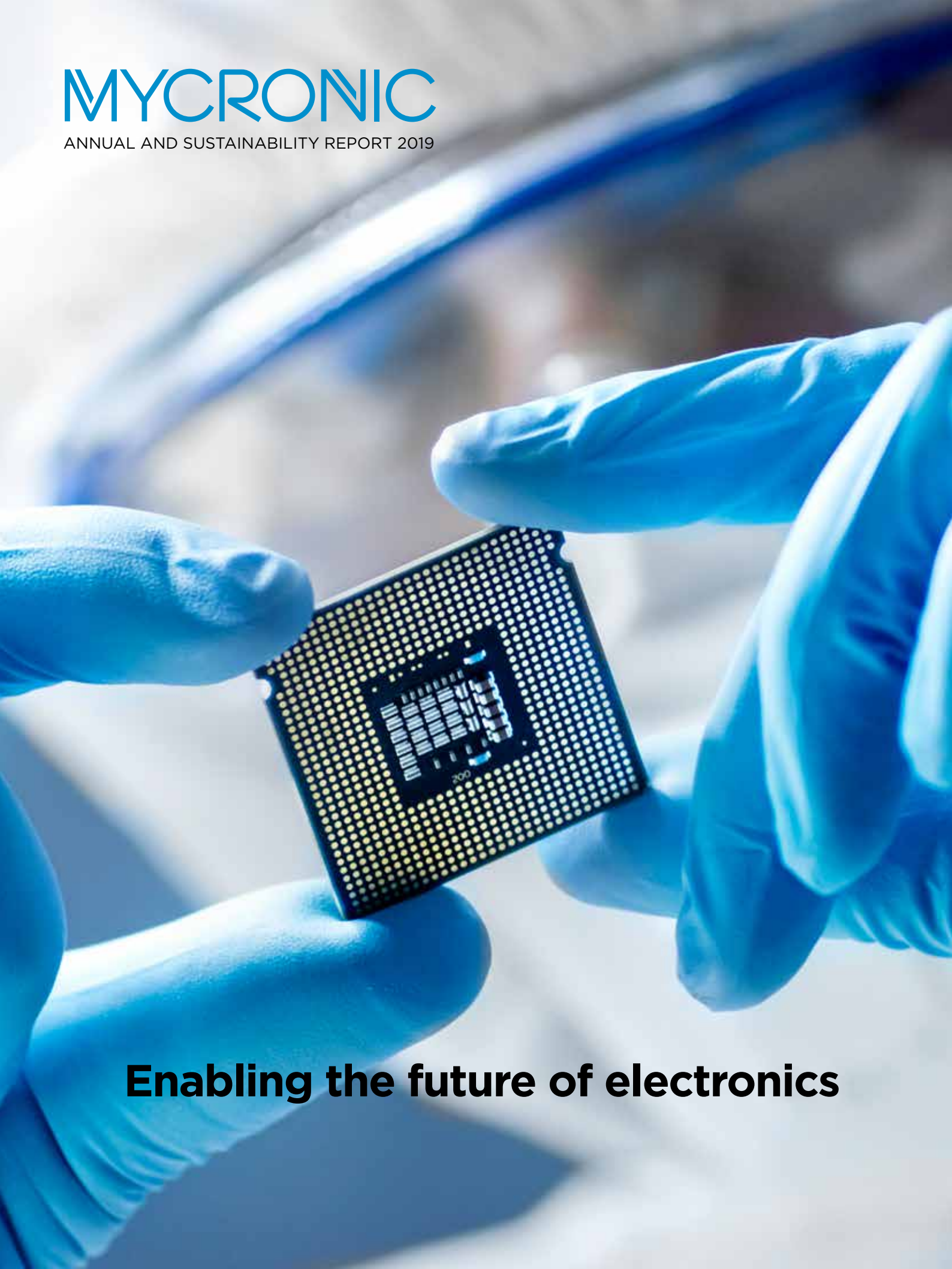


# MYCRONIC

ANNUAL AND SUSTAINABILITY REPORT 2019



**Enabling the future of electronics**

## Content

### Overview and strategy

- 1 Mycronic in brief
- 2 The year in brief
- 4 CEO comments
- 6 Strategy: Developments in the business environment
- 10 Strategy: Goals and priorities
- 12 Strategy: Our stakeholders

### Business description

- 14 Divisional overview
- 16 Assembly Solutions High Flex
- 17 Assembly Solutions High Volume
- 18 Assembly Solutions Global Technologies
- 19 Focus: Artificial intelligence
- 20 Pattern Generators
- 24 Sustainability
- 37 The Mycronic share

### Annual and consolidated accounts

- 40 Report of the Directors
- 46 Corporate Governance Report
- 50 Board of Directors and auditors
- 52 Group management
- 54 Financial overview
- 55 Proposal on disposition of accumulated results

### Financial statements

- 56 Group
- 60 Parent Company
- 64 Notes
- 89 Auditor's report

### Other

- 92 Definitions
- 93 Glossary
- 94 Shareholder information
- 95 GRI Appendix

Pages 24–35 in this report constitute Mycronic's statutory sustainability report in accordance with the Swedish Annual Accounts Act. This report relates to the financial year January 1 – December 31, 2019.

### Forward-looking information

The report includes forward-looking information that may include but is not limited to statements relating to business and profits, market conditions and similar circumstances. Forward-looking information is based on current expectations and forecasts relating to future events. Although it is assumed that the expectations described in these statements are reasonable, there is no guarantee that forward-looking statements will become reality or are correct. As the information includes assumptions and estimates that are dependent on risks and uncertainty factors, the actual outcome may differ significantly from what is described. Risks and uncertainty factors are described further in the section on risks on pages 44–45. Mycronic does not undertake to publicly update or revise forward-looking information as a consequence of new information, future events or similar, beyond what is required by law or stock market provisions.

# We make tomorrow's electronics possible.



The description of Mycronic's business on the following pages is based on the divisional structure described as of April 1, 2020 with a view to illustrating more effectively the organization in which Mycronic operates. The Report of the Directors, financial

reports and notes in the annual report contain a description in accordance with the business area structure reported up to and including December 31, 2019.

## Mycronic AB

### Business areas:

Assembly Solutions

Pattern Generators

### Divisions as of April 1, 2020:

Assembly Solutions  
High Flex

Assembly Solutions  
High Volume

Assembly Solutions  
Global Technologies

Pattern Generators

The former divisions SMT and Inspection, which focus on the flexible production market, primarily in Europe and the US. Here, Mycronic provides complete solutions to electronics manufacturers in need of flexible production controlled by customer orders, with rapid conversion and a high utilization rate.

Mycronic's Assembly Solutions High Volume offering, formerly the Dispensing division, offers a comprehensive range of production equipment for dispensing and conformal coating of circuit boards. The business focuses on high-volume markets in Asia.

This division focuses on developing and providing advanced production solutions with high levels of differentiation. It is made up of the former Assembly Automation division, which works with the assembly and testing of camera modules and die bonding systems.

**Pattern Generators** holds a unique position as the only supplier of mask writers to produce advanced photomasks for displays used in the manufacture of mobile phones, tablets, TVs and computers.

Mycronic's **Aftermarket business** is a key element in the business model and constitutes around 30 percent of the company's net sales.

Mycronic is a global high-tech company that develops, manufactures and provides market-leading production equipment which meets the electronics industry's high demands for precision and flexibility.

We are a Swedish company driven by innovation. We date back to the 1970s and have a presence in ten countries. Mycronic is currently listed in the Nordic Large Cap segment on the Stockholm Stock Exchange.

Development work at Mycronic never ends because our world is constantly changing. Electronics producers around the world face the challenge every day of delivering an improved and more reliable experience for the consumer, faster, and with greater precision and efficiency, and doing so in a sustainable way given the planet's finite resources.

With decades of experience of ground-

breaking innovation and a tried and tested business model, we are striving to be the market's first choice in the segments in which we are active.

We must help to add positive value for all of our stakeholders through every end product created using our production equipment. This is how development is driven at Mycronic, where passion meets innovation.



>40

years of experience in innovation

>1,400

employees in ten countries

>500

patents guarantee our lead



>12,000

Installed systems in more than 50 countries

>99%

of sales are from outside of Sweden

>3,000

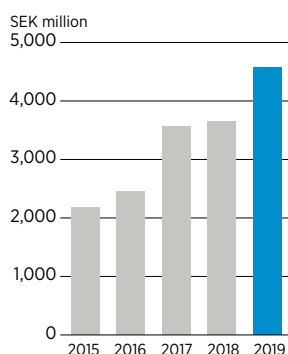
customers

2019 in brief

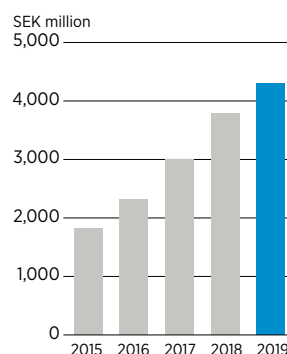
# Strong development of order intake, net sales and EBIT

Order intake increased by 25 percent compared with the previous record year of 2018. Net sales were up 14 percent to SEK 4,307 million, Assembly Solutions in particular contributing to this growth. EBIT increased by 10 percent, with both business areas contributing to this improvement.

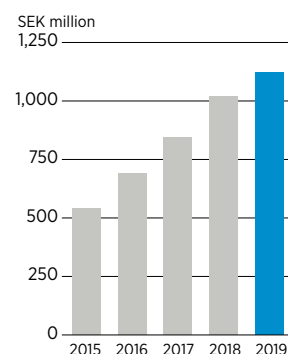
## Order intake



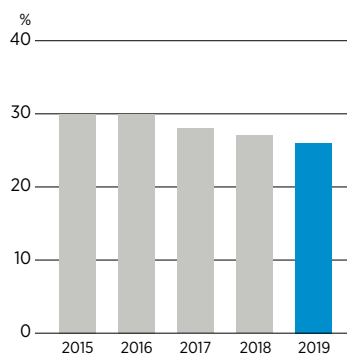
## Net sales



## EBIT



## EBIT margin

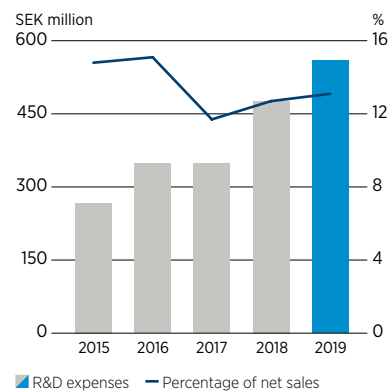


## Revenue distribution



● Assembly Solutions  
● Pattern Generators

## R&D expenses



■ R&D expenses — Percentage of net sales

Key ratios	Group		Assembly Solutions		Pattern Generators	
	2019	2018	2019	2018	2019	2018
Order intake, SEK million	4,567	3,642	2,762	2,149	1,805	1,492
Net sales, SEK million	4,307	3,781	2,463	2,012	1,844	1,769
Gross margin, %	55.7	55.5	41.0	41.7	75.3	71.2
EBIT, SEK million	1,124	1,020	110	69	1,019	955
R&D expenses, SEK million	559	476	344	322	215	154
Order backlog, SEK million	2,164	1,904				
Cash flow, SEK million	-180	4				
Growth from acquisitions, %	2	8				
Earnings per share before/after dilution, SEK	8.74	8.09				

## Anders Lindqvist takes over as CEO

Mycronic's new President and CEO, who took over the role in May, is focusing on three priorities: reinforcing the position within Pattern Generators, raising profitability within Assembly Solutions, and becoming closer to the customer. Read Anders Lindqvist's comments on pages 4-5.



## Expansion of our offering with a new, cost-effective mask writer

During the second quarter, we launched the mask writer Prexision Lite 8, which aims to support customers in the low and medium segments that need to modernize their production in a cost-efficient manner. Mycronic received orders for two Prexision Lite 8s during the year, and the first delivery is planned for Q1 2021.

## A group structure for the future

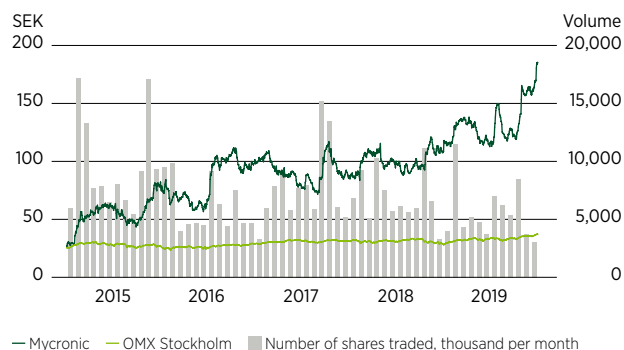
To facilitate continued profitable growth, Mycronic introduced a new Group structure on April 1, 2020, with four divisions. The objective is to achieve a more scalable group structure that facilitates better adaptation to the market and greater focus on customers, with faster decisions close to customers and an improved ability to adapt local operations to individual market needs. Read more on pages 14-23.



## Mycronic moves up to Nasdaq Large Cap

As a consequence of the company's positive development on the stock market, Mycronic moved up from Nasdaq Mid Cap to Nasdaq Large Cap on January 2, 2020. At year-end, the company's market capitalization amounted to SEK 18.1 billion.

### Share price development 2015-2019



## Assembly Solutions launches

Over the year, Assembly Solutions has reinforced its overall offering with new compact machine models for component mounting, a new and unique system to improve process quality when applying solder paste, and an upgraded platform for three-dimensional circuit board inspection. Besides this, a flexible and high-accuracy die bonding machine was launched for volume production of optoelectronics, along with new dispensing robots with advanced movement systems for dispensing mounting fluids when manufacturing mobile phones.

## Launch of SLX – a new mask writer for the semiconductor industry

In the fourth quarter, Mycronic announced its return to the market for mask writers used in the semiconductor industry with its launch of the Laser-based SLX mask writer. Read more about the system and its features on page 23.



# Reinforced structure for the future

As Mycronic closes the books on 2019, we can sum up yet another successful year. Order intake was up 25 percent compared with the previous record year of 2018, and a number of important product launches were completed. The emphasis is now on developing our business even further in order to make the most of opportunities for continued profitable growth.

Mycronic's main strength is that the company has always ventured to be one step ahead of the rest. When I think back on my first year as the CEO of Mycronic, the outstanding commitment and innovative spirit of its staff continue to impress me. The capacity for innovation unites all of our units and creates a foundation for the company's strong position as a global supplier of world-leading production solutions for electronics and display manufacturing. Securing our long-term skills supply is a priority field, and during the year we were honored with the award Innovator of the Year for employer branding by the Universum organization in Sweden. For our staff, initiatives for continued skill development, experience exchange and participation are important components in maintaining the outstanding commitment that is at the very heart of Mycronic's unique innovative force.

Further strategic cooperation with customers and other key stakeholders will be crucial to our success. To meet our customers' need for production equipment that contributes to profitability as well as more sustainable electronics production, we are now ensuring that we have the best possible conditions in-house to allow us to focus on customers and make quick decisions.

## A successful year

2019 was another year of milestones for Mycronic. Order intake increased by 25 percent, and at the end of the year the backlog amounted to SEK 2,164 million. In terms of earnings, both of our business areas contributed to the improved EBIT, which was up 10 percent on 2018. Our aftermarket and service offering, which currently represents around 30 percent of our net sales, is a significant and robust income source offering good profitability. We perceive potential here to reinforce our offering even further within our acquired companies so that more customers have access to service agreements and supplementary functions that guarantee production stability and

” **The time is perfect for building an organization that makes the most of the best elements of all parts of the Group.**

productivity. One indication of Mycronic's successful growth strategy is that our market capitalization increased during the year such that, as of January 2, 2020, we are now listed on Nasdaq Large Cap for companies with a market capitalization of more than EUR 1 billion.

## Reinforced criteria for profitable growth

Mycronic has grown enormously over the past few years, both organically and via a number of acquisitions. From having been a company where all of our development and production took place in Sweden, we have now developed into a global corporation with more than 1,400 staff in ten countries. The time is perfect for building an organization that makes the most of the best elements of all parts of the Group. In January 2020, we made a decision to implement a new group structure to reinforce the organization within Assembly Solutions and place us closer to our customers. Under the new structure, Assembly Solutions consists of three divisions:

### Assembly Solutions High Flex

Focus on markets for flexible manufacturing, primarily in Europe and the USA. Includes the former divisions SMT and Inspection.

### Assembly Solutions High Volume

Focus on high-volume markets in Asia. Includes the former Dispensing division.

### Assembly Solutions Global Technologies

Focus on advanced production solutions with high levels of differentiation. Includes the former Assembly Automation division.

The new structure means better adaptation to the market. I am absolutely certain that faster decisions close to customers and an improved ability to adapt local operations to individual market needs are required in order to achieve our aim of an EBIT margin in excess of ten percent for Assembly Solutions.

## Product launches in demand

2019 was also a successful year for product launches, with a number of products and offerings that I am absolutely certain will help our customers add value in the future. One example is SLX, a new, laser-based mask writer for the semiconductor industry. This launch is enabling us to expand our customer offering for Pattern Generators and is further consolidating our position in the mask writer market. The Prexision Lite 8 Evo is another example – a modern, attractive mask writer for the low and medium segments in the display market. Mycronic also launched Evo during the year, a new control platform that will be a cornerstone of our mask writers going forward and strengthen our customer offer.

Over the year, we reinforced our overall offering for Assembly Solutions with new compact machine models for component mounting, a new and unique system to improve process quality when applying solder paste, and an upgraded platform for three-dimensional circuit board inspection. Besides this, a flexible and high-accuracy die bonding machine was launched for volume production of optoelectronics, along with new dispensing robots with



advanced movement systems for dispensing mounting fluids when manufacturing cell-phones. This year's launches are an indication that our focused product development work is generating results.

We are seeing a clear trend in the market, where more and more customers are demanding complete solutions for their electronics production. Flexibility, high productivity and superior production quality have been key factors when several customers have chosen Mycronic's production systems during the year. Here, the new, compete surface mount technology MYPro Line – developed for smart factories of both today and tomorrow – plays an important role in strengthening our position on the market.

#### **Clear commitment to sustainability**

Leading production companies are integrating sustainability issues such as use of resources, choice of materials and end-of-life treatment of electronics in their business to an increasing extent. As a leading supplier of production equipment, we play an important part in our customers' value chain and it is clear to us that our strategic sustainability work will reinforce our future competitiveness. In February 2020,

we joined the UN Global Compact initiative in order to clarify our commitment to working in accordance with the Global Compact's ten principles relating to human rights, labor law, the environment and anti-corruption.

We are dedicated to full integration of our most significant sustainability issues into Mycronic's strategy and business. A lot of work remains to be done, but we are indefatigable and laying a robust foundation so that we can help bring about a more sustainable electronics industry. Our deliveries of SLX, which will be Mycronic's first system with solid state lasers, is one step towards this. Radically reducing the energy consumed by our mask writers has been a priority development project since 2017, as the existing lasers in our mask writers use a lot of energy and customers' use of our equipment means that Mycronic equipment is the biggest source of carbon dioxide emissions in our value chain. The new solid state laser is considerably more energy-efficient and will help to reduce energy consumption for our customers.

#### **An even stronger company**

Mycronic's successful strategy stands firm. We are now taking the next step and developing

the company's structure so that we can make the most of the opportunities that we perceive for continued profitable growth, with the knowledge that our shared passion for innovation is a success factor for our future. Through the investments of the past few years, we have established a lot of technology and knowledge that can be reused. With a clear structure for Assembly Solutions, we are now increasing our ability to rapidly adapt our local business to individual market needs as well. We will be continuing to cooperate all over the world through cross-functional innovation teams in order to capture the diversity of perspectives within our organization, and we will be working strategically to attract, retain and develop cutting-edge expertise. It is exciting to be part of the future of the electronics industry, and I am hugely enthusiastic about my work. I would like to pass on my warmest thanks to all staff, customers and other stakeholders for my eventful first year at Mycronic.

Anders Lindqvist  
President and CEO

# Global trends support business direction

Ongoing segmentation and regionalization of the market as well as stricter sustainability demands are changing the conditions within the electronics industry. Despite uncertainty due to the coronavirus and trade policy tensions, global trends are supporting the company’s business direction.

## The electronics market is maintaining long-term strength despite increased uncertainty

The global electronics industry is substantial and constitutes in its entirety just over 2 percent of the global economy. The electronics industry is expected to continue to grow over time, with forecast growth of 3.2 percent per year for the 2018–2023 period (Prismark, December 2019).

After being strongly influenced by individual dominant driving forces, such as PCs or mobile communication, the market development is now being driven by many different industry segments. With the more diverse pattern of needs of today and tomorrow, there is an increasing need for versatile, flexible production systems within several different areas of the electronics industry. Furthermore, the Industrial Internet of Things (IIOT) – digitally interlinked production chain systems – means that the market for production equipment for the electronics industry is being assessed more extensively from a holistic perspective that takes into account performance, efficiency and precision throughout the entire production chain.



This large-scale digitalization of production environments also opens the door to new business models on the market. Electronics manufacturers could be offered production equipment based on cost per use, royalty payments or systems that increase production capacity

in return for profit sharing with the supplier of the production equipment.

Mycronic is working to expand the addressable market. Diversification – both geographically and in terms of market subsegments – is becoming increasingly important.

## Technology content constantly increasing

We are undergoing a rapid electrification stage. Nowadays, most things in our society and lives include some form of intelligence. Driven by the Internet of Things, 5G and other technology shifts, the presence of processors and sensors is constantly increasing.

In addition to the earlier description of various industrial segments’ influence on the market for production equipment, electrification is introducing other consequences. Previous demand for smaller, more powerful electronics is not applicable to all segments in the electronics market. There is a growing need for

electronics that are based on well-established, reliable, robust and cost-effective technology, and its development is thus be driven by cost. At the same time, there is of course a constantly growing need for new, high-performance electronics in a number of fields, and this is being met with leading production equipment.

Thus, the requirement specifications in the electronics industry are broader than ever. This trend benefits flexible stakeholders that are able to supply production equipment for different applications in different production environments.





## Market regionalization

Despite the expected robust growth in the global electronics industry, the sector is being affected by the general development in the global economy and events such as political uncertainty, rising protectionism and changing trade agreements.

What is happening globally affects how the market behaves and is expressed in diverging supplier and logistics chains. The entire value chain is affected, from component manufacturers and manufacturers of semiconductor circuits to equipment suppliers and electronics manufacturers. In practice, this means increased regionalization of the market, with a number of separate value chains spanning different geographical areas such as North America, Western Europe and China.

Given these circumstances, it is particularly important to understand how the dynamics in different regions and markets work and to adapt the business to a more regionalized customer behavior, which is also associated with differing demands. In the long run, increasing regionalization in the market may also influence the standards that dictate the terms for electronics production.



## The electronics industry needs to be more sustainable

Leading manufacturers of electronic consumer products are integrating sustainability issues such as choice of materials, use of resources and energy and end-of-life treatment in their business to an increasingly clear extent. Electronic waste is the fastest growing waste category in the world, resulting in major environmental and social challenges. With a constantly increasing level of technological content and

high demand for new products, all links in the value chain are important for transitioning the electronics industry to a more circular economy.

As developers and suppliers of production equipment for electronics and display production, innovative stakeholders such as Mycronic can make this transition easier for their customers. For example, Mycronic has been working for a number of years on a project to radically reduce energy consumption in mask writers using energy-efficient solid state lasers. When it comes to the end-of-life treatment for

expired products, compliance with the EU's WEEE (Waste Electric and Electronic Equipment) Directive is an important part of Mycronic's producer responsibility to assist customers in handling electronic waste linked to the company's products. Responsible choices of materials and the extended service life of production equipment are other factors that can assist with this transition. Read more about how we are working with sustainability issues on pages 24–35.

# Ever faster development in industry is benefiting Mycronic

The switch to automated production systems, a semiconductor industry undergoing change and the large-scale establishment of 5G technology are phenomena that are affecting the electronics sector. Mycronic constantly analyzes, interprets and influences the development in order to identify opportunities in the market.

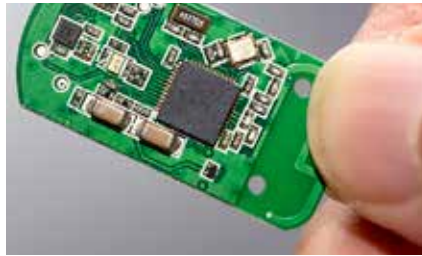


## Automated production systems increasingly important

The ability to automate stages in electronics production has been growing in importance for quite some time. Today, this is more important than ever before, and automated production stages are critical in several market segments.

When individual stages in electronics production are already largely automated, the challenge remains to bring the stages together into a single automated process. Material supply to and from the production chain, effective storage solutions, and final assembly are important steps in electronics production that are moving toward more automation. At the same time, a holistic approach to the production environment is crucial. Requirements for faster routes from development to finished product, greater expectations of manufacturers' delivery speed, and the ability to produce pilot series quickly and efficiently are all examples of driving forces that are shortening production cycles and making them more intensive. This means that today's production systems do not only need to be flexible but also automated in order to meet precision and efficiency requirements.

Furthermore, the continuing miniaturization trend with constant size reduction of components that are already small, is leading to more of a need for automation. The opportunities for automation are constantly improving as assembly stages that were previously difficult to automate can now be handled with extreme precision by advanced robots. In this regard, a higher degree of intelligent and integrated software also has an important part to play.



## Changes in the semiconductor industry

Semiconductor technology is critical for our data-driven society. It facilitates powerful solutions for computing, storing and compiling the enormous data volumes that are generated every day. At the same time, the technology content described on the previous page is continuing to increase in all sectors and application areas.

The capacity needed for the production of simpler electronics is increasing on the basis of the previous description of a changed pattern of requirements in the electronics industry; a result of the fact that not all electronics are based on cutting-edge technology these days. The semiconductor industry has an important part to play in this regard. Around 600,000 photomasks are needed each year to meet demand in the semiconductor industry. Around 70–75 percent of these are photomasks written by laser-based mask writers. These mask writers will therefore continue to be very important in semiconductor production.

Development in the advanced segment is continuing in parallel with the broader requirement specifications in the electronics industry. This means that the semiconductor industry is developing in two directions, with increased demand in both the low end and the high end segments, simultaneously. For the low and medium segments, the aged installed base is also helping to bring about more demand for replacement systems in order to supply the semiconductor industry with photomasks. As a result, Mycronic launched the SLX system, a new mask writer for the semiconductor industry, in 2019.



## 5G and data transfer influencing a number of elements

Completely new options for connection and communication are created when 5G, actual application of large-scale data and data centers are expanded at a rapid pace. Significantly higher transfer rates are the most noticeable change. Advanced optoelectronics and microelectronics are required for this.

Mycronic provides the flexible, ultra-precise production systems needed to produce the category of products that convert electric signals into optical signals. This is particularly important for the telecommunications industry. Hence the ongoing roll-out of 5G technology benefits stakeholders like Mycronic.

Even better opportunities for high quality streaming, communication and gaming without delay are yet another consequence of the establishment of 5G and large-scale Internet of Things and their distribution in society. This is expected to create entirely new opportunities in the gaming and communications industries, which in the long term may influence demand in the display industry. Comparisons can be drawn with the earlier establishment of 4G technology, which helped to change communication patterns.

# Mycronic's position based on a number of strengths



Innovation capacity is the foundation for the business

Mycronic focuses on corporate innovation capacity through a persistently high investment volume. For 2019, research and development expenses amounted to 13 percent of the company's net sales, totaling SEK 559 million. More than 400 of our employees are working with the technological development of today and tomorrow. Innovation capacity has been an important part of Mycronic

for more than 40 years and will continue to be so in the future. Our experience means that we are able to drive development initiatives on the basis of market perspectives and effectively convert our investments into value for our customers. Our reputation and position also help us to attract the skills we need.



We understand the market

The positive development of the last few years – in terms of both growth and improved profitability – is based on Mycronic's understanding of the market. We have positioned ourselves correctly, a result of long-term initiatives relating to continuous business intelligence and skills inventories based on the needs of the market. Mycronic has a separate strategic department, the main task of

which is to analyze what is happening in the market and how this affects the company's conditions for conducting business, both in the short term and the long term. This is why Mycronic has identified relevant, profitable niche areas on a number of occasions which are growing faster than the electronics industry as a whole.



Drive and agility

The combination of a long-term approach and protection of its existing operations with the ability to act quickly when market opportunities present themselves is important to Mycronic. This is why we are doing our best to maintain an agile approach so that we can pursue new ventures and initiatives. We are a smaller stakeholder in the electronics

industry despite our global presence in ten countries. And our entrepreneurial spirit must help to run our business with drive and agility. The earnings development also gives Mycronic the opportunity to achieve our ambitious targets through organic or acquired growth.



Global reach and strategic presence

Mycronic has a versatile business and extensive technical expertise in the fields in which we are active. Our global reach and presence in strategically important markets paves the way for skills transfer, application of best practice methods and shared usage of selected processes and functions. Our experience of operating the Group in two

business areas gives us the opportunity to prioritize the correct initiatives for future creation of synergies. Mycronic's local market presence and decentralized control also contributes to close relationships with our customers throughout the world.



Genuine accountability

We are dedicated to integrating sustainability in everything we do. We have reinforced our regulatory compliance processes globally throughout the year, and we have focused on improving internal follow-up. We are improving the skills of Mycronic's employees by means of a number of planned training initiatives. We are absolutely

certain that our efforts will mean that customers will choose us in the future not only because we supply innovative systems, but also because we act as a role model when it comes to sustainability.

# Three priorities within the scope of our long-term strategy

Focused initiatives to consolidate our strong position within Pattern Generators, increasing profitability levels within Assembly Solutions and enhancing our close proximity to customers are all priority areas within the scope of Mycronic’s strategy. The roll-out of the new Group structure improves conditions for achieving our goals.

Mycronic is striving to work together with customers to make the electronics of the future possible. This has helped the company to develop well over the past few years. Essentially, this strategy is based on Mycronic’s conviction that humans, technical innovation and professionalism all interact. This is also clear from the company’s motto – Mycronic is a place where passion meets innovation.

While the main focus of the strategy remains the same and the company’s financial targets are intact, Mycronic is working to continue to develop the business. Based on an analysis of the current and future global conditions, three strategic priorities are steering our business during the current business cycle: reinforce the market position within the Pattern Generators business area, raise profitability within Assembly Solutions, and further strengthen the relationships with Mycronic’s customers. As a consequence of these three strategic priorities, Mycronic now introduces a new group structure which will improve the chances of us achieving our targets.

## Consolidate the position for Pattern Generators

Mycronic has established a strong position in

the Pattern Generators business area, with a high market presence and a well-established global organization. Our objective is to go on developing that position. The launch of a new mask writer offering for the semiconductor industry is a clear example of how we can address attractive new market segments through development of our existing operations. Another example is presented by further offerings for the low and medium segments in the market for display photomasks. Mycronic also attaches great importance to constantly developing and improving its already successful aftermarket business.

## Improved profitability for Assembly Solutions

Mycronic’s goal of achieving sustainable profitability of more than 10 percent within Assembly Solutions is being realized through several initiatives. Focusing the business by means of a new group structure is an important step that will result in better adaptation to developments in the business environment and improve our ability to run business on a local level based on individual market needs. The Assembly Solutions offering within its three divisions – High Flex, High Volume and Global Technolo-

gies – is undergoing constant development. The demand for turnkey solutions is substantial, and as a full line supplier Mycronic is handling this by providing a complete range of production solutions for qualitative electronics production. While Mycronic is striving to operate in customer segments which are all growing faster than the market in general, we are still working to create synergies within Assembly Solutions divisions. The new group structure should also be more scalable, which will make it easier for Assembly Solutions to achieve an EBIT margin in excess of 10 percent.

## Be closer to customers


In a world changing at an ever-increasing pace, it is crucial for Mycronic to have an in-depth understanding of what our customers do. The new, decentralized group structure also paves the way for greater focus on customers, with faster decisions and increased professional proximity to customers. We are striving to use Mycronic’s extensive experience and global reach to be part of our customers’ strategic success. Greater focus on co-development projects and partnerships with customers in various segments are therefore priority areas for Mycronic.

“Essentially, the fact that we are identifying areas for improvement that will help to make Mycronic an even better and more profitable company is a positive thing.”


CEO Anders Lindqvist

Our strategy and business plan also include the following goals which will help to control the business over time. Mycronic has made progress in all areas, but potential for improvement is still apparent:


**Strengthen the position as a leading supplier within existing market segments**

Compliance level 


**Profitable growth within adjacent market segments**

Compliance level 


**Profitable growth in Asia within existing and adjacent segments**

Compliance level 

**Ensure innovative capacity for increased competitiveness**

Compliance level 

**Value creation through focus on sustainability**

Compliance level 

# Long-term goals and outcomes

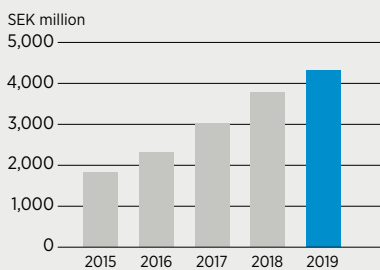
## Growth

5 billion

Net sales including acquisitions shall reach SEK 5 billion at the end of the business plan period, 4 to 7 years.

Net sales in 2019 were SEK 4,307 million. The net sales target shall be reached through a combination of organic growth and acquisitions.

### Net sales



■ Net sales

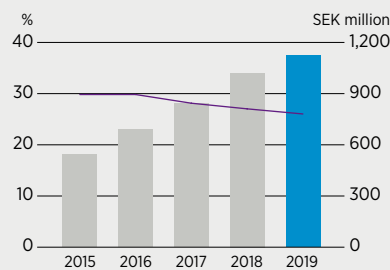
## Profitability

>15%

EBIT shall exceed 15 percent of net sales over a business cycle.

The EBIT margin for the year was 26 percent. Both Assembly Solutions and Pattern Generators increased their EBIT margins in 2019.

### EBIT



— EBIT margin ■ EBIT

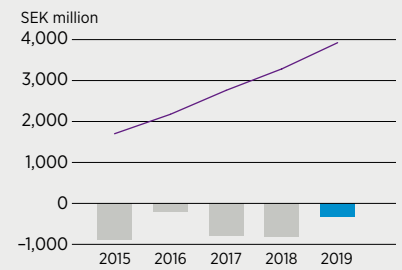
## Capital structure

< 3x

Net debt shall be less than 3 times average EBITDA (operating profit before interest, tax, depreciation and amortization). The average is calculated over 3 years.

The possibility to take on debt allows the Group to expand further to achieve long-term growth and profitability goals.

### Net debt



■ Net debt — 3 times EBITDA



# Our success is dependent on good relationships with stakeholders

How Mycronic delivers on our strategy and business plan is dependent on our relationships with our most important stakeholders. This includes both who we are servicing and with whom we are building our success. Confidence is the foundation for everything. We influence – and are influenced by – our customers, employees, shareholders, suppliers and society.

## Customers

Mycronic's business and the development of our offering is controlled by what our customers need, with clear emphasis on how these needs will change going forward. In most segments of the electronics production and display production market in which Mycronic is active, we are a quality supplier, and performance is our primary competitive advantage. Our customers expect a strategic partner with an in-depth understanding of the challenges associated with production of next-generation electronics. Partnership with our customers requires a proactive approach, transparency and commitment. This is why increasing our focus on customers through co-development projects and partnerships is one of Mycronic's three strategic priorities for the coming year.

## Employees

Not only do our over 1,400 employees turn Mycronic's groundbreaking innovations into reality, they also build and enhance our relationships with our customers. Commitment, expertise and their constant development are absolutely crucial if Mycronic is to go on improving still further as a company. A number of specific initiatives are taking place to improve Mycronic from an employee perspective, from internal skills transfer to rotation programs and global skills networks. These initiatives span all elements throughout the entire group. All employees are also included when learning and training on sustainability issues are reinforced.



## Shareholders

Shareholders' capital is a foundation for running our operations. Mycronic's owners expect competitive and sustainable returns on their capital. Many of the larger owners maintain a long-term perspective on their commitment and expect the company to have a good ethical compass, effective risk management and a strategy for value creation that is sustainable in the long term. We provide analysts, lenders, investors and almost 14,000 shareholders, both in Sweden and abroad, with regular information about the business and its financial and sustainability-related development.

## Business partners

Innovation, constant process improvements, a responsible view of business and cooperation with other stakeholders are needed to allow Mycronic to retain and further reinforce its position on the market. Within the global organization, Mycronic relies on business partners at a number of levels, focusing primarily on suppliers. Cooperation based on transparency and mutual understanding is necessary in order for Mycronic to deliver on the high expectations of our business partners over time. Active supplier control and agreement administration are important parts of this work, while reinforcement of our policies and processes to include sustainability aspects as a natural part of the business going forward are priority areas.

### VISION

The business partner of choice, enabling the future of electronics.

### VALUES

- Passion for business
- Passion for people
- Passion for technology

The background of the page is an abstract composition of various patterns and colors. It features a prominent grid of small, bright blue dots on a dark background, which appears to be a close-up of a mesh or a digital display. This grid is overlaid with diagonal bands of vibrant blue and green, creating a sense of depth and movement. The overall aesthetic is modern and technological.

# Business description

## Divisional overview

# A group structure for the future

Mycronic is a global high-tech company, that develops, manufactures and provides market-leading production equipment which meets the electronics industry's high demands for precision and flexibility. With a leading position in both business areas, we constantly strive to develop our offering.

A new group structure was introduced at Mycronic on April 1, 2020, to facilitate continued profitable growth. The change introduces four divi-

sions, with the Assembly Solutions business area representing three divisions and the Pattern Generators business area representing one. The objective is to achieve a more scalable group structure that facilitates better adaptation to the market and greater focus on customers, with faster decisions close to customers and an improved ability to adapt local operations to individual market needs.

### Assembly Solutions High Flex



The Assembly Solutions High Flex division offers surface mount technology (SMT) and inspection solutions, focusing on markets for flexible manufacture, primarily in Europe and the USA. This division includes the previous divisions SMT and Inspection.

#### Market driving forces

- Miniaturization
- Just-in-time production
- Cost-effective manufacture
- Automation
- High production yield

#### Geographical presence

Primarily Europe and North America.

#### Market position

Leading position in the High Flex market segment for customers with low or medium production volumes.

#### Primary competitors

- ASM
- Fuji
- Juki
- Yamaha
- Hanwha Techwin
- Panasonic
- Koh Young
- Viscom
- Saki

### Assembly Solutions High Volume



Assembly Solutions High Volume includes the former Dispensing division and focuses on high-volume markets in Asia. The offering includes both dispensing and conformal coating of circuit boards.

#### Market driving forces

- Cost-effectiveness
- Automation
- Need for robust electronics

#### Geographical presence

Asia, primarily China.

#### Market position

Fourth largest global actor within the segment.

#### Primary competitors

- Nordson Asymtek
- Musashi
- Protec
- Anda
- PVA



Strategic acquisitions and investments in an expanded product offering have helped to position Assembly Solutions as a turnkey supplier of innovative electronics production solutions with high demands on precision and flexibility. Few market stakeholders at present possess the expertise needed in vital stages in the production chain in order to function as a strategic partner to customers.

**Assembly Solutions Global Technologies**



The Assembly Solutions Global Technologies division focuses on advanced manufacturing solutions with high differentiation and includes the former Assembly Automation division.

**Market driving forces**

- 5G
- Data center applications
- In-car cameras

**Geographical presence**

Global presence, primarily North America at present.

**Market position**

A leading position in the microelectronics and optoelectronics segments and the assembly of camera modules.

**Primary competitors**

- ASM
- Trioptics
- Luritech
- 4 Technos
- Palomar
- Finetech

**Aftermarket business**

Aftermarket business is an important element of Mycronic. We have been working on development of a new, digitized offering over the year in order to streamline work in the field. Our objective is to create a harmonized toolkit on a global level for handling support reporting, ordering of spare parts and service agreements, for example.

**Pattern Generators**



The Pattern Generators division has a unique position as the world's only supplier of mask writers for production of advanced photomasks for displays. Measuring machines that perform quality assurance of photomasks through accurate measurement of the written pattern's positioning, as well as service agreements, are key elements in this offering.

**Market driving forces**

- The technology shift from LCD to AMOLED
- Larger displays
- Requirements for better resolution
- Displays in new applications

**Geographical presence**

Global operations, most customers are in Asia.

**Market position**

World leading as the only supplier of production equipment for advanced photomasks needed for production of displays.

**Primary competitors**

- Heidelberg
- Applied Materials

# Assembly Solutions High Flex

Many manufacturers of electronics need flexible, just-in-time electronics production. The Assembly Solutions High Flex division can offer these customers – focusing on Europe and the USA – a complete solution for circuit board assembly that includes both SMT and inspection.

Mycronic meets customers' demand for full line solutions to facilitate quick changeovers in production and is able to meet requirements for high utilization rates in the production lines. We achieve this by providing all the key solutions for circuit board assembly in the form of complete production lines or individual systems for specific process stages.

Customers demanding these solutions include manufacturers of electronics with high levels of added value for industrial applications, aerospace, aviation, defense, automotive, energy, medical, IT and telecommunications industries. This market is concentrated primarily to North America and Europe. Our customers are usually small or medium-sized subcontractors to both smaller and larger electronics systems suppliers or manufacturers of their own end products. We also have many customers among state companies producing electronics in China.

The MYPro Line product family includes both machine platforms for high-speed dispensing of solder paste and adhesives via MY700 and assembly of electronic components on circuit boards via MY300. As part of our offering, we also provide inspection equipment that identifies circuit board defects during the manufac-

turing process and helps to improve and enhance the production yield. We now have world-leading expertise in the field of inspection and provide products in three main categories: The PI series for advanced three-dimensional inspection of solder paste on PCBs, Mycronic's K series for three-dimensional, automated optical inspection of circuit boards and the SIGMA Link software that provides customers with real-time information about the manufacturing process.

Besides this, we offer material handling and automated storage solutions via SMD Tower, as well as customized process software.

*MY300 offers high-precision assembly of electronic components on circuit boards.*



*Inspection equipment identifies circuit board defects during the manufacturing process.*



*MY700 is used for high-speed dispensing of solder paste and adhesives.*



*Mycronic also offers material handling and automated storage solutions.*

# Assembly Solutions High Volume

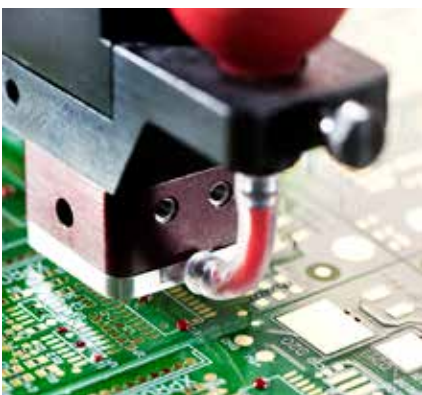
With emphasis on high-volume markets in Asia, the Assembly Solutions High Volume division offers a comprehensive range of production equipment for dispensing and conformal coating of circuit boards. This division includes the former Dispensing division.

The electronics we use daily are found in environments where vibration, temperature, moisture, and dirt can affect the life of the electronics unless the right steps are taken in the manufacturing process. Dispensing of adhesives and conformal coating of circuit boards play an important role in securing the functionality of electronics over time. The Assembly Solutions High Volume division is able to provide a comprehensive range of production equipment for dispensing and

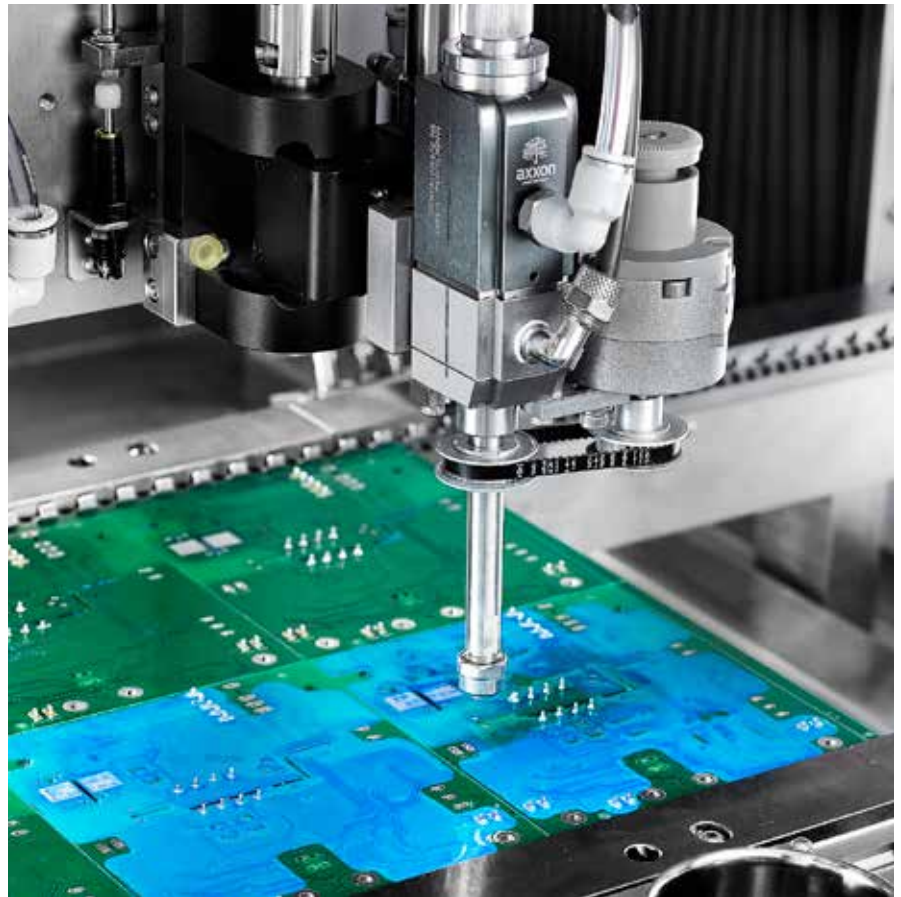
conformal coating of circuit boards. This year, a turnkey solution for conformal coating of circuit boards was presented in the form of a complete production line, which also includes an oven for the curing process. These products are used for high volume production of mobile phones, for example. The largest market for Mycronic is traditionally in China, with large contract manufacturers of consumer electronics as customers.

The product portfolio encompasses produc-

tion systems with dispensing and coating robots and a broad range of applications to dispense the various adhesives, mounting fluids and coatings used in the production of modern electronics. Mycronic's customers can manage electronics production of both existing and future products, mounting fluids and component technologies using these dispensing and coating systems.



*Mycronic offers a comprehensive range of production equipment for dispensing mounting adhesives.*



*Conformal coating of circuit boards guarantees the functionality of electronics over time.*

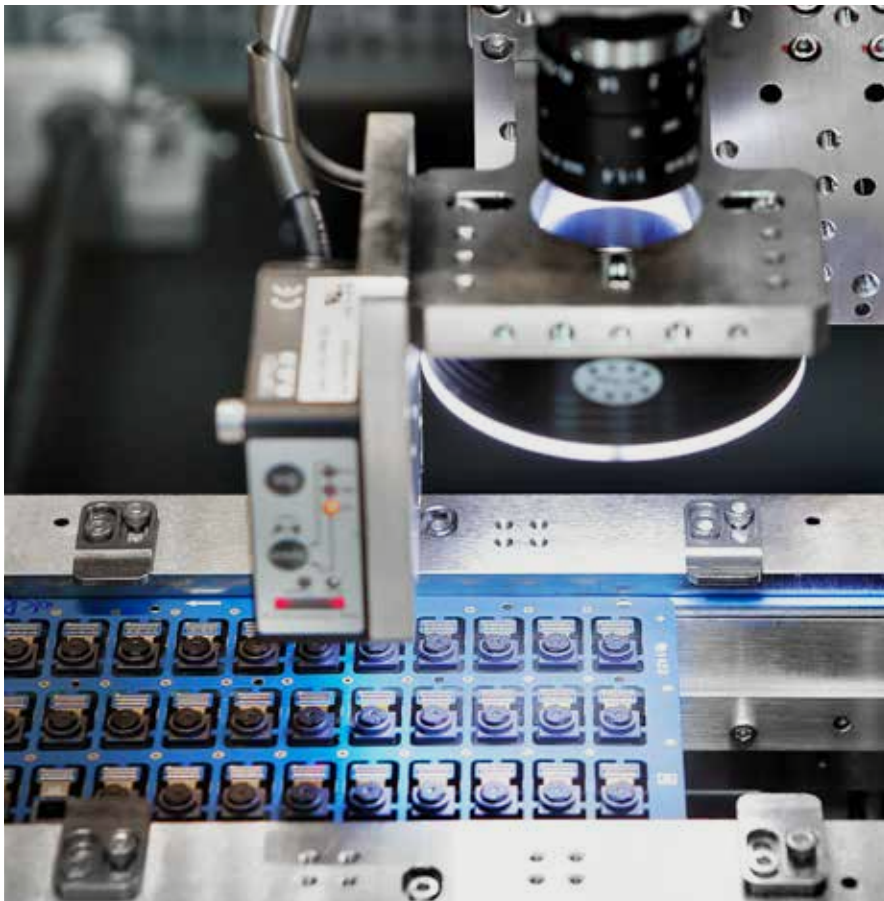
# Assembly Solutions Global Technologies

Identifying and operating in niche areas that are growing faster than the market in general is an important element in the Mycronic strategy. Assembly Solutions Global Technologies focuses on developing and releasing advanced production solutions with high levels of differentiation.

Increasing miniaturization and the need for high precision in the assembly of electronic components and optics has gradually forced the assembly automation field to progress, where automated robots pick and place components with extremely high precision. This area currently forms part of the Mycronic Assembly Solutions Global Technologies division, formerly Assembly Automation. There are a number of applications, which include industries where precision and reliability are crucial.

The offering of the Assembly Solutions Global Technologies division in the field of assembly automation is made up of two business units. Within one of these, we offer solutions for mounting and testing camera modules with high precision and deliver production systems to the growing market segment for automotive electronics. There is a growing need in the automotive industry for what are known as CMAT systems (Camera Module Assembly and Test), and here Mycronic has a leading position.

The other Assembly Automation business unit provides die bonding systems, mainly for the production of optoelectronics used in the data and telecommunications industries. Mycronic has a leading market position here thanks to flexible, ultra-precise production systems that – in simple terms – are necessary to produce the category of products that convert electric signals into optical signals.



*CMAT systems for camera module assembly are used by subcontractors to the automotive industry.*



*Camera module in vehicle (above) and unit assembled with die bonding (below).*

# Artificial intelligence for the production environments of the future

The ability of manufacturing systems to predict and adapt to unforeseen situations using artificial intelligence (AI) is expected to revolutionize electronics production. In only five to ten years, researchers within the area of deep learning at Mycronic expect a highly automated production environment with little or no human involvement that will be very close to zero defects.

Together with NuFlare Technology and D2S, and funding from NVIDIA, Mycronic has established a Center for Deep Learning in Electronics Manufacturing (CDLe) in San Jose, California. This center's deep learning focus area is a sub-area of AI and machine learning, using sophisticated neural networks to effectively learn how to predict outcomes from data. Deep learning methods have matured rapidly over the past few years, and they have come particularly far in industries that are generating and storing large volumes of data. It is thought that deep learning and AI have many applications in the production environments for Mycronic's customers, and this center is one of the company's initiatives aimed at taking the lead in the field.

Above all, the center is a valuable global resource that is being used to build up deep learning expertise at Mycronic. This should reinforce our customers' positions in a number of applications. Mycronic will be able to offer new solutions to existing problems relating to pattern generation, SMT, inspection and dispensing.

With the help of the CDLe, Mycronic has compiled a priority portfolio of initiatives aimed at developing more customized solutions to today's production challenges, as well as new applications and services.

## **Vision: Turn the intelligent factory into reality**

Mycronic has its sights set on accelerating the development of deep learning and AI to the benefit of our customers and intends to include this in the product development plans from 2020 onwards.

A great deal of emphasis is placed on the already established Mycronic 4.0 concept for circuit board manufacturing, which is based on information flows extending throughout the entire factory and into the cloud. The ambition is to achieve a zero-defects production line, and Mycronic is already working on gathering data together with circuit board manufacturers in a number of different locations.

The quality of deep learning algorithms is dependent on vast data volumes so that human capability and traditional analysis technology can be surpassed.

All of Mycronic's current systems are essentially software-driven and are gradually becoming more integrated with other factory systems. The process data they create is very valuable when it comes to training the algorithms and thereby generating accurate simulations through deep learning.

Simulated environments are particularly useful for SMT customers who need to find new, customizable automated production methods. The entire Mycronic 4.0 concept is dependent on information flows at the factory. This level of total automation includes many systems with a high degree of complexity, which is precisely where adaptive deep learning algorithms can add great value; both in the production line and in other systems all over the factory.

## **The challenge: To achieve constant accuracy**

There is major potential and our targets are ambitious, but there are a number of challenges that need to be dealt with. Besides the need to compile large data volumes and image libraries, one challenge involves achieving continuous, accurate recognition of the geometry of components. This means that the automated optical inspection (AOI) systems have to be improved to ensure robust, accurate definition of new components, including in dynamic production environments where products, component technologies and construction methods can change rapidly. For Mycronic, this has required the construction of a vast library containing tens of thousands of 3D images, including data on complex geometries, that can be recognized quickly with the assistance from algorithms.

This is a good start, but we will need ten times, or even a hundred times more data so that our deep neural networks can generalize for all kinds of components and circuit boards.

## **Creation of digital twins**

At present, deep learning researchers are working on building virtual copies of physical factories, which are combined with AI and advanced analysis in order to simulate manufacturing processes in real time. This procedure is frequently referred to as "digital twins" and permits analysis of data and systems (in the virtual model) so that problems can be remedied before they happen at the physical factory. This allows creative solutions to be devised for product design, predictive maintenance and zero-defect manufacturing.

Researchers at Mycronic estimate that large scale use of digital twins in the electronics industry may take a decade to achieve. The large-scale nature is also dependent on another technical breakthrough: synchronized data correlation of all systems in the various machines. This is not possible at present.

## **Step in the right direction**

Mycronic has already developed SIGMA Link, an advanced, web-based software package that improves control over product quality and process automation. This system is continuing to be improved with the help of additional high-quality training data. The addition of deep learning functionality is expected to take the benefits of this system to a whole new level in years to come.

## **Universal technology**

Deep learning methods and AI are universal technology, and Mycronic sees major opportunities to apply it in its mask writers as well, the primary emphasis being on using the technology to make the mask writers even more robust and thereby offer customers higher uptime and greater production yield. Evo, the new mask writer control platform launched recently, is designed to be able to offer and support solutions of this kind in the future.

# Pattern Generators

The Pattern Generators business area is continuing its proactive innovation work and launched both new mask writers and a strategically important control platform during the year.

## Laser-based mask writers for production of photomasks

The Pattern Generators business area manufactures production equipment for the manufacturing of photomasks. This production equipment comprises laser-based mask writers, and the business area has extended its product offering over the year to include a number of different applications. One important element in the offering is made up of the service agreements, which are key to allowing customers' mask writers to be used as efficiently as possible throughout the entire service life of the equipment. Pattern Generators also offers measuring machines that provide quality assurance of photomasks through accurate measurement of the positioning of the written pattern.

Photomasks are absolutely crucial for the mass production of displays, but the demand for photomasks is not directly linked to the number of displays produced. Photomasks cannot be used up and they can be used to create a large number of displays, provided that there are no changes to the design of the display. Around 18,000 display photomasks were produced globally in 2019, while the

number of displays manufactured totaled 3.6 billion units. Demand for photomasks is instead driven primarily by technology shifts such as the transition from LCD to AMOLED, larger displays, greater demand for higher resolution, and displays in new applications.

## Advanced photomasks for high-resolution displays

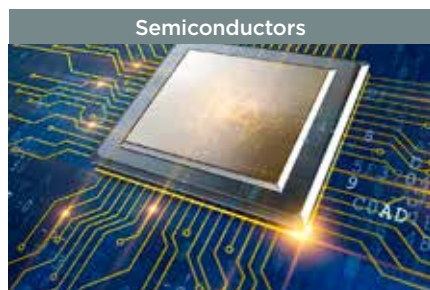
Mycronic is in a unique position as the world's only supplier of the mask writers used to manufacture the advanced photomasks needed for the volume production of displays. Mycronic's mask writers have been refined over time. The latest version is Precision 800, which was established on the market in 2018 and set a new standard for photomask production. Sophisticated displays have become a natural part of our society, and global electronics manufacturers are constantly improving the display quality of, for example, mobile phones, tablets, TVs, and computers to give customers a better experience. Technological development in the display industry is continuing at a rapid pace, with more and smaller pixels. The trend is heading in the direction of more complex display technologies such as AMOLED, which

means that both additional photomasks and more complex photomasks are needed in order to manufacture displays.

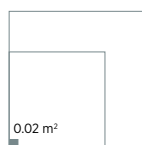
## Extended offering for enhanced flexibility

Precision 800 gives photomask manufacturers the opportunity to supply masks with higher quality and resolution without compromising on productivity, thereby meeting the demands made by the latest and most advanced generation of exposure equipment in display manufacturing.

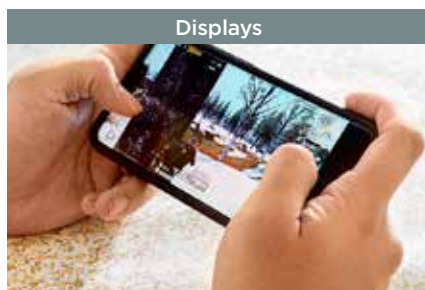
While there is a great deal of money to be made from complex photomasks, the market for less complex photomasks for standard displays up to G8 mask size is also an important segment. This year's launch of Precision Lite 8 broadens the offer with an attractive, modern production solution that aims to support customers who have a need to modernize their production of photomasks for the low and medium segments. Precision Lite 8 is designed to meet demands for cost-effective photomask production.



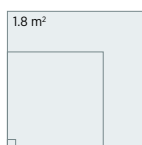
Semiconductors



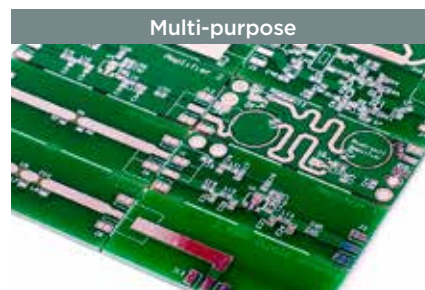
Photomask size: approx. 0.02 m<sup>2</sup>  
 Typical number of masks per design: 20-80.  
 Image resolution requirement: Very high-high.



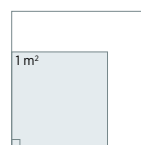
Displays



Photomask size: approx. 1.8 m<sup>2</sup>  
 Typical number of masks per design: 10-15.  
 Image resolution requirement: High.



Multi-purpose



Photomask size: approx. 1 m<sup>2</sup>  
 Typical number of masks per design: 2-10.  
 Image resolution requirement: Medium.



*Mycronic launches the new Precision Lite 8 mask writer, which is aimed at the low and medium segments in the display photomask market.*



### **New mask writer for the semiconductor industry to meet growing demand**

Driving forces, including the Internet of Things and the automotive industry's development of new driver assistance systems, machine learning, big data, and autonomous vehicles, are increasing the need and demand for semiconductors. This year saw the launch of SLX, a new, laser-based mask writer for the semiconductor industry, in order to meet the increasing demand for photomasks for the semiconductor industry. This market is driven by robust, long-term trends and a growing need to replace and modernize the installed base of laser-based mask writers. The introduction of SLX also marks Mycronic's return to this market, with the first delivery planned to take place in the fourth quarter of 2020. Mycronic's long-term ambition is to take the majority of future business, even though there are already competitors in this segment. Mycronic estimates the total demand in this segment to be 5–8 new mask writers per year over the next few years, and the total market for laser-based mask writers is estimated to amount to USD 30–50 million.

SLX is based on the same technology as

mask writers for displays. Synergies can be achieved in current and future product development by sharing the technological platform and coordinating development initiatives. The well-established sales and service organization is used for sales and aftermarket. By working closely with both the display industry and the semiconductor industry, this ensures a long-term partnership with customers in both segments, which is an important part of Mycronic's strategic positioning.

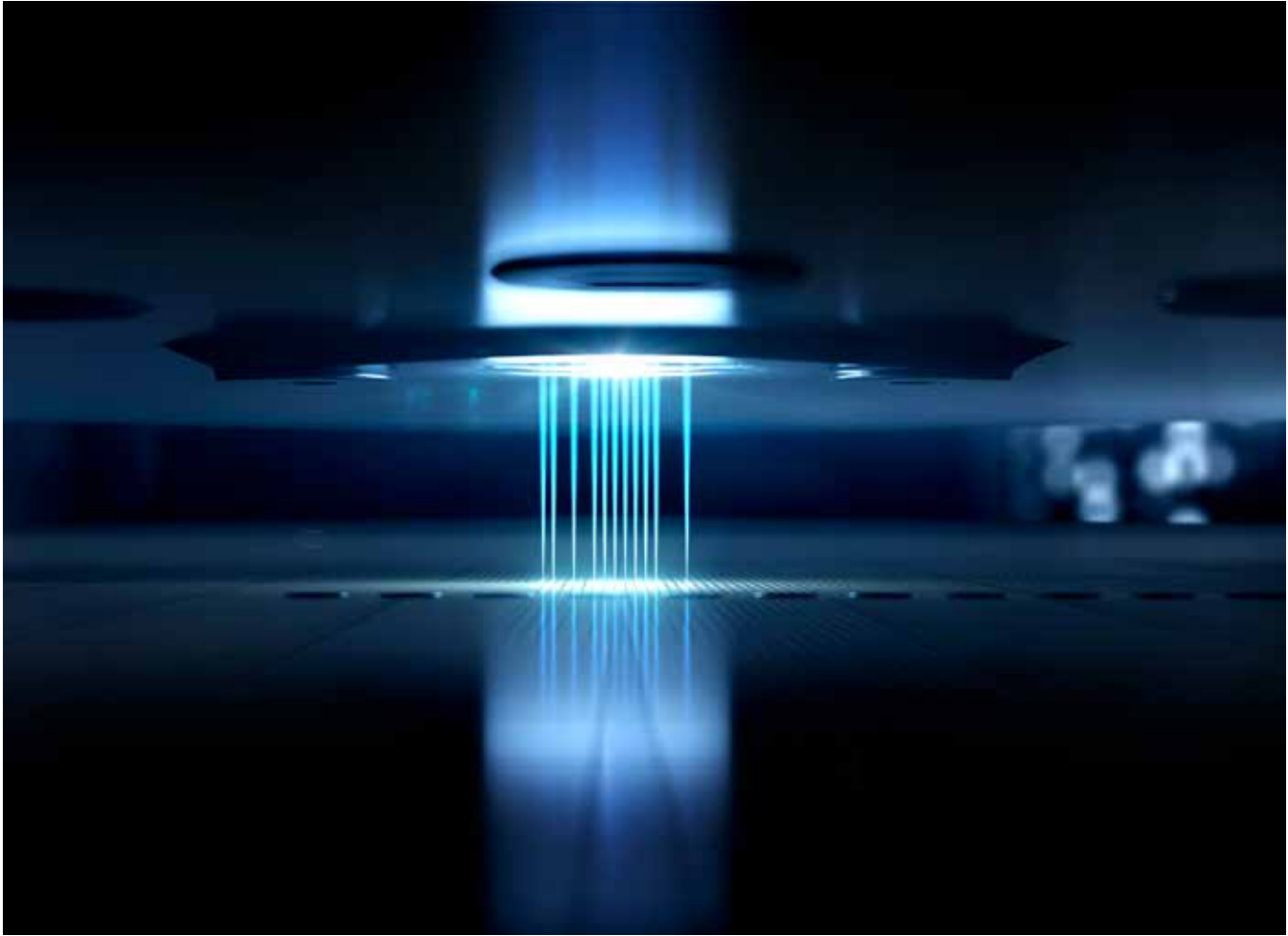
### **Multi-purpose technology and market leader**

Pattern Generators also offers mask writers for the multi-purpose market, a broad segment that includes many different applications and in which slightly less complex photomasks are used. Within the multi-purpose segment, for example, photomasks are used for electronic packaging, touch screens and MEMS (microelectromechanical systems), and the market serves as a complement to Mycronic's mask writers for displays. Last year's launch of FPS8100, which meets the increased demand for photomasks for the manufacturing of what are known as fine metal masks – which are used for deposition of organic material when

manufacturing AMOLED displays – has reinforced Mycronic's position in the photomask industry along with the rest of the FPS series. Mycronic is now a technology and market leader in the multi-purpose field.

### **Robust aftermarket business**

Qualified servicing and maintenance are a key element in the commitment to customers in all segments, and Mycronic is working constantly to develop and enhance its aftermarket offering and supplementary services. The goal is to maximize productivity, performance and production yield for the entire life of installed systems. Around 120 of Mycronic's systems are in production all over the world, of which around 60 percent are used in display applications. The rest of the systems involve multi-purpose and semiconductor mask writers. All new systems are sold with service agreements at present, and more than 90 percent of installed systems are covered by service contracts. Constantly improving the aftermarket offering is an important element in customers' opportunities to add value and Pattern Generators' ability to go on generating stable revenue. In 2019, aftermarket business accounted for one third of the business area's net sales.



While servicing and maintenance are an important part of our aftermarket offering, the global installed base of mask writers is aging, and thereby more difficult and costly to maintain. With more than 30 mask writers for display applications over ten years old, Mycronic's trade-in program is a cost-effective way to implement more modern mask writers and an important part of the customer offering. The trade-in program began in 2014 and has resulted in replacement of ten systems to date.

#### **Innovation reinforcing the customer offering**

Mycronic's photomask production equipment expertise has been built up over decades. The innovations and launches in the past few years have expanded the offer to include more areas of application, and through continued invest-

ments in technology development and innovation, Mycronic is striving to continue to meet the electronics industry's very high demands. This also involves systematic improvement of sustainability aspects with regard to both products and working methods. For example, a project has been ongoing since 2017 which is aiming to radically reduce mask writer energy consumption. The lasers in the mask writers use a lot of energy and constitute the single biggest source of carbon dioxide emissions, and our objective is to switch to more energy-efficient solid state lasers. SLX will be the first product with a solid state laser.

This year's launch of Evo, an advanced control platform, will constitute a cornerstone among Pattern Generators mask writers going forward and reinforce our offering to customers. The control platform is based on the latest technology and is designed to meet the indus-

try's new demands relating to production automation, advanced connection options and data management. The control platform is also capable of improving production yield for customers by opening up the option of using big data and machine-to-machine connection when manufacturing photomasks. Moreover, over time Evo will involve streamlining of product development and maintenance as all mask writers, except for Prexision 10, will be based on the same platform.

Mycronic's innovation capacity is crucial if we are to meet the demands made of the technically very advanced mask writers that are to deliver the increasingly complex photomasks used for development and manufacturing. Cooperation with customers and other strategic partners will be a crucial factor in order to go on creating world-class innovations.



# SLX – the new mask writer for the semiconductor industry

Our data-driven society is based largely on semiconductor technology that facilitates powerful solutions for computing, storing and compiling the enormous data volumes that are generated every day. There is a growing need for electronics that are based on well established, cost-effective technology – and this development affects the semiconductor industry. Around 600,000 photomasks are produced solely for the semiconductor industry each year, so this is a significant market. Almost 70–75 percent of these photomasks are written by laser-based mask writers. The mask writers in this growing segment will therefore be very important elements in the manufacturing of semiconductors in the future as well.

Mycronic is meeting market development

and has launched its SLX system, a new, laser-based mask writer for the semiconductor industry, over the past year. This system allows a very low cost to be achieved for each photomask produced and is based on established technology, thereby guaranteeing reliability in production. With a competitive price-to-performance ratio, SLX is a good option for Mycronic customers who need cost-effective production equipment. SLX is based on the same technology as mask writers for displays, and the recently launched Evo control platform constitutes part of that. Synergies can be achieved in current and future technological development by sharing the technological platform with mask writers for displays. The well-established sales and service organization is used for sales and aftermarket.

SLX is also meeting the future need for replacement and modernization in the market as the majority of machines installed are between 15 and 25 years old, complicated to maintain and have high running costs. With SLX, Mycronic is announcing its return to this market, where we currently maintain the existing installed base of Sigma and Omega semiconductor mask writers.

**“We have entered into close discussions with leading stakeholders in the semiconductor industry, and we are satisfied that we are now able to offer our customers a modern, attractive and cost-effective solution in the laser-based mask writer segment.”**

*– Charlott Samuelsson, Sr VP Pattern Generators*



# Mycronic reinforces commitment to sustainability

Leading players in the electronics industry are increasingly integrating sustainability in their business model. Mycronic has established a strategy for integrating the company’s essential sustainability topics in its business strategy and operations. We consider this to be crucial to our future competitiveness.

Mycronic and other suppliers of production equipment for electronic products and displays have an important role to play when customers review sustainability challenges in the entire value chain – from the extraction of raw materials to the final disposal of products. Environmental considerations and working conditions in the supply chain, use of resources in manufacturing, and electronic waste are examples of issues that stakeholders in the electronics industry need to consider.

Our operations should be conducted responsibly in all of the parts of the value chain that we can control or influence. The acquisitions made in recent years place demands on clear Group values and effective control and follow-up of our significant sustainability impacts. We are working persistently to firmly establish policies, processes and follow-up methods throughout the group.

## Focus on areas where we can make a difference

Our target is to fully integrate sustainability in our business strategy and operations within five years. Mycronic is focusing its sustainability efforts on four areas – known as focus areas – which are deemed to be strategically important to our long-term competitiveness and where it is clear to us that we can make a real difference. We have established plans with goals and annual objectives for each of the focus areas. Find out more about these on the next page. Mycronic’s work with sustainability should also have a clear link to the UN Sustainable Development Goals (UN SDGs) and contribute to the goals where we have the ability to influence the development in a positive direction.

## From compliance to role model

We believe that informed customers in the future will choose Mycronic because of our

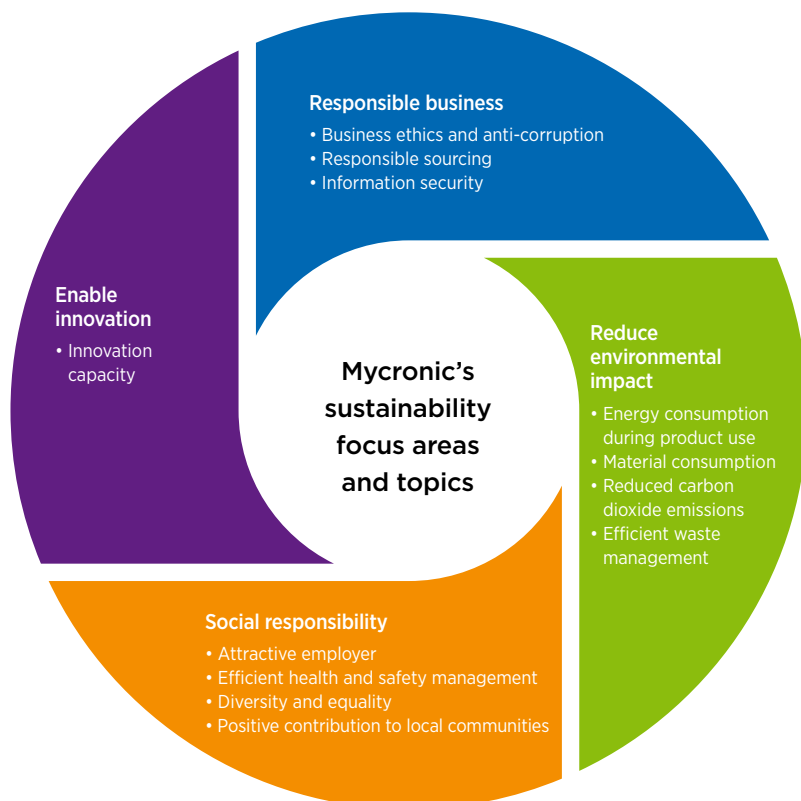
innovative systems and because of our exemplary work in the sustainability area. During the year, we continued to strengthen our compliance procedures in all operations globally, and we focus our efforts on the most significant sustainability challenges to become a role model in our industry. Read more about how we work with our prioritized sustainability topics in the following pages (25–35).

Mycronic has opted to report in accordance with the Global Reporting Initiative’s GRI Sustainability Reporting Standards (GRI Standards). In the GRI Appendix (pages 95 to 105), we are publishing supplemental information, such as sustainability indicators.

## Global implementation

The Board of Directors is ultimately responsible for sustainability topics. The Board receives an annual presentation of Mycronic’s sustainability strategy and is otherwise kept informed when necessary. It is incumbent upon the CEO, together with Group management, to ensure that Mycronic has effective governance of sustainability. Responsibility for each of the four focus areas is delegated to designated members of Group management (CFO, Sr VP Global Functions, Sr VP Human Resources, and Head of R&D High Flex). A sustainability manager was appointed during the year, responsible for coordinating and running sustainability work on a global level. The line organization holds the operative responsibility for ensuring that work is conducted in accordance with established action plans.

Mycronic has set up an Ethics and Compliance Board (ECB), chaired by the CFO and consisting of six members of Group management. The Committee is responsible for preparing guidelines on ethics and compliance and for ensuring that Mycronic has clear processes for review and follow-up for Codes of Conduct and other internal guidelines. The ECB also supports the line organization, responsible for ensuring that approved guidelines are followed in day-to-day operations.



# Stakeholders showing the way in sustainability

Mycronic conducts targeted sustainability dialogues with stakeholders to understand how they think that we, as a company and member of society, can best contribute to sustainable development. These dialogues serve as the basis for our materiality analysis and our continued work with sustainability.

In order to better understand how Mycronic impacts individuals, society and the environment, and to identify risks and opportunities at an early stage, we hold regular dialogues with our stakeholders. Discussions on sustainability are held every three years with customers, the capital market, employees and suppliers.












Our sustainability priorities are reviewed annually in conjunction with the firm's strategy planning. Prior to this review, we conduct a

materiality analysis, using input from the discussions with stakeholders, in order to identify the most material sustainability issues for Mycronic. Group management plays an active part in this work and approves the analysis.

The sustainability discussions and materiality analysis have resulted in 12 identified priority sustainability topics, grouped into four overarching focus areas. These form the basis for our sustainability strategy with long-term

goals and annual objectives as summarized in the table below. Mycronic's strategy also supports selected goals and targets of the UN Sustainable Development Goals. In the GRI Appendix (pages 97-107), we list the targets that we are working toward and provide a detailed description of our stakeholder dialogues.

## Sustainability goals and activities

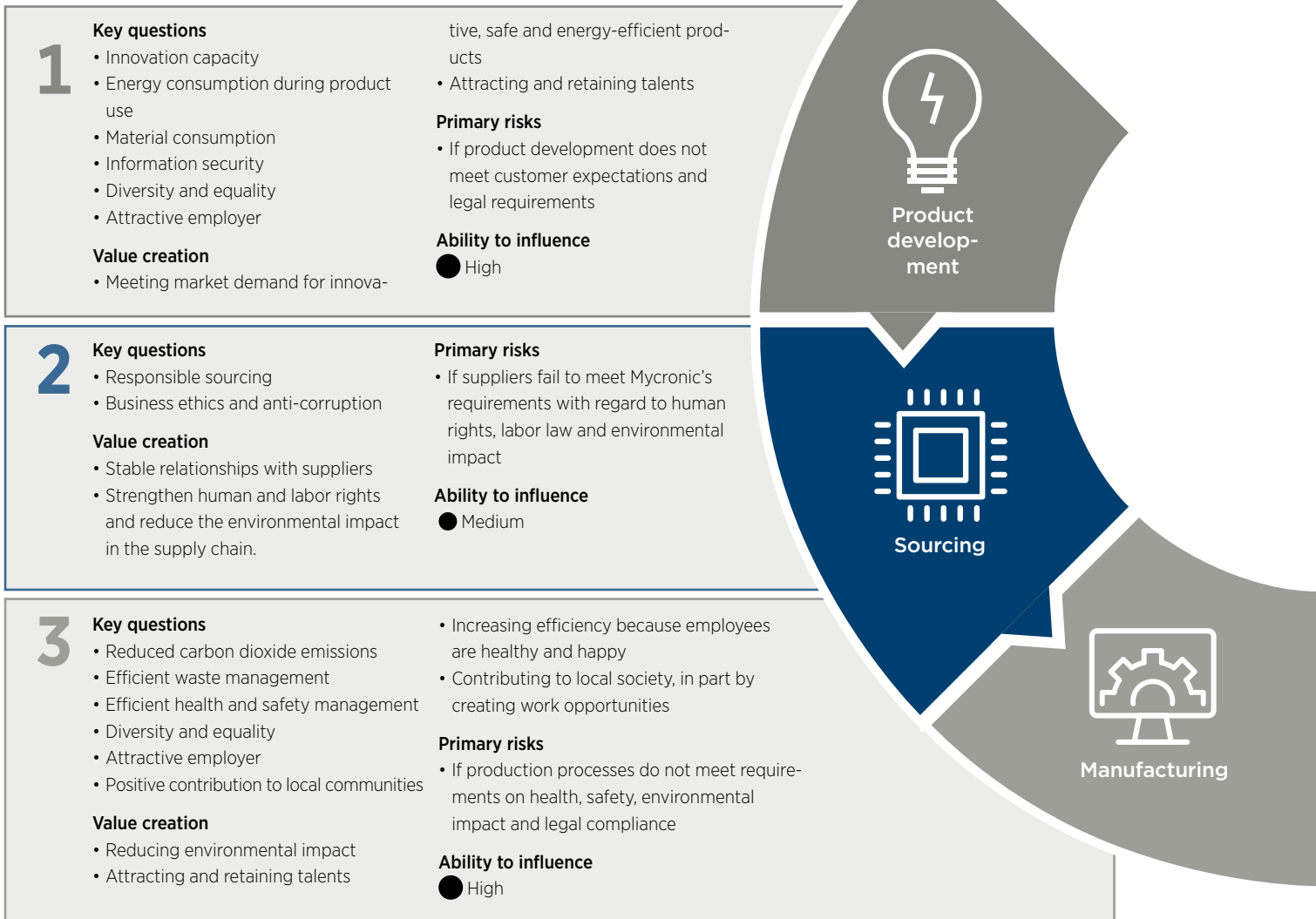
Focus areas	Goals	Completed in 2019	Objectives for 2020	UN SDGs
 <p><b>Responsible business</b></p>	<ul style="list-style-type: none"> <li>Integrity in business through clear principles</li> <li>Zero-tolerance for corruption</li> <li>Responsible sourcing</li> <li>High standards in information security</li> </ul>	<ul style="list-style-type: none"> <li>Mapping of risks in the sales process</li> <li>Reinforced guidelines on trade compliance in our Codes of Conduct for employees, suppliers, agents and distributors</li> <li>Global training on bribery and corruption</li> <li>Integration of environmental and social topics in our supplier audits</li> </ul>	<ul style="list-style-type: none"> <li>Raise awareness of internal policies through a global initiative</li> <li>Implement a pilot project on due diligence relating to risks of corruption among distributors and agents</li> <li>90 percent of critical suppliers must sign our Supplier Code of Conduct</li> <li>Raise awareness of information security among employees through a global initiative</li> </ul>	 
 <p><b>Reduce environmental impact</b></p>	<ul style="list-style-type: none"> <li>Reduce energy and material consumption during product life cycle</li> <li>Reduce carbon dioxide emissions</li> <li>Efficient waste management</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced routines concerning environmental requirements in product development projects</li> <li>Pilot study completed with a view to optimizing logistics flows</li> <li>Enhanced routines for ensuring compliance with WEEE and RoHS</li> <li>Energy-saving initiatives in Sweden and the US</li> </ul>	<ul style="list-style-type: none"> <li>Introduce systematic energy and material consumption targets in product development projects</li> <li>Establish a plan to reduce carbon dioxide emissions from larger production plants</li> <li>Establish a plan to reduce carbon dioxide emissions linked with freight transport</li> <li>Implement at least one initiative to improve waste disposal</li> </ul>	 
 <p><b>Social responsibility</b></p>	<ul style="list-style-type: none"> <li>Be an attractive employer</li> <li>Zero major incidents through efficient health and safety management</li> <li>Increase diversity and equality</li> <li>Contribute to sustainable local communities</li> </ul>	<ul style="list-style-type: none"> <li>Global human resources audits</li> <li>Local health and safety, diversity and preventive stress management initiatives</li> <li>Establishment of a global sponsorship policy</li> </ul>	<ul style="list-style-type: none"> <li>Implement global training initiatives for health and safety, diversity and preventive stress management</li> <li>Establish local action plans for diversity and stress management at all larger facilities</li> <li>Establish a global working method for Mycronic's contribution to the local community</li> </ul>	 
 <p><b>Enable innovation</b></p>	<ul style="list-style-type: none"> <li>Innovation capacity for continued business success</li> <li>Engage youth and universities to secure innovation capability</li> <li>Design for reduced environmental impact</li> <li>Offer solutions enabling a future of sustainable electronics production</li> </ul>	<ul style="list-style-type: none"> <li>Global innovation day on the theme "sustainable products"</li> <li>Mapping of cooperation initiatives with universities and incubators</li> <li>New guidelines on environmental impact in design processes</li> </ul>	<ul style="list-style-type: none"> <li>Report 25 innovations in a six-month period</li> <li>Establish a strategy relating to cooperation with universities, innovation incubators, and the like</li> <li>Ensure integration of environmental impact in design processes</li> <li>Implement a pilot project for life cycle analysis</li> </ul>	

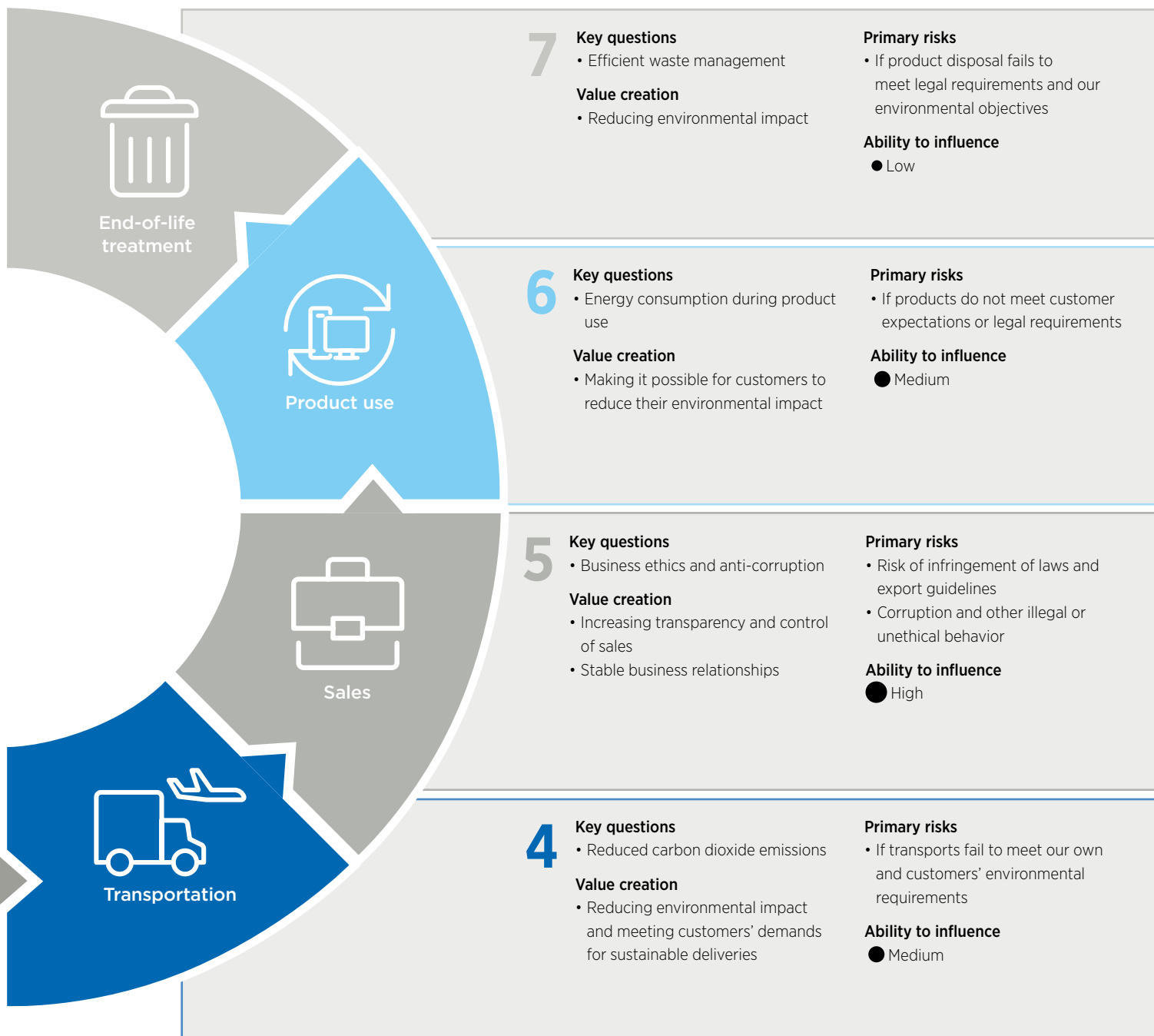
# Risks and value creation in the value chain

All stakeholders need to take responsibility if the electronics industry is to be sustainable. As an equipment supplier, we influence development both directly and indirectly in various parts of the value chain.

Mycronic is working actively to drive change towards sustainable development throughout the value chain. To manage both positive and negative impact effectively, we need to understand where impact happens in the value chain for each and every one of our significant sustainability topics, as well as which risks and opportunities these bring. Our responsibility

extends beyond our own operations and includes indirect impact that we bring about through business relationships with for example suppliers, distributors and customers. We have varying possibilities to influence different stages, depending on whether we have direct or indirect control over our impact.





Focus area: Responsible business



# Strong core values through clear policies

Our operations should be conducted in a responsible manner in all of the parts of the value chain we can control. A number of policies were updated over the course of the year, and control and follow-up were reinforced, in order to further consolidate our core values.

The growth that we have seen over the last few years presents a challenge to the organization, which is to ensure that activities throughout the entire value chain are managed in line with Mycronic's requirements and expectations.

Our goals and work in respect of responsible business are supporting the following UN Sustainable Development Goals: Goal 8 – Decent Work and Economic growth, and Goal 16 – Peace, Justice and Strong Institutions.

## Implementation of the Code of Conduct

The Code of Conduct – which was updated in

2018 – was communicated to and implemented in all Mycronic markets during the year. The Code of Conduct and Mycronic's values together build clear guidelines for employees and external consultants. New employees are introduced to the Code of Conduct as part of their orientation program.

## Anonymous whistleblower system

Events that contradict the Code of Conduct are reported to the HR department, alternatively to the immediate manager. There is also an anonymous whistleblower function managed by an external law firm, to which employ-

ees and external partners can safely report suspected irregularities on the part of people in senior positions. In 2019, two incidents were reported. These were investigated by external experts, who did not detect any irregularities.

## Overview of guidelines and policies

Mycronic's Ethics and Compliance Board (ECB) has during the year primarily worked with mapping the need of guidelines in the global organization. Following this, ECB updated and established new policies within relevant areas (read more below). During the year, the ECB has also established methods and processes for ensuring compliance with regulations in all business functions. A clear allocation of responsibilities and an efficient business intelligence structure will allow the organization to comply quickly with both internal and external regulatory frameworks when these are amended.

## Guidelines for a global organization

During the year, Mycronic reviewed the Group policies to ensure that the company has clear, common guidelines for our global organization, within essential areas. Working actively with policy updates helps us to quickly ensure compliance with new recommendations and legislation. Throughout the year, we have worked on our Group-wide Code of Conduct and the specific Codes aimed at our suppliers, distributors and agents, all of which have been updated with a reinforced section on trade compliance. We have also launched or updated guidelines as a complement to our Code of Conduct, such as policies relating to anti-corruption, sponsorship, gifts and entertainment, as well as to the whistleblower function. We will also be introducing a separate information security policy next year.



### Responsible sales

Through its subsidiaries, agents and distributors, Mycronic is active in some 50 countries. Transparency International considers the risk of corruption to be high in a number of these countries. In order to manage these risks, Mycronic has for a long time had a Code of Conduct that includes corruption issues, as well as rules for ensuring that we supply products to countries and customers in accordance with applicable legislation. We have launched a dedicated anti-corruption policy over the year in order to reinforce our commitment still further. Mycronic also tightened its Codes of Conduct for employees, distributors and suppliers regarding trade compliance.

In 2019, the CEO decided that all employees globally must participate in a mandatory training on bribery and corruption. Next year, additional training opportunities will be introduced within, for example, business corruption and information security.

Mycronic is reinforcing its control of the sales process by more clearly addressing social, environmental and business ethics aspects in the customer risk assessment process. During the year, the ECB and the sales organization were involved in reviewing and identifying risk elements in the sales process. This review has resulted in increased awareness of needs within the various parts of the group, as well as more stringent requirements relating to documentation and approval for sales to customers in certain countries.

### Increased control of the supply chain

Mycronic has around 1,500 suppliers globally. About half of the value of the products that we purchase each year pertains to direct materials in the form of metals, composites, stone, plastic and electronics. Since 2018, Mycronic requires that new strategic suppliers of direct

materials are certified in accordance with ISO 9001.

As of January 2019, environmental and social topics are included in our standard evaluation of new suppliers to the Swedish purchasing organization. This evaluation comprises a self-assessment and an on-site audit and covers issues relating to matters such as greenhouse gas emissions, electricity and water consumption, recycling of waste, human rights, health and safety, and diversity. In 2019, all of our new critical suppliers (three in Sweden and one in Japan) were assessed on these topics.

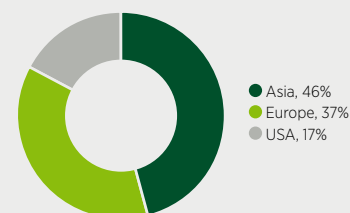
Mycronic's Code of Conduct for Suppliers was also updated in 2019. The updated Code has been translated into English, French, Japanese and Chinese. The objective is for all critical suppliers – that is to say, suppliers responsible for 80 percent of the total purchase value of direct materials – to have signed the Code of Conduct by the end of 2020. At the end of 2019, more than 50 percent of our critical suppliers globally had signed the Code and all regions have a roll-out plan for 2020.

Conflict minerals are an important social and ethical issue for the electronics industry. Mycronic is therefore working to map its supply chain in this regard. Mapping has begun, and when it is complete it will provide us with a clear picture of how much of our metal raw material is derived from certified smelters.

### Priority to information security

Information security is a priority area that requires constant development and improvement. Our prioritized IT systems are examined from a security perspective at regular intervals by external experts, at least every other year. External specialists review IT security when acquisitions take place. The results of the review combined with Mycronic's own guidelines form

### Geographical distribution of suppliers



the basis for how the acquired company is to be integrated into the IT structure. Throughout the year, our work focused on internal communication on Mycronic's approach to information security. In 2020, a new information security policy with accompanying information security classifications will be launched and a global training course in information security will be offered to all employees.

” As of January 2019, environmental and social topics are included in our standard evaluation of new suppliers

Focus area: Reduce environmental impact



# Environmental efforts focusing on the entire value chain

Following the acquisitions of the past few years, environmental work in 2019 focused on mapping the efforts made throughout our operations to achieve our environment targets. Our prioritized topics are carbon emissions, energy consumption during product use, material use, and waste management.

Mycronic's environmental work covers both direct and indirect environmental impact in the value chain. We maintain a preventive approach to reduce or avoid negative impact and are contributing to the following UN Sustainable Development Goals: Goal 12 – Responsible Consumption and Production, and Goal 13 – Climate Action.

### Environmental objectives show the way

Guidance relating to Mycronic's environmental considerations is based on our Code of Conduct, Quality and Environmental Policy, Supplier and Distributor Codes of Conduct and established environmental objectives. Environmental goals are reviewed annually and focus – based on our impact on the environment and climate – on carbon dioxide emissions, energy

consumption during product use, use of materials and waste management. The goals pertain to managing risks, as well as to positively impacting areas where we have the greatest opportunity to make a difference, for example by developing and offering products with reduced environmental impact during use.

Policies and environmental goals are mainly implemented within our quality and environmental management systems. At the end of December 2019, three of our six production facilities were certified according to ISO 14001 and four to ISO 9001. Work to achieve ISO 14001 certification of our production plant in France also took place during the year. As a consequence of the acquisitions made over the last few years, we mapped environmental work at the local plants in 2019 and activities were initi-

ated so as to ensure that we apply Groupwide methods in our environmental work.

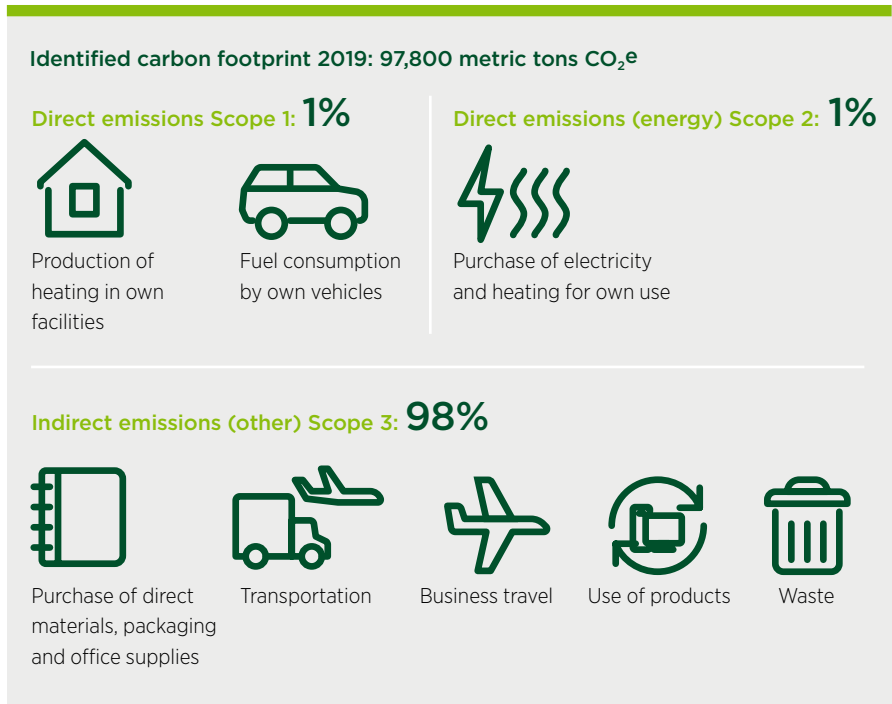
### Initiatives to counter climate change

Climate change is one of the greatest challenges of our age. Mycronic's largest carbon footprint occurs downstream in the value chain via the customers' use of our products. Of our total identified carbon dioxide emissions in 2019, 77 (75) percent stemmed from energy consumption during product use. Customers' use of our mask writers accounts for our single biggest source of carbon dioxide emissions, because the lasers in the mask writer require a lot of energy during use. Therefore, the Group has been running a project since 2017 that aims to develop more energy-efficient lasers in our mask writers (see example on next page). Mycronic's carbon dioxide emissions totaled 97,800 (73,100) metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) in 2019. The increase compared to 2018 is mainly due to the increased number of products in use, particularly among Axxon customers, which has influenced our indirect emissions under Scope 3. In addition, MRSI, acquired in 2018, was included in our calculations this year, which has also affected the result.

Mycronic took several initiatives during the year to reduce emissions linked to energy consumption in our facilities. For example, our head office in Täby – which is also one of our biggest production units – switched to LED lighting bringing energy savings of around 75 percent for lighting, and installed oil-free compressors that are around 15 percent more efficient. Climate-neutral electricity is used here as well. A number of initiatives were taken at our new production facilities in Boston, USA, such as the installation of a system for property control to increase operational and energy effectiveness. Travel and transport also impact our carbon footprint in the value chain. The French subsidiary ViT participates in a regional car sharing program and reimburses 75 per cent of the employees' public transport costs since 2019.

### Smart use of materials in our products

The world now has more stringent demands when it comes to environmental considerations in products. An efficient use of materials and





chemicals will help to reduce carbon dioxide emissions, produce less waste and decrease the risk of emissions from incorrect handling. Each product owner is responsible for including environmental considerations in the design, development and manufacturing of products. During the year, implementation work began on a new structure involving procedures, templates and checklists to guarantee and follow up environmental requirements more effectively. This implementation will continue gradually on a global level.

By reviewing the use of materials in our products, we can reduce our overall carbon footprint while also helping our customers to reduce their own impact on the environment. Mycronic products include several types of materials with differing degrees of environmental and climate impact, including metals (such as stainless steel, aluminum and titanium), rock (primarily diabase), plastic, glass, batteries and various types of electronic components. The production phase also requires the use of a number of chemicals that are classified as hazardous to health or the environment. These

include process chemicals that are necessary in the manufacturing process and chemicals that are included in products, such as adhesives and fats. A new working method for material declaration was established in 2019 in order to improve control of product content. Compliance with the EU RoHS Directive (Restriction of the use of certain Hazardous Substances) is part of this control procedure. Our ambition is to go beyond compliance with the regulations in this regard for relevant products to which the legal requirements do not apply.

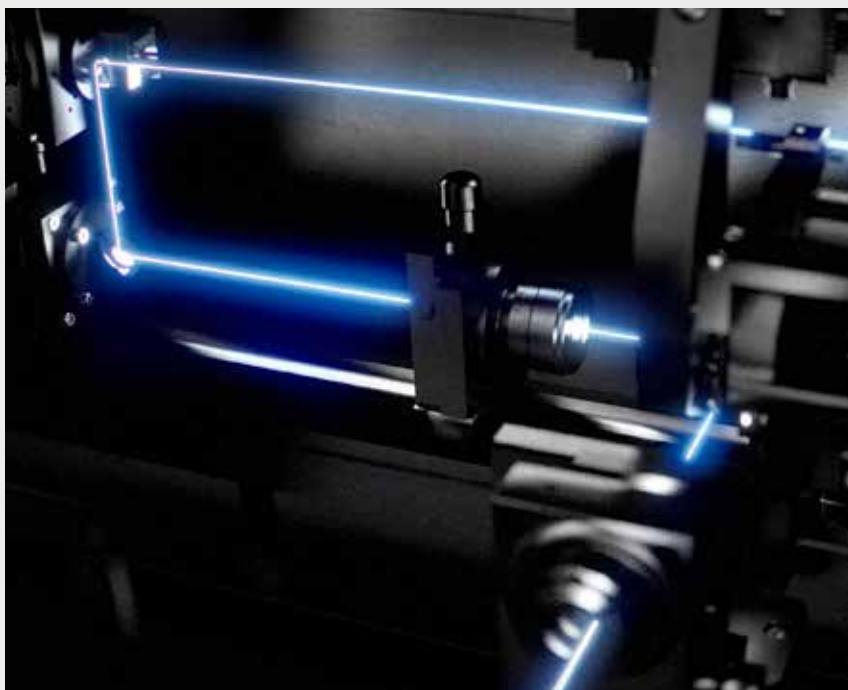
#### Efficient waste management

For Mycronic, waste is created during product development, testing, assembly and packaging of systems and spare parts, in office activities and when scrapping systems at customer sites. According to our estimates, about half of our waste is sent for recycling, while most of the remaining waste is sent for incineration with energy recovery. A minor portion of waste goes to landfill, of which most consists of the natural stone diabase.

Mycronic is working constantly to improve

waste disposal and recycling within the group, focusing on the biggest units. For example, some of our machines are renovated and upgraded by means of a buyback procedure and are then resold. Buybacks have increased significantly over the past three years, equaling almost 70,000 kg of material in 2019 compared with 14,700 kg in 2018 and 36,500 kg in 2017.

Compliance with the WEEE Directive (Waste Electric and Electronic Equipment) is also an important part of our responsibility as a manufacturer. Besides the countries in Europe where we have legal units, Mycronic has taken over manufacturer responsibility for distributors and agents in ten other EU countries in order to facilitate disposal of end-of-life products. In practice, this means that Mycronic funds and assists customers in all these countries with disposal of electronic waste linked to our products. We also have customer manuals that describe how products are dismantled and recycled, and how to scrap our products responsibly in line with WEEE. These manuals are also available for products sold outside the European market.



#### Lower carbon dioxide emissions with energy-efficient mask writers

Mycronic's biggest carbon footprint stems from the use of our products (Scope 3). Customers' use of our mask writers accounts for Mycronic's single biggest source of carbon dioxide emissions, because the lasers in the mask writer require a lot of energy during use. This is why the Pattern Generators business area is running a project that aims to replace the current lasers in mask writers with a more energy-efficient type of laser. This technology is expected to save up to 99 percent of the power used for lasers, which will drastically reduce the total energy consumption from the mask writer. Our new SLX mask writer will be the first system to use this type of laser. Our ambition is to use lasers based on this technology in all our mask writers in future.

Focus area: Social responsibility



# An attractive employer and responsible stakeholder

We look upon social responsibility as a means to strengthen both our business and our employer brand. We have conducted HR audits throughout the entire company over the year in order to ensure that all our operations are meeting our stringent standards.

Mycronic has more than 1,400 employees in 10 countries, with a significant share in research and development. Our employees are crucial to our value creation.

Mycronic has a global human resource strategy, which aims to secure long-term skills supply and to ensure that we offer a safe, inclusive and healthy place to work. Identified risks linked to social responsibility include the risk for shortage of unique skills expertise, and health and safety risks. To ensure efficient management of these risks, we conducted extensive HR audits globally during the year, where we verified that all our operations meet our high standards. These audits covered processes from recruitment to termination of employment. We intend to use our enhanced understanding of the strengths, risks and potential for improvements of our various units to share best practice within the group and hence increase the competitiveness of our working places. Our goals and the work we do in respect of social accountability are supporting the following UN Sustainable Development Goals: Goal 5 – Gender Equality and Goal 8 – Decent Work and Economic Growth.

## Innovator of the year for employer branding

The opportunity to work with cutting-edge technology in a global environment, at a company with a good reputation, is a commonly stated explanation for wanting to work at Mycronic. Our approach is based on skills development and active participation in both potential and current employees. This year, we received a flattering award by Universum in Sweden, naming us Innovator of the year for employer branding. Once again, we were also named as one of Sweden's Career Companies for our well-developed sustainability approach and responsible commitment to our employees.

To secure our future skills supply and attract talents, we are working to make more young people interested in technology and IT. In 2019, we offered eight high school students in Sweden four months of work experience through the Tekniksprånget internship program. In Sweden, we also cooperated with Hello World, a non-profit organization for children and young people that aims to raise interest in technology professions. In November, about 100 children and young people aged 8 to 14 enjoyed a study visit to our site. We also take part in student fairs at regular intervals.

## Skills development and career paths for engineers

Most of our skills development takes place through internal knowledge transfer and activities such as job rotation programs. All managers within the group hold annual performance interviews with their staff, and these are used to establish individual development plans. A global knowledge network is used to disseminate and develop know-how within our product areas.

Work on issuing what are known as career paths, which clarify development stages for

engineers, continued throughout the year. The Pattern Generators business area, for example, implemented career paths in Sweden, the US, Japan, South Korea and China.

We have analyzed our need for global skills development and training and made a decision to invest in online training courses. Implementation via our digital system will take place in 2020. A number of priority training courses were tested and underwent quality assurance at the end of the year so that they can be implemented on a broad front throughout the organization in 2020.

## Action plan following staff survey

We have established action plans throughout the year based on results from the staff survey that took place in 2018. 85 percent of respondents said they feel that Mycronic offers challenging and stimulating job assignments, and of course this is something that we are doing our best to go on doing. We believe that our digital support and training initiative will increase support in helping employees perform at work, as well as giving them opportunities for skills development going forward.

## Focus on diversity and equal treatment

Mycronic wants to have employees with different personalities, background and knowledge, since we consider diversity a prerequisite for an efficient, innovative, and including workplace. This is why we are striving to create a transparent and inclusive work climate in which there is no discrimination and where

# 25

By 2023, our target is that 25 percent of all managers and 20 percent of all employees will be women.

## Percentage women/men in Group management, 2019



The goal is for Group management to comprise at least 40 percent women by 2023.

## Community involvement helps elderly to survive winter

In November, Mycronic Korea took part in a community outreach program in Seoul. Volunteers among our employees helped to carry charcoal briquettes to households occupied by underprivileged elderly people who live in inaccessible places and still need to use briquettes in order to survive the winter. These briquettes were carried by volunteers up steep, narrow hills to households that cannot be reached by car. "Being able to help people was very rewarding, and it was also refreshing to have an opportunity to expand our horizons. We will be continuing to explore our opportunities to give back to society," said one of the participants when asked to summarize the initiative.



” We were once again named as one of Sweden’s Career Companies for our well-developed sustainability approach and responsible commitment to our employees

everyone’s opinions can be heard. Pursuant to our Code of Conduct and Diversity Policy, we work systematically to promote diversity and combat discrimination by means of local action plans and active measures. Next year, we implement a training initiative relating to diversity in the workplace.

The company is dedicated to becoming a workplace with more even distribution of men and women. By 2023, the goal is that 25 percent of all managers and 20 percent of all employees are women. In 2019, the percentage of women managers and employees was 22 and 17 percent, respectively.

### A safe and healthy workplace

Mycronic wants to offer a workplace where the employees in all parts of the world receive support with physical and ergonomic initiatives as well as psychosocial. Our aim is to ensure that none of our employees fall ill or are injured as a consequence of their work, and we focus our work environment management on reducing and preventing risks in the workplace.

Employees receive regular training on health and safety. Mycronic provides everything from safety training in chemicals management to information videos on office-work ergonomics, which are available on the intranet. This year, our French subsidiary ViT implemented a range of measures with a view to improving ergonomics during production work. For

example, machinery was equipped with special ergonomic accessories. Mycronic has also implemented targeted local initiatives throughout the year in order to reduce stress. This has included a training course on stress management for managers in Sweden, and an action plan containing activities for 2020 has been established. Health and safety committees are also in place in Sweden.

### Our contribution to local communities

By actively contributing to the local communities in which we operate, we are strengthening employee commitment and our own brand. We established a sponsorship policy in 2019, and in 2020 we will be establishing a global strategy for contributions to the local communities where we are present. A number of initiatives have been implemented by our various operations throughout the year. Among other things, Mycronic Korea took part in a community outreach program in Seoul (see the example above). Community initiatives were also implemented in other parts of Mycronic – in Sweden, for example.

Focus area: Enable innovation



# Innovations for the sustainable electronic products of the future

As an innovation company, we consider it part of our responsibility to integrate sustainability in the development of products and solutions. For example, we are working strategically to optimize the use of energy and materials in our products.

Mycronic had more than 500 patents at the end of December, of which 37 new patents were granted in 2019. Investments in the next generation of electronic solutions are driven by market demand for feature-rich and sustainable products. Preserving and developing the innovative culture that has been built up over forty years within the Group is essential. This includes encouraging new ideas and having the courage to think outside the box, finding synergies between experience and new thinking, and having the ability to make quick deci-

sions. Building efficient innovative processes, which continue to make the most of the collective knowledge, the innovation capacity and the technical expertise available, is every bit as important.

Sustainability is starting to become an increasingly integral part of discussions with customers. For example, more customers are demanding energy-efficient products. Our ongoing project to develop more energy-efficient lasers in our mask writers is one step further in meeting these requirements (see

page 31). Another example is our collaboration with solder paste suppliers to Assembly Solutions, aiming at developing solder pastes with a lower melting point that will allow production line energy consumption to be reduced.

We have begun to implement our goals established in 2018 that aim to increase the group's overall innovative capacity, with sustainability as an integral part of the process. The goals and innovation work that we do also support the UN Sustainable Development Goal: Goal 9 - Industry, Innovation, and Infrastructure.

## Sustainability integrated in the solutions of the future

In 2019, new guidelines were launched to ensure that sustainability issues are effectively taken into account in product design. This may involve anything from choosing sustainable materials and reducing energy consumption

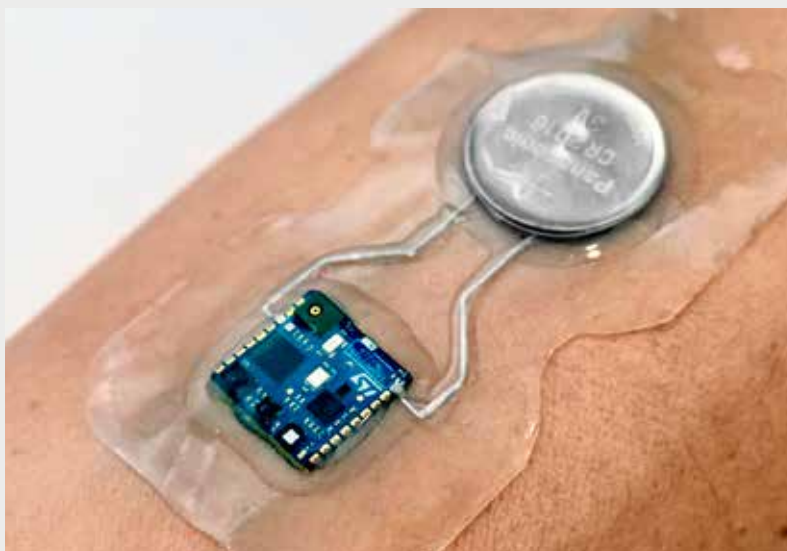
### Ideas for sustainable electronics production

A group wide innovation day with a sustainability theme was held in autumn 2019 in order to get our employees involved and pick up ideas on the sustainable products and solutions of the future. Local workshops on the topic of innovation and sustainability were arranged in the USA, Sweden, China and Japan over the course of the day, and teams were asked to suggest product ideas from a life cycle perspective. An American team that presented a selection of solutions feasible in the short and long term, relating to factors such as reduced energy consumption during product use, won the competition that was advertised. Other ideas that emerged during the day have resulted in feasibility studies for coming innovation projects.



## Stretching the limits of wearable electronics

“Imagine applying a tape-thin sensor to an elderly patient and that the sensor is able to move flexibly with the body while monitoring the heart and other functions,” says Gustaf Mårtensson, expert in complex fluids at Mycronic. One of the challenges is to ensure that the materials used are sustainable and non-toxic. Mycronic is part of an EU-funded research project which is aiming to develop stretchable electronics for health care, medical care and other applications.



from our machines, to facilitate dismantling and repair of products, recycling and removal of materials to be disposed of. Besides pure environmental gains, there is also a quality aspect relating to extending product lifetime. A product that can be repaired and upgraded will remain on the market for a longer time. To date, these new guidelines have been implemented in Sweden. The global roll-out has begun and will be followed up in the coming year.

In 2020, Mycronic will be implementing a pilot project in order to clarify and calculate the environmental impact of one of our products. This project aims to establish a method for working with life cycle analysis within the company, as well as to enhance in-house awareness of and interest in the environmental impact of our products from cradle to grave. In the longer term, we are planning to implement life cycle assessments for all product families. Our ambition is to gradually reduce the environmental impact of Mycronic products.

### Innovations in ecosystems with other stakeholders

At the end of December 2019, some 450 employees and consultants were part of Mycronic's research and development activities (R&D). The annual R&D budget amounts to between 12 and 15 percent of net sales and is governed by development plans for each product area. With nine units, two of which are development collaborations, spread across seven countries on three continents, we are well prepared to cope with the future demand for innovative solutions for electronics production. Our own laboratories and simulators, as well as a number of smaller innovation labora-

tories that we have built up for rapid development and testing of new ideas, are facilitating the route from idea to concept. At the same time, the acquisitions over the last few years have increased demands for internal cooperation and governance in order to highlight and optimize the use of the skills and technological expertise available throughout the group. Our Groupwide Tech Council, which involves R&D managers from all local units, has an important part to play in this regard.

Strategic collaborations with customers, partners and academia are an important part of daily innovation work. During the year, we have defined a clearer strategy that essentially involves optimizing our innovation capacity through cooperation in ecosystems with other stakeholders. Partnerships with customers have an important part to play here when it comes to monitoring and understanding future customer needs and potential solutions to these. In the same manner, collaboration with academia offers an insight into the latest research that may serve as a basis for new technical solutions for future products.

The clusters and incubators at selected universities in which our local business units are currently involved were mapped during the year. The next step is to establish our focus for going forward, in order to support the Group strategy most effectively. Together with experts in strategic fields, we have the opportunity to participate in projects where basic technology

is applied to completely new areas, or where completely new technologies will be explored. One example of a strategic partnership of this kind is the initiative launched with two partners in the electronics industry in 2018 – the Center for Deep Learning in electronics (CDLe) in San Jose in the USA. The center provides an opportunity to quickly build Deep Learning expertise by collaborating in a network with specialists in various fields. Employees from around the world will be stationed at the center, for a shorter or longer period. Since the outset, Mycronic has defined 40 projects that are expected to create direct value for customers when they are integrated into our products.

### Ensuring innovation capacity for future product development

Attracting the talented engineers of the future is important if we are to maintain our innovative capacity in the long term. Besides the recruitment made possible by means of partnerships with universities and colleges, we offer opportunities for degree project work and summer jobs for university students. Moreover, our R&D unit in Täby offers a number of internships for students who have graduated from high school. These young people interested in technology are given the opportunity to spend four months helping out with testing and other tasks as part of our ongoing research and development work, with a view to encouraging them to choose engineering for their future careers.

” The annual R&D budget amounts to between 12 and 15 percent of net sales

# Auditor's report on the statutory sustainability statement

To the general meeting of the shareholders of Mycronic AB, corporate identity number 556351-2374

## Engagement and responsibility

It is the Board of Directors who is responsible for the statutory sustainability statement for the year 2019 on pages 24–35 and that it has been prepared in accordance with the Annual Accounts Act.

## The scope of the audit

Our examination has been conducted in accordance with FAR's auditing standard RevR 12 *The auditor's opinion regarding the statutory sustainability statement*. This means that our examination of the statutory sustainability statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing

and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

## Opinions

A statutory sustainability statement has been prepared.

Stockholm, March 19 2020  
Ernst & Young AB

Erik Sandström  
Authorized Public Accountant

# The Mycronic share

Mycronic's share is listed on Nasdaq Stockholm, Large Cap. Mycronic focuses on value creation through established financial objectives and by executing the strategy.

## Stock trading

Mycronic's share is listed on Nasdaq Stockholm. As of January 2, 2020, the share is listed on the Large Cap list. In 2019, the total turnover of Mycronic shares on Nasdaq Stockholm amounted to 67.3 million (83.3) shares, corresponding to 69 percent (85) of the total number of shares.

## Shareholders

At the end of the year, Mycronic had 13,854 (15,483) shareholders. All shares are of the same class with equal voting rights and the same share of capital and earnings. The quote value is SEK 1 per share. The largest shareholder, Bure Equity, owned 27.9 percent at year-end. The ten largest owners held 67 percent (65) of the total number of shares. Board members and Group management held a total of 0.4 percent (0.5). At the end of 2019, Swedish ownership was 74 percent (80).

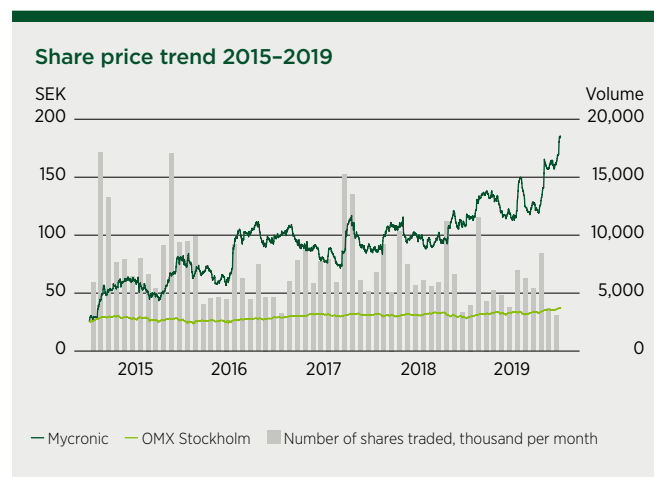
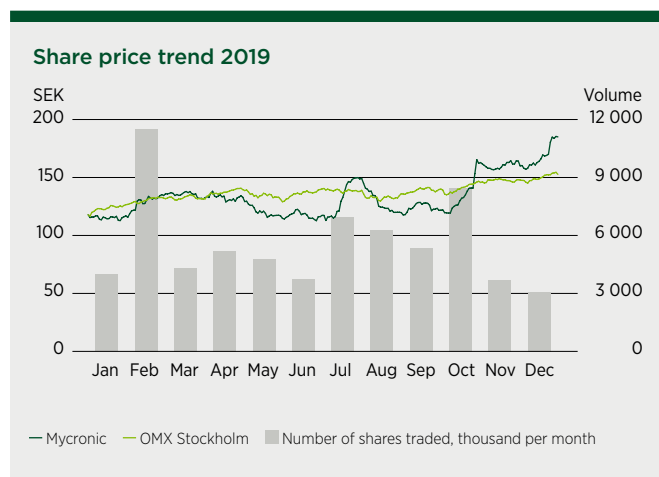
## Price trend

Mycronic's market capitalization increased 57 percent in 2019 to SEK 18,124 million, from SEK 11,564 million at the end of 2018. The highest closing rate was recorded on December 27 at SEK 185.50 and the lowest closing rate on June 28 at SEK 112.80. OMX Stockholm PI increased during the year by 30 percent, and OMX Stockholm Technology PI rose by 18 percent.

## Dividend and proposal on share buy-back

Mycronic's objective is to provide both a good return and value growth. Between 30 and 50 percent of net profit will be distributed to the shareholders, provided the company has a net debt lower than 3 times EBITDA after the stipulated dividend. As a basis for the dividend decision, the Board of Directors takes into account not only the nature, scope and risks

associated with the operations but also the historical development, budgeted development, investment plans and general economic climate. For 2019, the Board of Directors is proposing, in accordance with the company's dividend policy, a dividend of SEK 3.25 (3.00) per share. The dividend corresponds to a total of approximately SEK 318 million (294) and 37 percent (37) of net profit for the year. The Board of Directors intends to propose to the 2020 Annual General Meeting a renewed authorization for the Board of Directors to buy back shares in Mycronic AB. According to the proposal, the number of shares that may be bought back will be limited to a maximum of 5 percent of shares outstanding in Mycronic AB.



Source: Monitor by Modular Finance AB. Data compiled and processed from inter alia Euroclear, Morningstar and the Swedish Financial Supervisory Authority.

## Ownership structure December 31, 2019

Holding by size	No. of share-holders	No. of shares	%
1-500	10,869	1,334,477	1.4
501-1,000	1,347	1,113,796	1.1
1,001-5,000	1,233	2,790,702	2.8
5,001-10,000	172	1,258,188	1.3
10,001-50,000	149	3,330,306	3.4
50,001-100,000	26	1,908,320	1.9
100,001-	58	83,347,880	85.1
Anonymous		2,832,840	2.9
<b>Total</b>	<b>13,854</b>	<b>97,916,509</b>	<b>100.0</b>

## Analysts that monitor Mycronic

Company	Analyst
Carnegie	Mikael Laséen
Danske Bank	Fredrik Lithell
Handelsbanken	Daniel Djurberg
Redeye	Viktor Westman

## Data per share

	2019	2018
No. of shares	97,916,509	97,916,509
Share price at year-end, SEK	185.10	118.10
Equity per share, SEK	30.46	24.30
Market value/equity ratio	6.08	4.86
Earnings per share, SEK	8.74	8.09
P/E ratio	21	15
Dividend	3.25 <sup>1</sup>	3.00

1) Proposed dividend.

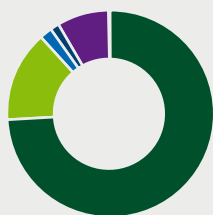
## Largest shareholders, December 31, 2019

Shareholder	No. of shares	Holding, %
Bure Equity	27,317,163	27.9
Fjärde AP-fonden	8,705,809	8.9
SEB Fonder	8,443,908	8.6
Invesco	6,045,806	6.2
Swedbank Robur Fonder	5,028,578	5.1
Lannebo Fonder	2,777,402	2.8
Handelsbanken Fonder	1,985,103	2.0
Vanguard	1,930,802	2.0
C WorldWide Asset Management	1,673,119	1.7
Catella Fonder	1,367,488	1.4
Ten largest shareholders	65,275,178	66.7
Others	32,641,331	33.3
<b>Total</b>	<b>97,916,509</b>	<b>100.0</b>

## Share capital development

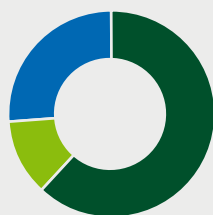
Year	Increase in number of shares	Total number of shares	Share capital, SEK thousand
1989	16,000	16,000	1,600
1990	3,300	19,300	1,930
1994	1,801	21,101	2,110
1997	11,979,399	12,000,500	12,001
1998	2,000,083	14,000,583	14,001
2000	5,100,000	19,100,583	19,101
2001	102,000	19,202,583	19,203
2002	12,700	19,215,283	19,215
2003	19,951,333	39,166,616	39,167
2009	26,111,057	65,277,673	65,278
2010	32,638,836	97,916,509	97,917

## Ownership structure by geography



● Sweden, 74.3% ● USA, 14.3%  
 ● Denmark, 1.9% ● Luxembourg, 1.4%  
 ● Other, 8.2%

## Ownership structure by category



● Swedish institutions and companies, 62%  
 ● Swedish private investors, 12%  
 ● Foreign investors, 26%





# Annual and consolidated accounts

# Report of the Directors

The Board and CEO for Mycronic AB (publ.), corporate identification no. 556351-2374, hereby submit the annual report and consolidated financial statements for the financial year January 1 to December 31, 2019.

## Mycronic's operations

Mycronic has developed innovative solutions for advanced electronics production since the 1970s. In the same spirit, the company continues today to help its customers to create world-leading production solutions for electronics and display manufacturing with rigorous demands on precision and flexibility. Operations are conducted through two business areas: Assembly Solutions and Pattern Generators. The following description is based on the organizational structure as of December 31, 2019.

Assembly Solutions holds a leading position within systems for electronics production with a complete offering for SMT, inspection, dispensing solder paste and mounting fluids. Within the field of assembly automation, Mycronic is a leader in assembly equipment for manufacturing camera modules for the automotive industry and in die-bonding systems for manufacturing optoelectronics and microelectronics.

Pattern Generators holds a unique position as the only supplier of mask writers to produce advanced photomasks for displays that are used when manufacturing products such as cell phones, tablets, TVs and computer displays.

A large share of Mycronic's net sales is derived from aftermarket business, where service is provided to in excess of 3,000 customers in more than 50 countries with over 12,000 installed systems.

## Group structure

The Group consists of the Parent Company Mycronic AB and wholly owned subsidiaries in France, Japan, China, the Netherlands, Singapore, the UK, South Korea, Germany, and the USA, as well as a dormant company in Taiwan.

After an acquisition in 2018, Mycronic owns 100 percent of MRSI Systems in the USA, see Note 22. In 2017, Mycronic acquired 100 percent of Vi TECHNOLOGY in France. As a result of acquisitions in 2016, Mycronic owns 100 percent of Kognitec and RoyoTech (of which 25 percent was acquired in 2017) in Germany, 100 percent of AEI in the USA, and 100 percent of the

Chinese company Axxon. The consideration for the remaining 20 percent of the shares in Axxon was paid in 2019. All acquisitions are consolidated from the date of acquisition.

## Sustainability Report

In accordance with the Swedish Annual Accounts Act, Chapter 6, paragraph 11, Mycronic has chosen to prepare the statutory Sustainability Report separately from the Report of the Directors. The Sustainability Report can be found on pages 24-35 with an accompanying statement from the auditor on page 36.

## Personnel

At the end of the year, the Group had 1,450 (1,254) employees.

The average number of full-time employees in the Group in 2019 was 1,349 (1,175), of which 357 (336) were employed in Sweden. Women accounted for 17 percent (16) of the average number of Group employees. See Note 14.

## Long-term financial goals

The Group's long-term financial goals were published in February 2017.

## Growth

Net sales including acquisitions shall reach SEK 5 billion at the end of the business plan period, 4 to 7 years.

## Profitability

EBIT shall exceed 15 percent of net sales over a business cycle.

## Capital structure

Net debt shall be less than 3 times average EBITDA (operating profit before interest, tax, depreciation and amortization). The average is calculated over 3 years.

## Significant events during the year

In May, Anders Lindqvist took over as the new President and CEO of Mycronic.

## Product development and product launches

Assembly Solutions strengthened its total offer during the year with new compact machine models for component placement, a new and unique system that improves the process quality in the application of solder paste and an upgraded platform for three-dimensional inspection of circuit boards. The business area also launched a flexible die-bonding machine with very high accuracy for high-volume production of optoelectronics as well as new dispensing robots with advanced movement systems for dispensing mounting fluids when manufacturing cell phones.

During the year, Pattern Generators expanded its customer offer in mask writers for displays with the launch of Prexision Lite 8. The business area also launched the Evo control platform during the year, and the platform will be a cornerstone in Mycronic's mask writers moving forward and strengthen the customer offer. The business area also launched SLX, a cost-effective laser mask writer for the semiconductor industry, which means that Mycronic is once again delivering newly developed systems to this market.

## Comments on financial performance

All financial information, such as the order intake and profit and loss and balance sheet items, includes acquired companies as of the respective dates of acquisition.

## Order intake and order backlog

Order intake, including system and aftermarket sales for both business areas, amounted to SEK 4,567 million (3,642) in 2019. Order intake included eight (seven) mask writers.

The order backlog at year-end was SEK 2,164 million (1,904). The order backlog includes ten mask writers, of which seven with planned delivery in 2020. The order backlog also contains a major upgrade with delivery in 2020.

### Net sales

Net sales in 2019 amounted to SEK 4,307 million (3,781), an increase of 14 percent. Of this, 7 percent was attributable to organic growth and 2 percent to acquisitions, with exchange rate effects of 5 percent.

Net sales comprised delivery of eight (seven) mask writers and one major upgrade. Assembly Solutions showed strong growth of 22 percent, which corresponds to organic growth of 11 percent, excluding positive exchange rate effects.

The Group's net sales were affected by positive exchange rate effects. Recalculated to the exchange rates which prevailed in 2018, net sales reached SEK 4,126 million. Aftermarket sales constituted 28 percent (29) of net sales.

### Gross profit and gross margin

Consolidated gross profit amounted to SEK 2,399 million (2,098). The year's higher gross profit can be explained by greater sales volumes primarily in Assembly Solutions and a more beneficial product mix within Pattern Generators. Gross margin amounted to 56 percent (55).

### Research and development expenses

Consolidated development expenses in 2019 amounted to SEK 559 million (476). The increase is mainly attributable to the Pattern Generators business area and MRSI Systems, which was acquired in 2018, in the Assembly Solutions business area.

The product program is continuously being modernized through maintenance and minor development initiatives. The Group also continued to execute its fast-paced product development strategy. Through collaboration, investments are made in product development for new needs and new markets.

Mycronic's patent strategy protects its investments in unique technology. At year-end, the Group held more than 500 patents.

Within Assembly Solutions, development expenditures amounted to SEK 340 million (312) in 2019. The expenditures covered existing product development and investments for future growth and competitiveness. In 2019, SEK 17 million (10) was capitalized in the balance sheet.

Development expenditures in Pattern Generators increased to SEK 227 (154) million, due to the development of Prexision Lite 8, the new control platform Evo, and the mask writer SLX. These investments will continue in 2020 along with the development of the next generation of mask writers. In 2019, SEK 12 million (0) was capitalized in the balance sheet.

### Sales and administration

Expenses for sales and administration amounted to SEK 778 million (649) in 2019.

The increase in expenses is primarily attributable to investments in the sales organization and operating expenses in the acquired companies. The Group continued to build up the global sales organization both geographically and product-wise and conducted market activities.

### EBIT

Consolidated EBIT for 2019 amounted to SEK 1,124 million (1,020), corresponding to an EBIT margin of 26 percent (27). The results were positively affected by healthy delivery volumes in both business areas.

The underlying EBIT amounted to SEK 1,169 million (1,076), with an underlying EBIT margin of 27 percent (28). The difference between EBIT and the underlying EBIT consists of acquisition-related expenses. These amounted

to SEK 45 million in 2019 and are attributable to amortization and impairment of acquired intangible assets as well as changes in value and revaluation of contingent considerations. Acquisition-related expenses were charged in full to Assembly Solutions.

### Tax

Consolidated profit before tax amounted to SEK 1,122 million (1,011) in 2019.

Consolidated tax expenses amounted to SEK 263 million (219).

### Profit for the year and earnings per share

Consolidated profit after tax for full-year 2019 amounted to SEK 859 million (792), of which SEK 855 million (790) is attributable to the Parent Company's owners.

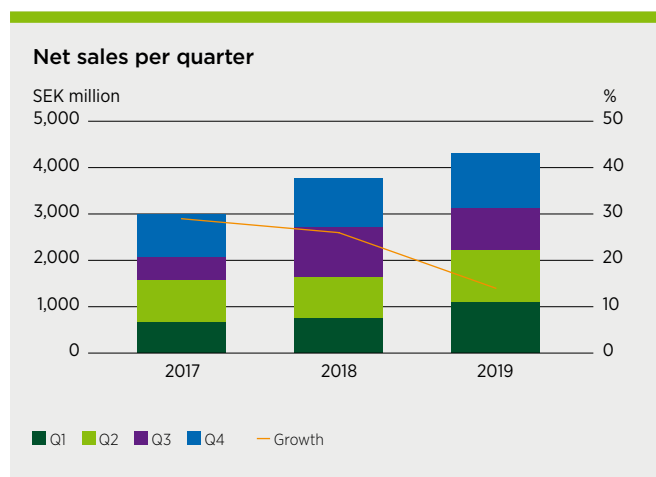
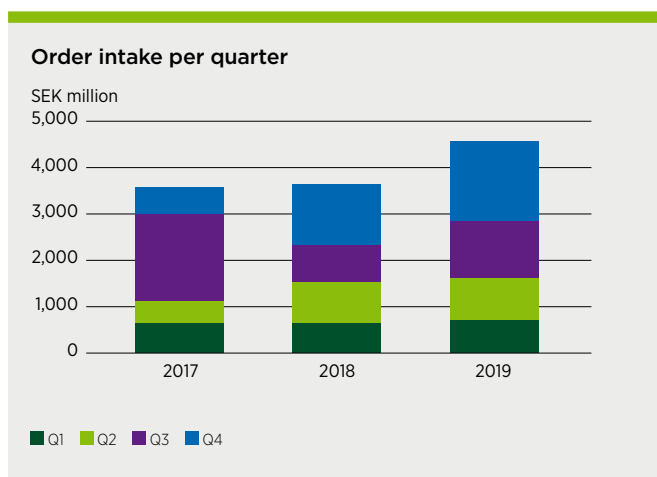
The average number of outstanding shares amounted to 97,892,942 (97,916,509). Earnings per share amounted to SEK 8.74 (8.09) before and after dilution.

### Comments on financial position

The Group's total assets at year-end 2019 amounted to SEK 4,800 million, compared with SEK 4,199 million at the end of 2018.

Non-current assets amounted to SEK 1,960 million (1,592). Intangible assets amounted to SEK 1,366 million (1,381), of which SEK 1,299 million (1,343) consisted of acquisition-related assets in the form of goodwill, customer relationships, technology and brands.

Capitalized development expenditure amounted to SEK 51 million (32). During 2019, development projects were capitalized in the amount of SEK 29 million (10). Amortization of previously capitalized development amounted to SEK 11 million (7). Each development project is assessed individually to determine whether



the criteria for capitalization in the statement of financial position have been met.

The value of intangible assets with indefinite useful life is impairment tested at least once per year to ensure accurate reporting.

During 2019, inventory increased from SEK 868 million to SEK 1,109 million, and trade receivables from SEK 664 million to SEK 826 million. The increase is related to the company's expansion. During 2019, cash and cash equivalents decreased from SEK 829 million to SEK 655 million.

Current liabilities amounted to SEK 1,224 million (1,559). Trade payables increased from SEK 236 million to SEK 288 million. Advance payments from customers amounted to SEK 336 million (306). The Group strives to the greatest extent possible to receive advance payments from customers in connection with orders, and especially for sales of mask writers.

At year-end, the Group had interest-bearing liabilities amounting to SEK 318 million (1) while net cash was SEK 337 million (827). Interest-bearing liabilities consist primarily of lease liabilities.

### Equity

Consolidated equity on December 31, 2019, was SEK 2,978 million (2,379). The number of outstanding shares at year-end was 97,775,109.

The equity/assets ratio, the percentage of equity of the total assets, was 62 percent (57). At year-end, Mycronic's market capitalization was SEK 18,124 million (11,564).

### Comments on cash flow and investments

Consolidated cash and cash equivalents at year-end amounted to SEK 655 million (829). Cash flow for the period was SEK -180 million (4).

Cash flow from operating activities after changes in working capital generated SEK 545 million (702). Working capital claimed SEK 498 million, mainly through increased capital tied up in inventories and trade receivables related to the company's growth. This also includes a decrease in current liabilities in conjunction with the delivery of a Prexision system during the first quarter of 2019.

Investments amounted to SEK 399 million (440), where the contingent consideration for the remaining 20 percent of the shares in Axxon in the fourth quarter was SEK 248 million. Investments in tangible assets were SEK 109 million and included the renovation of new premises in the USA and the upgrade of Mycronic's premises in Täby. Investments in intangible assets included the capitalization of product development of SEK 29 million (10) and investments in business systems.

Financing activities claimed SEK 326 million (258), of which dividends of SEK 294 million (245).

### Events after year-end

In order to be better equipped for continued profitable growth, a new Group structure was announced in January 2020 with the aim of achieving the company's strategic priorities. The new Mycronic organization goes into effect on April 1, 2020, at which point the Group will consist of four divisions: Assembly Solutions High Flex, Assembly Solutions High Volume, Assembly Solutions Global Technologies and Pattern Generators.

With operations in large parts of the world, Mycronic is expected to be affected by the covid-19 outbreak. The company is continuously working to assess the impact and to take appropriate measures. It is not possible to estimate

the financial effects in a reliable manner at the time of publication of the annual report.

### Approved guidelines for remuneration

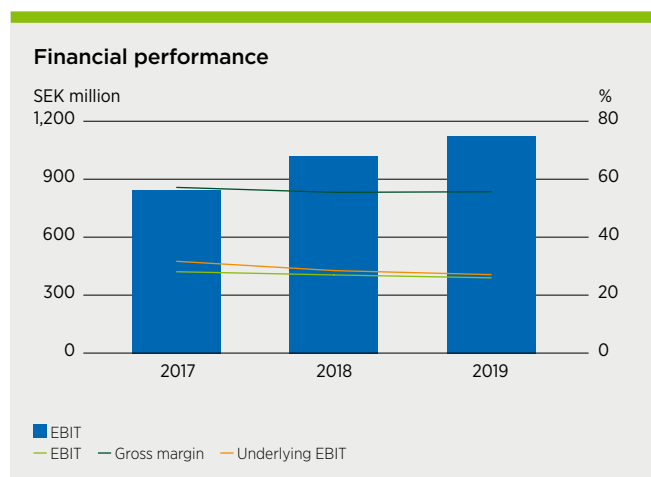
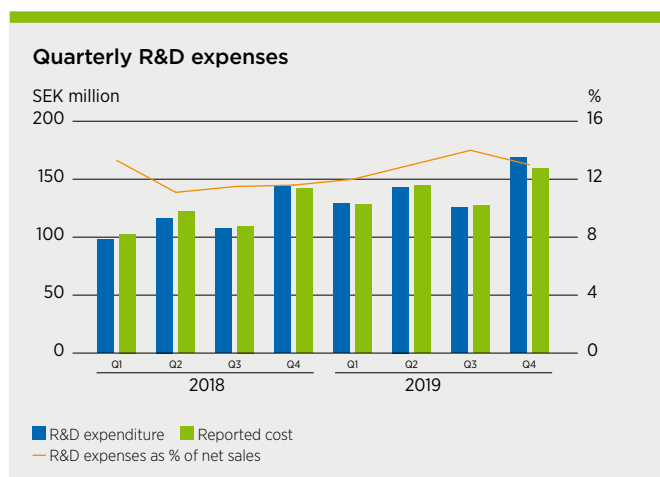
For guidelines for remuneration to senior executives resolved on by the 2019 Annual General Meeting, see Note 14.

### Proposed guidelines for remuneration

The Board of Directors proposes that the Annual General Meeting resolves to adopt the following guidelines for remuneration to senior executives covering remuneration to the Board of Directors, the CEO, the deputy CEO and other senior executives according to 9.9 of the Code, i.e. the Executive Management. The guidelines are applicable to remuneration agreed, and amendments to remuneration already agreed, after the adoption of the guidelines by the Annual General Meeting 2020. These guidelines do not apply to any remuneration decided or approved by the general meeting.

The Board of Directors shall be entitled to temporarily deviate from these guidelines, in whole or in part, if special reasons justify doing so in an individual case and such deviation is necessary in order to meet the company's long-term interests and sustainability or to ensure the company's financial viability. If such a deviation occurs, it must be reported in the remuneration report before the next Annual General Meeting. An issue regarding deviation from the guidelines shall be prepared by the remuneration committee and decided by the Board of Directors.

**The guidelines' promotion of the company's business strategy, long-term interest and sustainability**  
Mycronic is a global high-tech company that



develops, manufactures and supplies market-leading production equipment with high requirements on precision and flexibility to the electronics industry. Mycronic has three priorities within the framework of the company's long-term strategy. These are to consolidate the company's strong position within Pattern Generators, increase profitability within Assembly Solutions and increase the company's proximity to customers. The strategy also includes creating value through a focus on sustainability.

The Board of Directors considers that it is critical for the successful implementation of the company's business strategy and safeguarding of its long-term interests, including its sustainability, is that the company is able to recruit and retain a highly competent management with capacity of achieving specified goals. To this end, it is necessary that the company can offer competitive remuneration to motivate senior executives to do their utmost. Variable cash remuneration covered by these guidelines shall be based on criteria that aim at promoting the company's business strategy and long-term interests, including its sustainability, and where the fulfillment of the criteria is determined by the method set out below.

#### Forms of remuneration, etc.

The remuneration and other terms of employment for senior executives shall be based on market terms. The total remuneration may consist of fixed base salary, variable remuneration, pension and certain other benefits. Agreements exist, that has previously been entered into regarding variable remuneration for additional persons in the group management team that is linked to continued employment. In addition, the general meeting may – regardless of these guidelines – resolve on share-related or share price-related remuneration.

#### Fixed base salary

Fixed base salary for the CEO and other senior executives are reviewed yearly. The fixed base salary constitutes a maximum of 65 percent of the total remuneration excluding LTI and assuming a 50 percent outcome of STI.

#### Short-term incentive (STI)

The remuneration is paid in accordance with goals achieved for the company as a whole. The criteria, such as revenue or operating profit, contributes to the company's business strategy, long-term interests and sustainability through clear links to the above-mentioned criteria and thus to the company's long-term

value creation. The fulfillment of the criteria is determined through the company's audited annual accounts. The remuneration can amount to a maximum of 110 percent of the fixed base salary. STI, as a percentage of the total remuneration excluding LTI, may amount to a maximum of 55 percent at full outcome. Unless otherwise provided by mandatory law or obligations in applicable collective bargaining agreements, short-term incentive shall not be pensionable. The outcome of the remuneration is prepared by the remuneration committee and determined by the Board of Directors in connection with the end of the qualification period. The remuneration is thereafter paid out. The company has no contractual right to recover the remuneration.

#### Long-term Incentive (LTI)

Senior executives can be offered share-related or share price-related remuneration. LTI is intended to improve the participants' commitment to the company's development and shall be implemented on market-based terms. Resolutions on incentive programmes related to shares and share prices must be passed at the Annual General Meeting and are therefore not covered by these guidelines.

#### Other benefits

##### Pension

The agreed retirement age for both the CEO and other senior executives is 65 years. All pension benefits for senior executives are based on defined payments. This means that the company pays an individually agreed defined pension premium and a premium-based supplementary pension for senior executives. The company does not have any other pension obligations.

##### Company car, etc.

Senior executives are offered a company car or cash compensation of equivalent value. In addition, all senior executives are covered by customary health insurance.

Other benefits constitute a maximum of 35 percent of the total remuneration excluding LTI and assuming a 50 percent outcome of STI. Regarding employment conditions that are governed by rules other than Swedish, appropriate adjustments may be made in order to comply with such mandatory rules or local practice, whereby the overall purpose of these guidelines shall be met.

#### Notice of termination and severance pay

The senior executives' employment or contrac-

tual agreements shall be valid until further notice or for a specified period of time. In the event of termination by the company, the notice period is twelve months for the CEO and the CEO is entitled to twelve months severance pay. In the event of termination by the company, the notice period is six months for other senior executives and other senior executives are entitled to six months severance pay. During notice period, the current employment contract runs with associated benefits. In cases where severance pay would be paid, no other benefits will be paid after the expiry of the notice period.

#### Salary and terms of employment for employees

In preparing the Board of Directors' proposal for these remuneration guidelines, the salaries and terms of employment for the company's employees have been taken into account. Information about employees' total remuneration, components of their remuneration, as well as increases in remuneration and increases over time have been obtained and have constituted a part of the remuneration committee's and the Board of Directors' decision basis in their evaluation of the fairness of the guidelines and the limitations arising from them.

#### The resolution process

The Board of Directors shall prepare a proposal for new guidelines when there is a need for significant changes to the guidelines, however at least every four years. The Board of Directors' proposal is prepared by the remuneration committee. The chairman of the Board of Directors may chair the remuneration committee. In order to manage conflicts of interest, other members of the remuneration committee who are elected by the Annual General Meeting must be independent in relation to the company and the senior executives.

The remuneration committee shall, inter alia, monitor and evaluate the application of the guidelines for remuneration to senior executives decided by the Annual General Meeting. When the remuneration committee has prepared the proposal, it is submitted to the Board of Directors for decision. The CEO or other senior executives shall not be present while the Board of Directors addresses issues related to remuneration and passes resolutions about them, insofar as they are affected by the issues.

If the Annual General Meeting resolves not to adopt guidelines when there is a proposal for such, The Board of Directors shall submit a new proposal no later than at the next Annual

General Meeting. In such cases, remuneration shall be paid in accordance with the current guidelines or, if no guidelines exist, in accordance with the company's practice.

External advisors are used in the preparation of these matters when deemed necessary.

#### Review of the guidelines

A review of the guidelines for remuneration to senior executives has been made as a result of the amendments to the Swedish Companies Act that came into force on June 10, 2019. The proposed changes are not expected to entail any significant change in the remuneration paid in accordance with the current guidelines.

#### Long-term incentive program (LTIP)

The Board of Directors proposes that the Annual General Meeting resolves to introduce a long-term incentive program 2020 (LTIP 2020).

LTIP addresses certain key personnel as a means of increasing and strengthening opportunities to recruit, retain and motivate employees, and to encourage personal, long-term ownership in Mycronic.

Each participant is entitled, after the end of a qualification period, subject to the employee still being employed, and depending on the fulfillment of specific performance requirements linked to Mycronic's earnings per share, to receive an allotment of common shares in Mycronic, referred to as performance shares.

The allotment of performance shares to participants will be free of charge. The allotment of performance shares within LTIP 2020 will take place during a limited time period following the 2023 Annual General Meeting. The period until this date constitutes the qualification period.

One prerequisite for the participant to be entitled to allotment of performance shares is that the participant continues to be employed by Mycronic throughout the qualification period until allotment. In addition, allotment of performance shares requires the fulfillment of performance requirements linked to Mycronic's earnings per share. The number of shares is limited to a maximum of 10,300 for the CEO, 3,900 for senior executives, and 1,600 for other key personnel. In the event of a maximal allotment and participation, the program will encompass 143,700 shares.

#### The Mycronic share

The share has been listed on Nasdaq Stockholm since March 2000. As of January 2, 2020, the share is listed on the Large Cap list.

Share capital amounts to SEK 98 million. The number of shares is 97,916,509, issued in one class. Every share grants the right to one vote.

The largest shareholder at the end of 2019 was Bure Equity with holdings of 27,317,163 shares, or 27.9 percent of capital and votes. No other shareholder had, either directly or indirectly, more than 10 percent of the company's shares.

Mycronic does not have any limitations in terms of the transferability of shares due to provisions in the Articles of Association. To the company's knowledge, there are no agreements between shareholders that result in limitations to the right to transfer shares. Furthermore, the company is not party to any agreement that will have effect, be altered, or cease to apply if control over the company should change as a result of a public tender offer. The Group has no contractual obligations between the company and Board members or between the company and employees other than those reported in the section on remuneration.

#### Parent Company

Mycronic AB is the Group's Parent Company. Sales in the Parent Company comprise production solutions for electronics and display manufacturing and aftermarket sales. At year-end 2019, there were 374 persons (342) employed by the Parent Company.

The Parent Company's net sales amounted to SEK 2,833 million (2,621) and included eight (seven) mask writers. EBIT was SEK 1,028 million (943). Cash and cash equivalents at year-end amounted to SEK 246 million (538).

#### Outlook for 2020

The Board's assessment is that consolidated net sales for 2020 will be around SEK 4.1 billion, excluding any acquisitions made in 2020.

#### Significant risks and risk management

Mycronic is an international group with subsidiaries all over the world and thus exposed to risks of various kinds. The company can influence these risks to varying degrees. Risks may have a large or small impact on the Group, the Parent Company or subsidiaries within the Group. The significant risks that can affect Mycronic are described below.

Risks and their costs are limited through development of processes and systematic risk management and the Group's insurance solutions. Risk management is handled on a general level by the Board of Directors and at the operational level by Group management.

Financial risk management is centralized in the Parent Company's finance department, as is handling of insurance. Financial risks are managed in accordance with the financial policy established by the Board.

#### Market-related risks

The Group's sales are related to investments within the electronics industry. Sales and profitability are affected by overall economic trends in terms of sales volumes, price trends and customers' financing options. Through continuous investment in product development and acquisitions, Mycronic addresses several application areas and customer segments, which spreads risk. Furthermore, the Group's after-market business contributes to reducing dependence on system sales.

Mycronic is affected by political decisions and regulations in the more than 50 countries where the Group operates through subsidiaries or through distributors and agents. Through local establishment, knowledge in each market increases.

The bulk of Mycronic's operations are in North America, Europe and Asia. The Group is exposed to country-specific risks such as political decisions or overall changes to the regulatory framework in its respective geographical markets.

Mycronic's Code of Conduct sets clear requirements for employees, suppliers, distributors and agents to comply with laws and ethical regulations.

If Mycronic cannot deliver products and services according to customers' requirements, or if customers do not fulfill their payment obligations, the Group's financial position and earnings may be affected.

The Assembly Solutions business area operates in a market with many actors and hence significant competition. Consolidation among companies on the market can result in a stronger financial situation for some competitors. The Group has more than 3,000 customers globally, which lowers dependency on individual customers. Sales are distributed over a large number of systems within different application areas.

The Pattern Generators business area has a customer base of around 30 companies. Dependency on individual customers is high, which concentrates customer risk. Sales are distributed over a few, high-value machines and sales processes are long. Low sales to one of these customers can, in the short term, have a major impact on earnings and financial position. Earnings for a report period, e.g. a quarter,

can also be affected significantly by delays in the delivery of individual mask writers. There are few competitors and customer relationships are long-lasting.

Technological development within the electronics industry is rapid, which exposes the Group to development risk where development activities do not lead to profitable new business opportunities, a product launch or delivery does not occur on time, or that the cost of developing new products is difficult to estimate.

Consumption of electronics products is increasing worldwide, which is one of the key drivers of the Group's activities. Mycronic's development projects are based on thorough feasibility studies, which combine market studies, technical studies and project preparations. These are important to reduce business risk in product development projects. Development activity is carried out in close cooperation with customers and the sales organization.

Changes in price and lead times for components used in the equipment that the company manufactures can impact Group earnings. Certain components are manufactured by a limited number of suppliers. Mycronic evaluates alternative suppliers of critical components and works to ensure competitive prices and lead times.

Through the Group's products and global sales, Mycronic assumes product liability. Product liability covers damages arising from utilization of the Group's products. Mycronic has taken out liability insurance for this risk. There is also a risk that design-, manufacturing- and quality-related defects can lead to costs for product withdrawal or corrective actions. Besides financial consequences, this could entail a negative impact on the company's brand.

#### **Business-related risks**

Mycronic has production facilities around the world. Damage from fire, power failure and water damage can result in production disruptions and delivery problems which can affect the Group's earnings and financial position.

The Group takes preventative steps to ensure the continuity of operations. This work involves regular maintenance and fire safety training for personnel. The company has contingency plans for acting quickly and limiting damages. The Group has the usual insurances, such as property and business interruption insurance.

Increasing digitalization leads to greater risks related to information security. Mycronic

invests continuously in system support and training to identify and prevent risks. This risk is minimized through permission structures and good internal control. Mycronic contracts external IT security experts for regular review of prioritized IT systems. Mycronic's principle is that this shall occur at least every other year. An external IT specialist conducts a security review in conjunction with acquisitions.

The Group's earnings in the long term are dependent on its abilities to protect strategically important technology. The Group works purposefully to identify and protect new technology in early stages through patents and held more than 500 patents at year-end 2019.

Employees and customers together form the largest asset, and talented and motivated employees and managers are a prerequisite for achieving established goals. Personnel expenses are one of the largest expense items. Mycronic works continuously to make the company an attractive employer. Cooperation with universities is a high-priority area for ensuring recruitment opportunities.

Mycronic's brand is impacted by customer experience of the products supplied and how company representatives behave. An incident or damage within the areas described in this section can affect the brand and lead to diminished confidence. Mycronic works actively with brand-building measures and manages the risk of brand damage through clear communication of its vision and values through ethical regulations and other policies.

#### **Financial risks**

Through its global operations, the Group is exposed to the risk of negative changes in earnings and cash flow through currency, credit and financing risks. The single largest financial risk is exchange rate fluctuations. Interest rate risk is limited. Financial risks are described in more detail in Note 33.

# Corporate Governance Report

The objective of corporate governance is to ensure that the Mycronic Group is managed as efficiently as possible in order to create shareholder value. This is achieved through a clear division of responsibilities between shareholders, the Board and Group management, as well as through clear regulations and transparent processes.

## Framework for corporate governance

Corporate governance is based on external governing instruments such as the Swedish Companies Act, the Annual Accounts Act, Nasdaq Stockholm's Rule Book for Issuers and the Swedish Code of Corporate Governance (the Code), as well as internal governance systems. In 2019, Mycronic complied with the Code in all respects.

The vision, mission, values and Code of Conduct form the basis for internal governance systems. Internal regulations include the Articles of Association, the rules of procedure for the Board of Directors, the Board policy for the CEO and several other policy documents that are updated annually. Examples of steering documents include the Code of Conduct, communication policy, and authorization policy.

## Shareholders

Mycronic is a Swedish public limited liability company registered in Täby. The share is listed on Nasdaq Stockholm, Large Cap. Share capital amounts to SEK 97,916,509 spread over 97,916,509 shares. Each share carries one vote.

At the end of 2019, Mycronic had 13,854 shareholders (15,483). Bure Equity AB was the largest shareholder with 27.9 percent of capital and votes at the end of the year. More information on Mycronic's share and shareholders can be found in The Mycronic share section of this report on pages 37–38.

## The Annual General Meeting (AGM)

The AGM is the company's highest decision-making body. All shareholders have the right to participate in the AGM and to exercise their voting rights relative to their shareholdings. Rules regarding the AGM can be found in the Swedish Companies Act and the Articles of Association. Notice to attend the AGM shall be made four to six weeks prior to the meeting through an announcement in Post- och Inrikes Tidningar and in a press release published on the company website. Issuance of the notice shall be announced in Svenska Dagbladet. Shareholders who wish to attend the Meeting must submit an application in accordance with information in the official notification.

## 2019 Annual General Meeting

The AGM was held in Stockholm on May 9, 2019. The AGM was attended by shareholders representing 67.2 percent of the share capital and votes.

The AGM took decisions in accordance with the Board's and the Nomination Committee's proposals on:

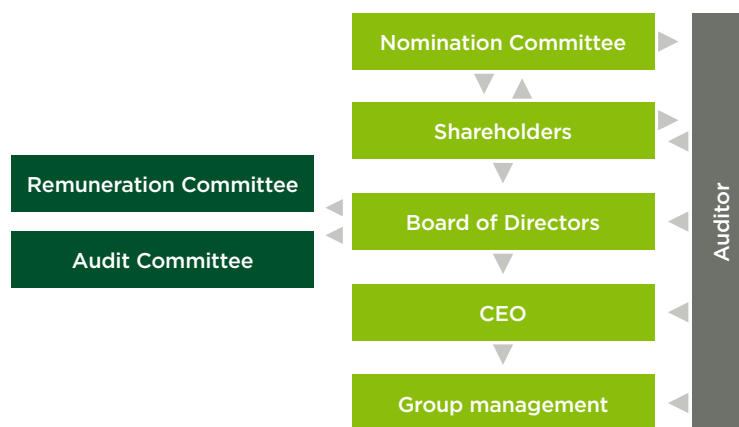
- Adoption of the balance sheet and profit and loss accounts
- Disposal of earnings through a dividend of SEK 3.00 per share

- Discharge of Board members and the CEO from liability to the company
- There should be six elected Board members with no deputy Board members
- Selection of a registered public auditing firm
- Board fees totaling SEK 2,430,000 (unchanged), of which SEK 700,000 for the Chairman and SEK 275,000 to each of the other elected Board members. In addition, SEK 100,000 was allocated to the Audit Committee Chairman, SEK 50,000 to other members of the Audit Committee, as well as SEK 75,000 to the Remuneration Committee Chairman and SEK 40,000 to other members of the Remuneration Committee
- Anna Belfrage, Katarina Bonde, Ulla-Britt Fräjdin-Hellqvist, Robert Larsson and Patrik Tigerschiöld were re-elected to the Board. Staffan Dahlström was newly elected. Patrik Tigerschiöld was elected Chair of the Board. Per Holmberg declined re-election. In addition to the elected members, two union representatives were appointed from the unions Unionen and Akademikerna to represent employees. The auditing firm Ernst & Young was appointed auditor with authorized public accountant Erik Sandström as auditor-in-charge
- Adoption of guidelines for remuneration to senior executives
- Adoption of principles for the Nomination Committee

## Corporate governance at Mycronic

In order to govern the Mycronic Group in an efficient manner, governance, management and control has been distributed between shareholders, the Board, the CEO and Group management, with committees and collaborative bodies within specific areas.

Control is exercised by the external auditor and through internal control activities.





- Resolution to authorize the Board of Directors to decide on a new issue and buy-back of own shares limited to a maximum of 5 percent of shares outstanding in Mycronic AB

Information on the AGM including all proposals and minutes can be found at [www.mycronic.com](http://www.mycronic.com).

### 2020 Annual General Meeting

The AGM will be held on May 7, 2020, at 5:00 p.m. at Vasateatern, Vasagatan 19, 111 20 Stockholm, Sweden.

### Nomination Committee

The Nomination Committee represents the shareholders. Its task is to present proposals to the AGM for resolution regarding the election of the Chair of the AGM, Board members, the Chair of the Board, auditor, fees as well as proposals of principles for the composition of the Nomination Committee.

In accordance with the resolution by the AGM, the Nomination Committee consists of four persons: representatives from the three largest known owners as of August 31 and the Chair of the Board. The composition of the Nomination Committee is published at the latest six months prior to the AGM. The Nomination Committee's proposals are presented in the Notice of the AGM and on Mycronic's website.

The annual evaluation of the Board's work is presented to the Nomination Committee and is the basis for its work in proposing Board members. The Nomination Committee bases its work on the requirements of the Swedish Companies Act and the Code, as well as company-specific requirements. In its work, the Nomination Committee applies section 4.1 of the Code as the diversity policy. The intention is to have an appropriate Board composition, which shall be characterized by versatility and

breadth including age, gender, education, background and experience. The Board of Directors is presented on pages 50–51. Additional information is available in the Nomination Committee's reasoned statement regarding its proposal to the 2020 AGM.

The Nomination Committee for the 2020 AGM consists of Henrik Blomquist (Bure Equity), Thomas Ehlin (Fjärde AP-fonden), Hans Ek (SEB Investment Management) and Patrik Tigerschiöld (Chair of the Board).

### Board of Directors

The Board of Directors (the Board) has overall responsibility for the company's organization and management. The Board monitors operations, ensures a suitable organization, and establishes guidelines for internal control. The Board establishes strategies and goals and makes decisions on major investments. The CEO is appointed by the Board and is responsible for ongoing administration.

The responsibilities of the Board are governed by the Swedish Companies Act and in the rules of procedure. Division of labor between the Board and the CEO is established through written instructions.

The Board consists of six members appointed by the AGM, and two representatives appointed by Unionen and Akademikerna.

### Board activities

The Board works according to the rules of procedure, which shall ensure that the Board is well-informed and that all Board-related issues are addressed. The rules of procedure, which are established annually, describes the division of responsibilities between the Board and its committees, and between the Board and the CEO. The Board takes decisions on strategy and budget, confirms financial reports and signifi-

cant policies including the authorization policy, appoints the CEO and evaluates the CEO's work, establishes regulations for internal control and monitors the effectiveness of internal control, decides on major investments and agreements, appoints the Audit and Remuneration Committees, and evaluates the work of the Board. The Board monitors that approved guidelines on remuneration of senior executives are followed and proposes guidelines for remuneration for consideration by the AGM.

The Chair of the Board leads the work of the Board and also represents the company on ownership issues.

Board meetings are prepared by the Chair of the Board, together with the CEO. The CEO and the company's CFO, who is responsible for recording the minutes of Board meetings, attend. In addition, other employees attend when necessary in relation to individual cases. Materials are distributed prior to each meeting. Some questions are prepared in committees.

Recurring items at Board meetings are reviews of the business situation and financial reporting. Board committees report on their activities and raise issues for decision.

In 2019, the Board held nine meetings. In addition, the Board met during a strategy seminar.

### Board committees

The committees' tasks and work plan are established by the Board in written instructions. The main task of the committees is to prepare matters for Board decision-making.

### Remuneration Committee

The Remuneration Committee is appointed by the Board and consists of three Board members. The Committee is tasked with proposing the CEO's salary, other remuneration, and terms of employment. The Committee also proposes

## The Board's work 2019

During 2019, the Board held nine meetings, of which one was the statutory meeting, one was by circulation and two were telephone meetings.

### Fourth quarter

- Budget for 2020 established
- Interim Report January–September

### Third quarter

- Interim Report January–June.



### First quarter

- Interim Report for the fourth quarter and full-year 2018, proposal on dividend
- 2018 Annual Report adopted

### Second quarter

- Review of business operations in acquired companies
- Review of forecast and update on development projects
- Statutory meeting with decisions on financial signing authority, policies, etc. directly after the AGM
- Strategy seminar, with adjacent board meeting
- Interim Report January–March

guidelines for remuneration and terms of employment for other senior executives and the directors of subsidiaries, and proposals for incentive programs. The Remuneration Committee ensures compliance with established guidelines for remuneration of senior executives.

Since the 2019 AGM, the Remuneration Committee consists of Patrik Tigerschiöld (Chair), Ulla-Britt Fräjdin-Hellqvist and Robert Larsson. The Remuneration Committee held three meetings in 2019.

**Audit Committee**

The Audit Committee is appointed by the Board and consists of three Board members. The Committee is tasked with ensuring the quality of financial reporting. This comprises reviews of significant accounting and valuation issues. The Audit Committee evaluates the external auditing and assists the Nomination Committee with proposals for the election of the auditor. Employees do not participate during part of certain meetings between the Audit Committee and the external auditor.

Since the 2019 AGM, the Audit Committee consists of Anna Belfrage (Chair), Katarina Bonde and Ulla-Britt Fräjdin-Hellqvist. In 2019, the Audit Committee held five meetings.

**Evaluation of Board performance**

The Board's work is evaluated annually. The evaluation is done by external evaluation or self-assessment. The objective is to develop, set targets for, and measure the work of the Board, but also to provide the Nomination Committee a basis for the task of preparing proposals on Board appointments to the upcoming AGM. The Chair of the Board is responsible for the evaluation.

**CEO and Group management**

Group management consists of nine persons, including the CEO, see pages 52–53.

The CEO leads the work of Group management, which meets every other week. Issues addressed include financial performance, development projects, leadership and skills provision and other strategic issues. The CEO is responsible for keeping the Board informed of the company's development. In 2019, two global management meetings were organized to strengthen unified communication and control throughout the Group. In addition to Group management, there are several collaborative bodies that prepare and coordinate strategic and operational issues.

**External audit**

The auditor is appointed by the AGM to review the company's annual financial statements and the consolidated accounts, as well as the Board's and CEO's administration. Audits are conducted in accordance with International Standards on Auditing and generally accepted auditing practices in Sweden. Group management is briefed on audit results continuously. The auditor meets with the Audit Committee on an ongoing basis and with the entire Board annually. The auditor submits the Auditor's Report to shareholders at the AGM. In 2019, the auditor performed, in addition to the audit, a synoptic review of the third quarter report. Fees to the auditor are paid on an ongoing basis as invoices are approved. See Note 10 for information on auditor remuneration.

**External financial reporting**

In accordance with the established communication policy, Mycronic continuously reports information on the company's performance and financial position through interim reports, the annual report and sustainability report and press releases in conjunction with significant events.

In conjunction with interim reports, presentations are held for financial analysts, institutional investors, and the media. Company man-

agement and Director Investor Relations meet analysts and institutional investors at other external and internal arrangements. Representatives from Mycronic also participate at events arranged by, for example, investment banks and the Swedish Shareholders' Association. Financial reports, press releases and other relevant information are presented on the company's website.

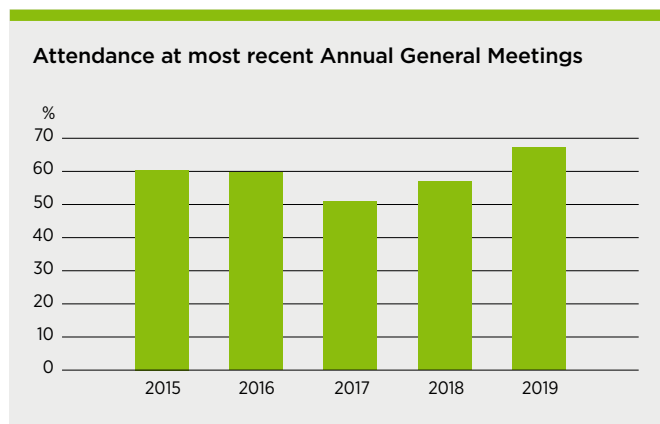
Mycronic observes a 30-day silent period before publication of financial reports, during which the company does not communicate with the financial market by means other than public press releases.

**Insiders**

In accordance with the EU's Market Abuse Regulation (MAR), Mycronic is obligated to maintain a register of persons discharging managerial responsibilities and parties closely related to them. This group consists of Board members and Group management. These persons are obliged to report all transactions in Mycronic securities to Finansinspektionen (Sweden's financial supervisory authority) and to the company. The company is also required to maintain a temporary insider register (log book) of persons who have access to non-public information for a limited period in connection with particular events. This might be the Board, employees or contractors.

**Internal control of financial reporting**

Internal control is comprised of processes and methods that limit risks for material misstatement in the financial statements, and provide a reasonable assurance of the reliability and accuracy of the financial reporting. Internal control is maintained by the Board, management and employees. Mycronic has chosen to describe its work with internal control based on COSO's components: the control environment, risk assessment, control activities, information and communication, and monitoring.



Name	Representing	Holdings, % August 31, 2019
Henrik Blomquist	Bure Equity	27.9
Thomas Ehlin	Fjärde AP-fonden	9.1
Hans Ek	SEB Investment Management	6.1
Patrik Tigerschiöld	Chair of the Board of Mycronic AB	

### Control environment

The control environment consists of a suitable organization, decision-making procedures, authorization and responsibilities, as expressed in policies and guidelines. Common values provide consensus with the intention of strengthening internal control. Mycronic's Code of Conduct describes the approach that employees are expected to maintain in matters relating to business ethics and social issues. Examples of steering documents include the rules of procedure for the Board and its committees, terms of reference issued by the Board to the CEO, the authorization policy, Code of Conduct, and insider and communication policies. Ensuring processes include a high degree of internal control is the responsibility of the respective department manager. Process descriptions and steering documents are gathered in a digital, Group-wide management system. The Group's finance and control organization, centrally and at the level of each unit, plays an important role in the reliability of financial information and is responsible for ensuring that complete, accurate financial reporting is completed on time.

### Risk assessment

Included in risk assessment is the identification and evaluation of the risk for material misstatements in accounting and reporting and the risks of irregularities and fraud. When assessing risks that affect internal control as it relates to financial reporting, the evaluation is based on likelihood and impact. Risks are linked to processes. Critical processes are evaluated with respect to their efficiency and risk. Critical processes include product development, sourcing, manufacturing, sales, salary and support processes such as financial closing and IT.

### Control activities

Control activities should prevent, reveal and

resolve deviations. There are controls at all levels within the company and across all departments. Control activities may be automated by being built into IT systems, such as authorization structures. They may also be manual, such as double checks for disbursements and reconciliations in connection with financial closings. Recurring analysis of results complement daily controls. A financial handbook ensures uniformity of financial reporting within the Group. One system is used across the entire Group for financial reporting. In 2019, Mycronic further developed the standardization of a number of key controls within critical processes. These controls comprise unified Group-wide tools for internal control and governance. Control requirements are important aids for the Board to manage and evaluate information from management and assume responsibility in relation to the risks identified.

### Information and communication

The Board and management have established channels for communication to ensure that financial reporting is complete and accurate. Internal communication channels include quality systems and analysis tools as well as the intranet. One way to educate staff on Group-wide rules is through e-learning, which can be linked to tests after completion of the training. Each month, financial information is compiled and distributed to Board members and Group management. External communication is carried out in accordance with the established communication policy. Financial reporting is published in accordance with applicable regulations. The Board approves the Group's annual report and year-end statement and issues quarterly reports. For the first and third quarters, the Board has instructed the CEO to issue the quarterly reports.

### Monitoring

Mycronic's follow up of the internal control occurs through self-assessment. Self-assessment entails employee involvement, which increases understanding of the importance of internal control. Evaluation of internal control follows a plan approved by the Audit Committee. Risk for material misstatements or deficiencies in the financial reporting are reported. Self-assessment of critical processes is complemented by external evaluation or statements of opinion.

In 2019, Mycronic continued to develop an overarching process for reporting units to establish the effectiveness of key controls. Under this process, a self-assessment of the effectiveness of key controls must be performed for each reporting unit. The results are followed up and compiled at the Group level and presented to the Audit Committee, which in turn reports the results to the Board. In 2019, the company strengthened its system support for the internal control.

Representatives of the central finance and controller department regularly visit the subsidiaries to review and evaluate internal controls. One of the visits to subsidiaries in 2019 was carried out together with representatives from Ernst & Young. The reviews focused on inventories, customer receivables and authorization procedures. Experiences are continuously shared among representatives from the Group's finance and HR departments, for example, through global conferences.

In 2019, Mycronic has not had a review function in the form of an internal audit. The Audit Committee decided to establish such a function in 2020. The Audit Committee monitors the internal control work and has ongoing contact with the external auditors. This contributes to the Board's collective insight into internal control as it relates to financial reporting.

## Attendance at meetings in 2019 and remuneration to Board members elected by the Annual General Meeting

Name	Elected	Independent <sup>1)</sup>	Holdings	Attendance			Remuneration		
				Board of Directors	Audit Committee	Remuneration Committee	Board	Audit Committee	Remuneration Committee
Patrik Tigerschiöld, Chair	2009	No	235,170	9/9		3/3	700,000		75,000
Katarina Bonde	2010	Yes	2,000	9/9	5/5		275,000	50,000	
Ulla-Britt Fräjdin-Hellqvist	2012	Yes	10,000	8/9	5/5	3/3	275,000	50,000	40,000
Per Holmberg <sup>2)</sup>	2016	Yes	5,000	4/4		1/1			
Anna Belfrage	2018	Yes	-	9/9	5/5		275,000	100,000	
Robert Larsson	2018	Yes	-	9/9		2/2	275,000		40,000
Staffan Dahlström	2019	Yes	3,000	4/5			275,000		

1) According to the Swedish Code of Corporate Governance, in relation to the company's largest shareholders.

2) Replaced at the 2019 Annual General Meeting by Staffan Dahlström.

# Board of Directors and auditor

## Patrik Tigerschiöld



Chair of Board since 2012 and Board member since 2009

**Born:** 1964

Dependent Board member

**Education:** MSc Business and Economics

**Other Board assignments:** Chair of Board of Bure Equity AB, Cavotec SA, the Association for Generally Accepted Principles in the Securities Market and the Swedish Association for Listed Companies. Board member of Ovzon AB, Fondbolaget Fondita AB and member of Ingenjörsvetenskapsakademien

**Previous positions:** CEO of Bure Equity AB 2010–2013, CEO of Skanditek Industriförvaltning 1999–2010, and CEO of SEB Allemansfonder AB 1995–1999.

**Committee in Mycronic:** Chair of the Remuneration Committee

**Shareholding in Mycronic:** 235,170

## Anna Belfrage



Board member since 2018

**Born:** 1962

Independent Board member

**Education:** MSc Business and Economics

**Other Board assignments:** Board Member of NOTE AB, Serneke AB, Isofol Medical AB and Ellevio AB

**Previous positions:** CFO Södra Skogsägarna ekonomisk förening 2017–2019, Acting CEO Beijer Electronics Group 2014–2015, CFO Beijer Electronics Group 2011–2014, CFO ABS Group (a division of the Cardo Group) 2004–2010, various roles and positions at Dresser Wayne AB, Obducat AB, Åkerlund & Rausing AB, and auditor at Price Waterhouse 1986–1994

**Committee in Mycronic:** Chairman of the Audit Committee

**Shareholding in Mycronic:** –

## Katarina Bonde



Board member since 2010

**Born:** 1958

Independent Board member

President of Kubi LLC

**Education:** MSc, Engineering Physics

**Other Board assignments:** Chair of Board of Imint Intelligence AB, Opus Group AB, Mentimeter AB, Flatfrog Laboratories AB and Reason Studios AB. Board Member of Stillfront Group AB

**Previous positions:** CEO of UniSite Software Inc 2000–2003, CEO of Captura International 1997–2000, Marketing director Dun & Bradstreet Software Inc 1996–1997, Vice President at Timeline Inc 1994–1995, and CEO of Programator Industri AB 1989–1992.

**Committee in Mycronic:** Member of the Audit Committee

**Shareholding in Mycronic:** 2,000

Shareholding as of December 31, 2019.

**Ulla-Britt Fräjdin-Hellqvist**

Board member since 2012

**Born:** 1954

Independent Board member  
CEO of Fräjdin & Hellqvist AB

**Education:** MSc, Engineering Physics

**Other Board assignments:** Board Member of DataRespons ASA, Holmbergs First Holding AB, Insplorion AB, Triboron International AB and Fräjdin & Hellqvist AB and Chair of the research programs Smartare Elektroniksystem and FFI-EMK

**Previous positions:** Chair of Board of among others SinterCast AB (OMX) and Kongsberg Automotive ASA (Oslo stock exchange). Chair of Board and Board member of a number of private, listed and state-owned companies since 1992. Leading positions in Svenskt Näringsliv 2001–2006, and Volvo Personvagnar 1979–2001

**Committee in Mycronic:** Member of the Audit Committee and the Remuneration Committee

**Shareholding in Mycronic:** 10,000

**Erik Sandström**

Auditor-in-Charge,  
Ernst & Young AB

**Born:** 1975

Authorized Public Accountant and member of FAR

**Other assignments:** Autoliv, Gränges, Praktikertjänst, Ratos, Tradedoubler and Transcom

**Staffan Dahlström**

Board member since 2019

**Born:** 1967

Independent Board member  
CEO of HMS Networks AB (publ) since 2009

**Education:** Data Engineer, MBA

**Other Board assignments:** Board Member of Clavister AB (publ)

**Previous positions:** Co-founder HMS Networks since 1989

**Committee in Mycronic:** –

**Shareholding in Mycronic:** 3,000

**Johan Densjö**

Board Member 2012–2014 and since 2019

Employee representative appointed by Unionen

**Born:** 1971

Training Team Leader, Business Area Pattern Generators

**Education:** Engineer

**Shareholding in Mycronic:** –

**Robert Larsson**

Board member since 2018

**Born:** 1967

Independent Board member  
EVP and Head of Industrial & Digital Solutions at AFRY

**Education:** MSc, Mechanical Engineering

**Previous positions:** A number of senior positions in ABB in Sweden, China and Switzerland

**Committee in Mycronic:** Member of the Remuneration Committee

**Shareholding in Mycronic:** –

**Jörgen Lundberg**

Board member since 2019

Employee representative appointed by Akademikerna

**Born:** 1964

Sr Program Manager Project Office

**Education:** MSc, Mechanical Engineering

**Shareholding in Mycronic:** 100

# Group management

**Anders Lindqvist**



President and CEO  
Employed since 2019

**Born:** 1967

**Education:** Mechanical engineer and university-level studies in marketing

**Previous positions:** President and CEO of Piab Group AB 2013–2019, Divisions Director for Atlas Copco 2007–2013, President of Atlas Copco China 2006–2007, President of Atlas Copco Nordic 2004–2006

**Board assignments:** Chair of Board of Dafo Vehicle Fire Protection AB. Board member of Norican ApS

**Shareholding in Mycronic:** 12,000

**Lena Båvegård**



Sr VP Global Functions  
Employed since 2018

**Born:** 1967

**Education:** MSc, Electrical Engineering

**Previous positions:** Various senior positions in Transmode and Infinera, most recently as Sr Dir, Corporate Quality & Sustainability and various senior positions in Q-Med and Ericsson

**Board assignments:** Board alternate of SIQ Intressentföreningen Kvalitetsutveckling

**Shareholding in Mycronic:** 2,000

**Michael Chalsen**



Sr VP Assembly Solutions  
Global Technologies

Employed since 1984

**Born:** 1959

**Education:** BSc Mechanical Engineering, MBA

**Previous positions:** VP Operations, MRSI Group, GM Newport/MRSI, President, MRSI Systems LLC

**Shareholding in Mycronic:** 2,412

**Anette Mullis**



Sr VP, Human Resources  
Employed since 2018

**Born:** 1965

**Education:** BSc in Social Work, from Lund University

**Previous positions:** Various senior global and regional positions as HR Director in the USA and Europe in Ericsson, CSL Behring, Wyeth Pharmaceuticals (now Pfizer) and IKEA

**Shareholding in Mycronic:** 1,092

**Charlott Samuelsson**



Sr VP Pattern Generators  
Employed since 1996

**Born:** 1963

**Education:** MSc, Engineering Physics

**Previous positions:** Head of global after-market, Head of system and application development and Head of business development in the Mycronic Group.

**Board assignments:** Board member of Invisio Communications AB

**Shareholding in Mycronic:** 21,790

**Niklas Edling**

Sr VP Corporate Development  
and Vice CEO

Employed since 2011

**Born:** 1963

**Education:** MSc, Mechanical Engineering  
and MSc in Economics and Business  
Administration

**Previous positions:** VP Supply Chain &  
Manufacturing Laerdal Medical and VP  
Operations Hudson RCI

**Board assignments:** Board member of  
Aritco AB and Cavotec SA

**Shareholding in Mycronic:** 30,131

**Ivan Li**

Sr VP Assembly Solutions High Volume  
Employed since 2008

**Born:** 1983

**Education:** MSc Mechanical Engineering

**Previous positions:** VP Global Dispensing  
Mycronic & General Manager Axxon

**Shareholding in Mycronic:** -

**Torbjörn Wingårdh**

CFO

Employed since 2016

**Born:** 1964

**Education:** MSc in Economics and  
Business Administration

**Previous positions:** CFO Business area  
Saab SDS and senior positions at Investor  
AB in Sweden and the USA

**Shareholding in Mycronic:** 25,000

*The appointment of the Sr VP Assembly  
Solutions High Flex is ongoing at the time of  
publication of the annual and sustainability  
report.*

Shareholding as of December 31, 2019.

## Financial overview

SEK million	2019	2018	2017 <sup>1</sup>	2016	2015	2014	2013	2012	2011	2010
Order intake	4,567	3,642	3,567	2,455	2,179	2,028	1,053	1,280	1,214	1,388
Order backlog	2,164	1,904	1,963	1,342	1,066	702	149	90	176	153
<b>Profit and Loss Accounts</b>										
Net sales	4,307	3,781	3,000	2,319	1,815	1,475	997	1,354	1,198	1,288
Gross profit	2,399	2,098	1,716	1,410	1,076	712	446	612	488	633
EBITDA	1,307	1,094	919	724	566	301	60	95	2	169
EBIT	1,124	1,020	844	691	540	277	32	-21	-66	73
Profit/loss before tax	1,122	1,011	836	689	540	278	36	-15	-57	74
Tax	-263	-219	-212	-163	-98	-12	-22	-29	-32	-37
<b>Profit/loss for the year</b>	<b>859</b>	<b>792</b>	<b>623</b>	<b>526</b>	<b>442</b>	<b>266</b>	<b>14</b>	<b>-44</b>	<b>-89</b>	<b>37</b>
<b>Balance Sheet</b>										
Non-current assets	1,960	1,592	1,192	1,225	242	286	282	284	409	403
Inventories	1,109	868	589	575	276	233	324	329	357	321
Other current assets	1,075	910	651	747	327	420	309	278	284	407
Cash and cash equivalents	655	829	813	209	898	661	487	581	536	583
<b>Total assets</b>	<b>4,800</b>	<b>4,199</b>	<b>3,244</b>	<b>2,755</b>	<b>1,742</b>	<b>1,600</b>	<b>1,402</b>	<b>1,472</b>	<b>1,587</b>	<b>1,714</b>
Equity	2,978	2,379	1,780	1,412	1,268	1,207	1,165	1,168	1,232	1,315
Interest-bearing liabilities	318	1	13	11	-	-	-	2	7	12
Other liabilities	1,504	1,819	1,452	1,333	474	393	236	301	348	387
<b>Total equity and liabilities</b>	<b>4,800</b>	<b>4,199</b>	<b>3,244</b>	<b>2,755</b>	<b>1,742</b>	<b>1,600</b>	<b>1,402</b>	<b>1,472</b>	<b>1,587</b>	<b>1,714</b>
Capital employed	3,296	2,380	1,793	1,422	1,268	1,207	1,165	1,171	1,239	1,327
Net debt	-337	-827	-800	-198	-898	-661	-487	-579	-529	-570
<b>Cash flow</b>										
Cash flow from operating activities	545	702	984	462	661	418	-47	70	-15	121
Cash flow from investing activities	-399	-440	-181	-768	-37	-18	-36	-5	-31	-36
Cash flow from financing activities	-326	-258	-194	-392	-392	-245	-2	-4	-6	224
<b>Cash flow for the year</b>	<b>-180</b>	<b>4</b>	<b>609</b>	<b>-699</b>	<b>233</b>	<b>154</b>	<b>-85</b>	<b>61</b>	<b>-52</b>	<b>308</b>
<b>Key ratios</b>										
Book-to-bill	1.1	1.0	1.2	1.1	1.2	1.4	1.1	0.9	1.0	1.1
Gross margin, %	55.7	55.5	57.2	60.8	59.3	48.3	44.8	45.2	40.8	49.2
EBIT margin, %	26.1	27.0	28.1	29.8	29.8	18.7	3.2	-1.6	-5.5	5.6
Underlying EBIT margin, %	27.1	28.5	31.7	31.7	-	-	-	-	-	-
Equity/assets ratio, %	62.1	56.7	54.9	51.2	72.8	75.5	83.2	79.4	77.6	76.7
Return on equity, %	32.1	38.1	39.1	39.3	35.8	22.4	1.2	-3.7	-7.0	3.1
Return on capital employed, %	39.9	49.0	52.6	51.4	43.7	23.5	3.1	-1.1	-4.4	6.3
Capital turnover, multiple	1.5	1.8	1.9	1.7	1.5	1.2	0.9	1.1	0.9	1.1
<b>Research and development, R&amp;D</b>										
R&D costs	559	476	348	348	267	198	183	290	289	318
R&D costs/net sales, %	13.0	12.6	11.6	15.0	14.7	13.4	18.4	21.4	24.1	24.7
<b>Data per share</b>										
Number of outstanding shares at year-end, million	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
Average number of outstanding shares, before/after dilution, million	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	82.5
Share price at December 31, SEK	185.10	118.10	85.00	98.00	82.25	24.80	12.40	10.25	11.95	17.70
Proposed dividend per share	3.25	3.00	2.50	2.00	1.5	0.8	-	-	-	-
Proposed extra dividend	-	-	-	-	2.50	3.2	2.5	-	-	-
Earnings per share (average number of share before/after dilution)	8.74	8.09	6.37	5.38	4.52	2.72	0.14	-0.45	-0.91	0.45
Equity per share (number of shares at year-end)	30.46	24.30	18.18	14.42	12.95	12.33	11.90	11.93	12.58	15.93
P/E ratio (calculated using average number of shares)	21	15	13	18	18	9	88	neg	neg	47

<sup>1)</sup> Restated for comparability



## Proposal on disposition of accumulated results

### At the Annual General Meeting's disposal are the following amounts in SEK:

Share premium reserve	201,915,502
Retained earnings	1,021,954,867
Profit/loss for the year	637,173,762
<b>Total</b>	<b>1,861,044,131</b>

### The Board of Directors proposes that the retained earnings and non-restricted equity be managed as follows:

Dividend	318,228,654
Carried forward to new account	1,542,815,476
<b>Total</b>	<b>1,861,044,131</b>

### Proposal on dividend

The Board of Directors proposes to the Annual General Meeting a dividend of SEK 3.25 per share, amounting to SEK 318.2 million. The dividend corresponds to 37 percent of the Group's net profit after tax.

### Approval and adoption

As stated below, the annual report and consolidated financial statements were approved for publication on March 12, 2020. The consolidated profit and loss accounts and statement of financial position as well as the profit and loss accounts and balance sheet of the Parent Company will be put before the Annual General Meeting for adoption on May 7, 2020.

### Statement of assurance

The Board of Directors and the CEO give their assurance that the annual report has been prepared in accordance with generally accepted accounting standards in Sweden and that the consolidated financial statements have been prepared in accordance with Regulation (EC) No. 1606/2002 of the European Parliament and of the Council of July 19, 2002, on the application of international accounting standards.

The annual report and consolidated financial statements give a true and fair view of the financial position and performance of the Group and the Parent Company.

The Report of the Directors for the Parent Company and the Group gives a true and fair view of the business activities, financial position and results of the Parent Company and the Group and describes the significant risks and uncertainties to which the Parent Company and the Group companies are exposed.

Täby, March 12, 2020

**Patrik Tigerschiöld**

Chair of the Board

**Anna Belfrage**

Board member

**Katarina Bonde**

Board member

**Ulla-Britt Fräjdin-Hellqvist**

Board member

**Staffan Dahlström**

Board member

**Robert Larsson**

Board member

**Johan Densjö**

Board member  
Appointed by Unionen

**Jörgen Lundberg**

Board member  
Appointed by Akademikerna

**Anders Lindqvist**

CEO

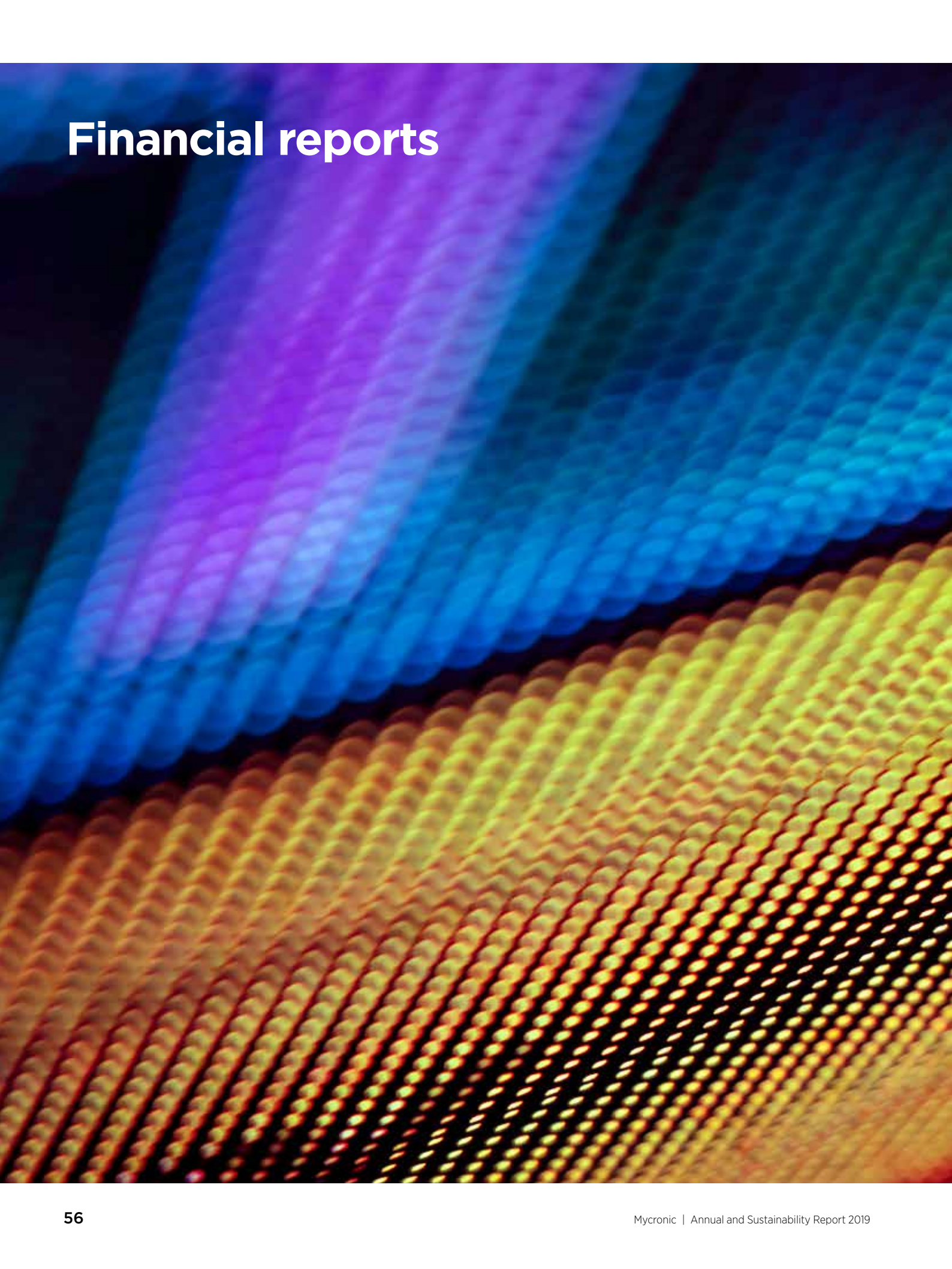
Our Auditor's Report was submitted on March 19, 2020

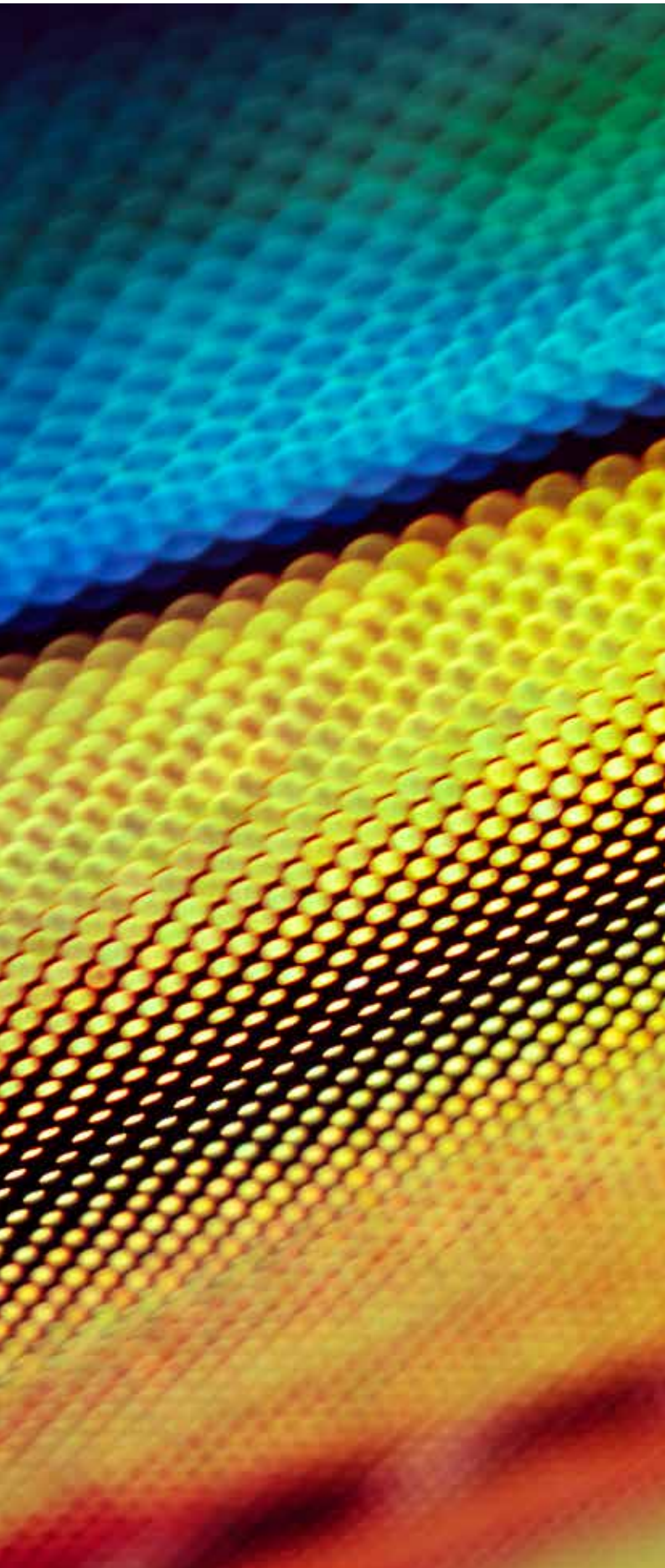
Ernst & Young AB

**Erik Sandström**

Authorized Public Accountant

# Financial reports





## Content

### Financial statements, Group

- 58 Profit and loss accounts
- 59 Statements of financial position
- 60 Statements of cash flows
- 61 Consolidated statement of changes in equity

### Financial statements, Parent Company

- 62 Profit and loss accounts
- 63 Balance sheets
- 64 Statements of cash flow
- 65 Parent Company's statements of changes in equity

### Notes

- 66 Note 1 Accounting policies, general information
- 66 Note 2 Accounting policies for the Group
- 70 Note 3 Accounting policies of the Parent Company
- 71 Note 4 Critical accounting estimates and assumptions
- 71 Note 5 Capital management and proposal on disposition of accumulated results
- 72 Note 6 Revenue from Contracts with Customers
- 73 Note 7 Segment reporting
- 74 Note 8 Transactions with related parties
- 74 Note 9 Operating expenses
- 74 Note 10 Fees for auditing and non-auditing services
- 74 Note 11 Other operating income/expenses
- 74 Note 12 Research and development expenses
- 75 Note 13 Depreciation/amortization by function
- 75 Note 14 Employees, personnel costs and remuneration to senior executives
- 77 Note 15 Net financial items
- 77 Note 16 Appropriations and untaxed reserves
- 77 Note 17 Income tax
- 78 Note 18 Intangible assets
- 80 Note 19 Tangible assets
- 81 Note 20 Leases
- 82 Note 21 Participation in Group companies
- 83 Note 22 Business combinations
- 83 Note 23 Non-current receivables from Group companies
- 83 Note 24 Other non-current receivables
- 84 Note 25 Inventories
- 84 Note 26 Trade receivables, impairment, age analysis and other
- 84 Note 27 Prepaid expenses and accrued income
- 84 Note 28 Non-current provisions
- 85 Note 29 Accrued expenses and deferred income
- 85 Note 30 Current provisions
- 85 Note 31 Pledged assets
- 85 Note 32 Contingent liabilities
- 86 Note 33 Financial risks
- 87 Note 34 Financial assets and liabilities
- 90 Note 35 Reconciliation alternative performance measures
- 90 Note 36 Events after year-end
- 91 Audit report
- 94 Definitions
- 95 Glossary
- 96 Shareholder information

# Group

## PROFIT AND LOSS ACCOUNTS

SEK million	Notes	2019	2018
Net sales	6, 7	4,307	3,781
Cost of goods sold	9	-1,908	-1,683
<b>Gross profit</b>		<b>2,399</b>	<b>2,098</b>
Research and Development	9, 12	-559	-476
Selling expenses	9	-541	-421
Administrative expenses	9, 10	-237	-228
Other operating income	11	70	48
Other operating expenses	9, 11	-8	0
<b>EBIT</b>		<b>1,124</b>	<b>1,020</b>
Financial income		9	3
Financial expenses		-11	-12
<b>Net financial items</b>	15	<b>-2</b>	<b>-9</b>
<b>Profit before tax</b>		<b>1,122</b>	<b>1,011</b>
Tax	17	-263	-219
<b>Profit for the year</b>		<b>859</b>	<b>792</b>
Earnings per share, before and after dilution, SEK		8.74	8.09
Average number of outstanding shares, before dilution, thousands		97,893	97,917
Average number of outstanding shares, after dilution, thousands		97,895	97,917
Profit attributable to owners of the Parent Company		855	790
Profit attributable to non-controlling interests		4	3
		<b>859</b>	<b>792</b>

## STATEMENTS OF COMPREHENSIVE INCOME

SEK million	Notes	2019	2018
Profit for the year		859	792
<b>Other comprehensive income</b>			
<b>Items not to be reclassified to profit and loss</b>			
Actuarial profit/loss from defined benefits to employees	28	-2	-3
Tax relating to actuarial results		1	1
<b>Total of items not to be reclassified to profit and loss</b>		<b>-2</b>	<b>-2</b>
<b>Items to be reclassified to profit and loss</b>			
Translation differences upon translating foreign entities	33	61	82
Tax relating to translation differences	33	-5	-7
Hedge of net investment	33, 34	-13	-6
The year's changes in fair value on cash flow hedges	34	-27	-56
Cash flow hedges transferred to profit and loss	33	51	36
Tax relating to cash flow hedges		-5	4
<b>Total of items that may be reclassified to profit and loss</b>		<b>62</b>	<b>53</b>
<b>Total other comprehensive income</b>		<b>60</b>	<b>51</b>
<b>Total comprehensive income for the year</b>		<b>919</b>	<b>844</b>
Total comprehensive income attributable to owners of the Parent Company		915	841
Total comprehensive income attributable to non-controlling interests		4	3
		<b>919</b>	<b>844</b>

## STATEMENTS OF FINANCIAL POSITION

SEK million	Notes	Dec 31, 2019	Dec 31, 2018
<b>ASSETS</b>			
Intangible assets	18	1,366	1,381
Tangible assets	19	447	106
Non-current receivables	6, 24, 34	50	22
Deferred tax assets	17	97	83
<b>Total non-current assets</b>		<b>1,960</b>	<b>1,592</b>
Inventories	25	1,109	868
Tax receivables		52	41
Trade receivables	6, 26, 34	826	664
Prepaid expenses and accrued income	27	122	140
Other receivables		76	65
Cash and cash equivalents	33, 34	655	829
<b>Total current assets</b>		<b>2,839</b>	<b>2,607</b>
<b>TOTAL ASSETS</b>		<b>4,800</b>	<b>4,199</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital		98	98
Other contributed capital		1,338	1,337
Reserves		84	22
Retained earnings including profit/loss for the year		1,453	919
<b>Equity attributable to owners of the Parent Company</b>		<b>2,972</b>	<b>2,376</b>
Holdings of non-controlling interests		6	3
<b>Total equity</b>		<b>2,978</b>	<b>2,379</b>
<b>Liabilities</b>			
Non-current interest-bearing liabilities	34	252	-
Non-current provisions	28	50	48
Deferred tax liabilities	17	226	163
Other non-current liabilities	34	4	50
<b>Total non-current liabilities</b>		<b>532</b>	<b>261</b>
Current interest-bearing liabilities	34	66	1
Advance payments from customers	6	336	306
Trade payables	34	288	236
Tax liabilities		72	71
Other liabilities		138	308
Accrued expenses and deferred income	6, 29	340	592
Current provisions	30	50	46
<b>Total current liabilities</b>		<b>1,289</b>	<b>1,560</b>
<b>Total liabilities</b>		<b>1,822</b>	<b>1,820</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>4,800</b>	<b>4,199</b>

## STATEMENTS OF CASH FLOWS

SEK million	Notes	2019	2018
<b>Operating activities</b>			
Profit before tax		1,122	1,011
<i>Adjustments for non-cash items and other</i>			
Depreciation/amortization and impairment of assets	18, 19	182	74
Capital gain/loss on the sale of non-current assets		0	0
Unrealized foreign exchange differences		11	-27
Provisions for employee benefits		2	0
Other provisions		1	20
Write down of inventories		20	25
Revaluation of contingent considerations		-37	-11
Other non-cash items		-43	-
Income tax paid		-215	-164
<b>Cash flow from operating activities before changes in working capital</b>		<b>1,043</b>	<b>928</b>
<i>Cash flow from changes in working capital</i>			
Inventories		-237	-197
Trade receivables		-128	-93
Other receivables		2	-84
Trade payables		53	74
Other liabilities		-187	74
<b>Cash flow from operating activities</b>		<b>545</b>	<b>702</b>
<b>Investing activities</b>			
Investments in subsidiaries	22	-248	-367
Investments in intangible assets	18	-43	-15
Investments in tangible assets	19	-109	-54
Sale of tangible assets		0	0
Increase in non-current receivables	24	4	-5
Decrease in non-current receivables	24	-4	1
<b>Cash flow from investing activities</b>		<b>-399</b>	<b>-440</b>
<b>Financing activities</b>			
Dividends paid to Parent Company shareholders		-294	-245
Dividends to non-controlling interests		-6	-
Swap contract for own shares		-21	-
Borrowings		49	-
Repayment of loans		-54	-13
<b>Cash flow from financing activities</b>		<b>-326</b>	<b>-258</b>
<b>Cash flow for the year</b>		<b>-180</b>	<b>4</b>
Cash and cash equivalents at beginning of year		829	813
Exchange rate differences in cash and cash equivalents		6	12
<b>Cash and cash equivalents at end of year</b>		<b>655</b>	<b>829</b>
<b>Interest received and paid</b>			
Interest received		4	3
Interest paid		-11	-11
		<b>-8</b>	<b>-9</b>

**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**

The share capital consists of 97,916,509 (97,916,509) shares. The shares are of the same class, and each share carries one vote.

SEK million	Share capital	Other contributed capital	Reserves		Retained earnings	Total	Holdings of non-controlling interests	Total equity
			Hedge reserve <sup>1</sup>	Translation reserve				
<b>Equity, January 1, 2018</b>	<b>98</b>	<b>1,337</b>	<b>0</b>	<b>-31</b>	<b>376</b>	<b>1,780</b>	<b>0</b>	<b>1,780</b>
Profit for the year					790	790	3	792
<b>Other comprehensive income</b>								
<b>Items not to be reclassified to profit and loss</b>								
Actuarial profit/loss from defined benefits to employees					-3	-3		-3
Tax relating to actuarial results					1	1		1
<b>Items that may be reclassified to profit and loss</b>								
Translation differences for the period at translation of foreign entities				82		82	0	82
Tax relating to translation differences				-7		-7		-7
Hedging of net investments in subsidiaries				-6		-6		-6
The year's changes in fair value on cash flow hedges			-56			-56		-56
Cash flow hedges transferred to profit and loss			36			36		36
Tax attributable to cash flow hedges			4			4		4
<b>Total other comprehensive income</b>			<b>-16</b>	<b>69</b>	<b>-2</b>	<b>51</b>	<b>0</b>	<b>51</b>
<b>Total comprehensive income for the year</b>			<b>-16</b>	<b>69</b>	<b>787</b>	<b>841</b>	<b>3</b>	<b>844</b>
<b>Transactions with owners</b>								
Dividends paid					-245	-245		-245
Transactions with non-controlling interests						0		0
<b>Total transactions with owners</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-245</b>	<b>-245</b>	<b>0</b>	<b>-245</b>
<b>Closing equity December 31, 2018/ Opening equity January 1, 2019</b>	<b>98</b>	<b>1,337</b>	<b>-17</b>	<b>39</b>	<b>919</b>	<b>2,376</b>	<b>3</b>	<b>2,379</b>
Profit for the year					855	855	4	859
<b>Other comprehensive income</b>								
<b>Items not to be reclassified to profit and loss</b>								
Actuarial profit/loss from defined benefits to employees					-2	-2		-2
Tax relating to actuarial results					1	1		1
<b>Items that may be reclassified to profit and loss</b>								
Translation differences for the period at translation of foreign entities				61		61	0	61
Tax relating to translation differences				-5		-5		-5
Hedging of net investments in subsidiaries				-13		-13		-13
The year's changes in fair value of cash flow hedges			-27			-27		-27
Cash flow hedges transferred to profit and loss			51			51		51
Tax attributable to hedge accounting			-5			-5		-5
<b>Total other comprehensive income</b>			<b>19</b>	<b>43</b>	<b>-2</b>	<b>60</b>	<b>0</b>	<b>60</b>
<b>Total comprehensive income for the year</b>			<b>19</b>	<b>43</b>	<b>854</b>	<b>915</b>	<b>4</b>	<b>919</b>
<b>Transactions with owners, etc.</b>								
Dividends paid					-294	-294		-294
Dividends to non-controlling interests					-5	-5	-1	-6
Swap contract for own shares					-21	-21		-21
Share-based remuneration		1				1		1
<b>Total transactions with owners</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>-320</b>	<b>-319</b>	<b>-1</b>	<b>-320</b>
<b>Closing equity, December 31, 2019</b>	<b>98</b>	<b>1,338</b>	<b>2</b>	<b>82</b>	<b>1,453</b>	<b>2,972</b>	<b>6</b>	<b>2,978</b>

1) The hedge reserve pertains to cash flow hedges of currency risk in contracted flows. Transfers to profit and loss were recognized in net sales and were entirely due to the impact the hedge item had on profit and loss. Of the closing hedge reserve, SEK 3 million related to continuing hedges and SEK -1 million to settled hedges.

# Parent Company

## PROFIT AND LOSS ACCOUNTS

SEK million	Notes	2019	2018
Net sales	6, 7	2,833	2,621
Cost of goods sold		-1,097	-1,076
<b>Gross profit</b>		<b>1,736</b>	<b>1,545</b>
Research and Development	12	-406	-353
Selling expenses		-202	-156
Administrative expenses		-133	-126
Other operating income	11	33	32
Other operating expenses	11	0	0
<b>EBIT</b>		<b>1,028</b>	<b>943</b>
<i>Profit from financial investments</i>			
Interest income and similar items	15	59	34
Interest expenses and similar items	15	-8	-8
<b>Profit after financial items</b>		<b>1,079</b>	<b>968</b>
Appropriations	16	-273	-235
<b>Profit before tax</b>		<b>806</b>	<b>734</b>
Tax	17	-169	-161
<b>Profit for the year</b>		<b>637</b>	<b>573</b>

## STATEMENTS OF COMPREHENSIVE INCOME

SEK million	2019	2018
<b>Profit for the year</b>	<b>637</b>	<b>573</b>
Other comprehensive income	-	-
<b>Total comprehensive income for the year</b>	<b>637</b>	<b>573</b>



**BALANCE SHEETS**

SEK million	Notes	Dec. 31, 2019	Dec. 31, 2018
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	18	29	4
Tangible assets	19	63	52
<i>Financial assets</i>			
Participations in Group companies	21	1,071	1,049
Receivables from Group companies	23	790	712
Other non-current receivables	24	27	1
Deferred tax assets	17	6	4
<b>Total financial assets</b>		<b>1,893</b>	<b>1,766</b>
<b>Total non-current assets</b>		<b>1,985</b>	<b>1,821</b>
<b>Current assets</b>			
Inventories	25	463	446
<i>Current receivables</i>			
Trade receivables		233	117
Receivables from Group companies		518	364
Other receivables		43	42
Prepaid expenses and accrued income	27	78	116
<b>Total current receivables</b>		<b>871</b>	<b>639</b>
Cash and cash equivalents		246	538
<b>Total current assets</b>		<b>1,580</b>	<b>1,623</b>
<b>TOTAL ASSETS</b>		<b>3,565</b>	<b>3,445</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
<i>Restricted equity</i>			
Share capital		98	98
Statutory reserve		0	0
		<b>98</b>	<b>98</b>
<i>Non-restricted equity</i>			
Share premium reserve		202	202
Retained earnings		1,022	764
Profit for the year		637	573
		<b>1,862</b>	<b>1,538</b>
<b>Total equity</b>		<b>1,960</b>	<b>1,636</b>
<b>Untaxed reserves</b>	16	<b>919</b>	<b>646</b>
<i>Non-current liabilities</i>			
Non-current interest-bearing liabilities		28	-
Non-current provisions		1	1
Other non-current liabilities	34	4	7
<b>Total non-current liabilities</b>		<b>32</b>	<b>7</b>
<i>Current liabilities</i>			
Current interest-bearing liabilities		19	-
Advance payments from customers		172	194
Trade payables		118	163
Liabilities to Group companies		47	32
Current tax liability		50	54
Other liabilities		71	252
Accrued expenses and deferred income	6, 29	164	450
Current provisions	30	13	11
<b>Total current liabilities</b>		<b>654</b>	<b>1,156</b>
<b>Total liabilities</b>		<b>686</b>	<b>1,163</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>3,565</b>	<b>3,445</b>

## STATEMENTS OF CASH FLOW

SEK million	Notes	2019	2018
<b>Operating activities</b>			
Profit after financial items		1,079	968
<i>Adjustments for non-cash items</i>			
Depreciation/amortization and impairment of assets		22	13
Capital gain/loss on the sale of non-current assets		-	-
Unrealized exchange rate differences		-10	-42
Provisions		1	6
Write-down of inventories		15	20
Share-based remuneration		1	-
Interests not received		-8	-2
Other non-cash items		-46	-
Paid income tax		-165	-133
<b>Cash flow from operating activities before changes in working capital</b>		<b>889</b>	<b>831</b>
<i>Changes in working capital</i>			
Inventories		-26	-116
Trade receivables		-92	24
Other receivables		-130	-234
Trade payables		-44	59
Other liabilities		-262	80
<b>Cash flow from operating activities</b>		<b>335</b>	<b>643</b>
<b>Investing activities</b>			
Investments in subsidiaries	22	-248	-18
Investments in intangible assets	18	-30	-4
Investments in tangible assets	19	-33	-31
Increase in non-current receivables	23, 24	-50	-402
Decrease in non-current receivables	23, 24	0	-
<b>Cash flow from investing activities</b>		<b>-361</b>	<b>-456</b>
<b>Financing activities</b>			
Dividends paid to Parent Company shareholders		-294	-245
Swap contract for own shares		-21	-
Borrowings		49	-
<b>Cash flow from financing activities</b>		<b>-266</b>	<b>-245</b>
<b>Cash flow for the year</b>		<b>-292</b>	<b>-58</b>
Cash and cash equivalents at beginning of year		538	596
<b>Cash and cash equivalents at end of year</b>		<b>246</b>	<b>538</b>
<i>Additional information</i>			
<b>Interest received and paid</b>			
Interest received		23	16
Interest paid		-8	-5
		<b>14</b>	<b>11</b>

**PARENT COMPANY STATEMENTS OF CHANGES IN EQUITY**

The share capital consists of 97,916,509 (97,916,509) shares. The shares are of the same class, and each share carries one vote.

SEK million	Restricted equity		Non-restricted equity		Total equity
	Share capital	Statutory reserve	Share premium reserve	Retained earnings including profit/loss for the year	
<b>Equity, January 1, 2018</b>	<b>98</b>	<b>0</b>	<b>202</b>	<b>1,009</b>	<b>1,308</b>
Profit for the year				573	573
<b>Total comprehensive income for the year</b>				<b>573</b>	<b>573</b>
<b>Transactions with owners</b>					
Dividends to shareholders				-245	-245
<b>Closing equity, December 31, 2018</b>	<b>98</b>	<b>0</b>	<b>202</b>	<b>1,336</b>	<b>1,636</b>
Profit for the year				637	637
<b>Total comprehensive income for the year</b>				<b>637</b>	<b>637</b>
<b>Transactions with owners, etc.</b>					
Dividends to shareholders				-294	-294
Swap contract for own shares				-21	-21
Share-based remuneration				1	1
<b>Closing equity, December 31, 2019</b>	<b>98</b>	<b>0</b>	<b>202</b>	<b>1,659</b>	<b>1,960</b>

# Notes

## Note 1 Accounting policies, general information

Mycronic AB (publ) and its subsidiaries, together comprising the Group, are engaged in the development, manufacture and sales of advanced production equipment to the electronics industry. Sales are generated almost exclusively outside Sweden.

Subsidiaries are located in France, Japan, China, the Netherlands, Singapore, the UK, South Korea, Germany, and the USA, and one dormant company in Taiwan. In addition, there are a large number of distributors and agents around the world.

The Parent Company is listed on NASDAQ, Stockholm, in the category Large Cap.

The consolidated annual report has been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) as endorsed by the EU. Furthermore, the Swedish Financial Reporting Board's recommendation RFR 1, Supplementary Accounting Rules for Groups, has been applied.

### New and forthcoming accounting standards

None of the new standards, revised standards and interpretations of existing standards that shall be applied as of the financial year beginning on January 1, 2019 have any material impact on the Group or Parent Company financial statements in addition to what is specified below.

As of January 1, 2019, IFRS 16 Leases replaces the previous standard, IAS 17 Leases, and the associated interpretations IFRIC 4, SIC 15 and SIC 27. IFRS 16 entails that a majority of all leases are recognized in the statement of financial position. When the standard entered into force on January 1, 2019, Mycronic decided to apply the modified retrospective approach, entailing that comparative information from prior periods are not presented. The lease liability consisted of the discounted remaining lease payments at January 1, 2019. For all leases, the right-of-use asset was an amount corresponding to the lease liability adjusted for prepaid or accrued lease payments recognized in the statement of financial position on the first day of application. Accordingly, the transition to IFRS 16 had no effect on equity.

Mycronic has chosen to apply the practical exemptions regarding leases where the underlying asset has a low value and for leases with a lease term of less than twelve months. These leases are not included in amounts recognized in the statement of financial position. Leases are also not included that were originally of a term longer than twelve months but which end in 2019. Mycronic's material leases currently primarily comprise rented premises, but also vehicles and office equipment. Rented premises are presented as one class of underlying assets, and vehicles and office equipment are presented under Other, as they are not considered material individually. In the transition to IFRS 16, these leases are recognized in the statement of financial position, which results in an increase in the Group's total assets as a result of the addition of right-of-use assets and lease liabilities. The lease payments recognized earlier as other external expenses are replaced by depreciation costs for the right-of-use assets, which are recognized in EBIT and interest on the lease liability, which is recognized as a financial expense. The lease payment is divided between repayment of the lease liability and payment of interest.

The Parent Company utilizes the exemption set out in RFR 2 Accounting for Legal Entities and recognizes lease payments as a cost on a straight-line basis over the period of the lease. The right-of-use asset and the lease liability are thus not reported in the balance sheet. IFRS 16 is also not applied in the segment reporting.

In the transition to IFRS 16, all remaining lease payments were measured at present value applying Mycronic's incremental borrowing rate. The average borrowing rate on January 1, 2019, was 1.3 percent. At the date of initial application, the following adjustments were recognized in the Group's statement of financial position:

Right-of-use assets	SEK 179 million
<i>Of which Rented premises</i>	<i>SEK 168 million</i>
Prepaid expenses	SEK -5 million
Lease liabilities	SEK 174 million

Reconciliation operating leases commitments, SEK million	
Future lease payments for operating leases at Dec. 31, 2018	193
Adjusted lease payments under IAS 17	-5
Short-term leases that are expensed	-7
Low value leases that are expensed	-1
Discounting using the Group's incremental borrowing rate	-5
<b>Recognized lease liability at January 1, 2019</b>	<b>174</b>

New or revised standards or interpretations published by IASB that have not yet entered into force are not expected to have any material impact on the Groups' or the Parent Company's financial reporting.

### Basics of valuation

The assets and liabilities are stated at cost, unless otherwise specified. The functional currency of the Parent Company is Swedish kronor (SEK). SEK is also the reporting currency of the Parent Company and the Group. This means that the financial statements are presented in SEK. All amounts are stated in SEK million unless otherwise specified.

### Accounting estimates and classifications

The preparation of financial reports in accordance with IFRS requires the company's management to make certain accounting judgments, estimates and assumptions that affect how accounting policies are applied and the reported amounts of assets, liabilities, revenues and expenses. The actual results may differ from these estimates and assessments.

The estimates and assumptions are reviewed regularly. Adjustments to estimates are reported for the period in which they occur if the change only affected this period or in the period that the change is made and future periods if the change affects both the current and future periods.

Assessments made by the company management in terms of applying IFRS that significantly impact financial reports and completed estimates and that can result in major adjustments to the financial reports for the subsequent year are described in more detail in Note 4.

Non-current assets and liabilities essentially consist of amounts that are expected to be recovered or settled later than twelve months from the closing date. Current assets and liabilities essentially consist of amounts that are expected to be recovered or settled within twelve months from the closing date. Any deviations from these principles for recovery or payment will be described in notes associated with the relevant balance sheet item.

## Note 2 Accounting policies for the Group

### Consolidated reporting

Subsidiaries are companies where the Parent Company has a controlling influence. A controlling influence exists when the investor has an influence over the investment object, which in a substantial manner affects the possibility of returns, when the investor is exposed to, or has the right to, variable returns from the investment object and when the investor can use its influence to affect the size of the returns.

The consolidated financial statements are prepared in accordance with the purchase method of accounting, whereby the acquisition of a subsidiary is regarded as a transaction in which the Group indirectly acquires the subsidiary's assets and assumes its liabilities and contingent liabilities. The Group's cost of acquisition is determined through an acquisition analysis in connection with the purchase. The analysis determines the acquisition value of the shares or operations, as well as the fair value on the date of acquisition for acquired identifiable assets as well as assumed liabilities or contingent liabilities. The cost of acquisition for the subsidiary shares and operations is measured as the aggregate of the fair values on the date of acquisition of assets given, liabilities incurred or assumed and equity instruments issued in exchange for control of the acquired net assets. Contingent considerations are valued at fair value. In business combinations where the cost of acquisition exceeds the fair value of acquired net assets, the difference is recognized as goodwill. If the cost of acquisition is less than the fair value of acquired net assets, the difference is recognized in the profit and loss account. Transaction costs are reported directly in operating profit.

When contingent considerations are revalued at fair value, the revaluation is recognized in operating profit.

The financial statements of the subsidiaries are included in the consolidated financial statement from the date of acquisition and up to the date on which controlling influence ends.

Intra-group receivables and liabilities, revenues or costs and unrealized profits or losses that arise from intra-group transactions between Group companies are eliminated in full when the consolidated financial statements are prepared.

### Foreign currency translation

#### Functional currency

Items included in the financial statements of the Group's subsidiaries are measured using the currency of the primary economic environments in which the subsidiary operates (functional currency). The functional currencies are CNY, EUR, GBP, JPY, KRW, SEK, SGD, TWD and USD.

#### Transactions

Transactions in foreign currency are translated to the functional currency at the exchange rate in effect on the transaction date.

Sales transactions in foreign currency within the Pattern Generators segment are translated at the spot rate with the exception of sales of spare parts and service contracts for which an approximate exchange rate for the month is used. Sales transactions in foreign currency from sales within Assembly Solutions are reported at an approximate exchange rate for the month. When a contract sale is hedged, the cumulative gain or loss on the hedging instrument, normally a forward exchange contract, is recognized against net sales when the hedged sales transaction is recognized in the income statement.

Monetary assets and liabilities in foreign currency are translated to the functional currency at the closing day rate. Exchange rate gains/losses arising on translation are recognized in the profit and loss account for the year. Non-monetary assets and liabilities carried at cost are translated at the exchange rate that applied on the transaction date. Non-monetary assets and liabilities carried at fair value are translated to the functional currency at the rate of exchange prevailing on the date when the fair value was determined. Forward exchange contracts are used to protect assets and liabilities from foreign exchange risk.

A financial hedge is reflected in the accounts, in that both the underlying asset/liability and the hedging instrument are translated at the closing day exchange rate, while changes in the exchange rates are recognized through profit and loss. Value fluctuations concerning operating assets and liabilities are recognized in the income statement under other operating income/expenses.

#### Financial statements of foreign operations

Assets and liabilities in foreign group companies are translated from that company's functional currency to SEK at the closing day exchange rate.

Revenue and expenses in the respective Group company's profit and loss account are translated to SEK at the average rate of exchange that is a reasonable approximation of actual rates on the respective transaction dates. All exchange differences arising from the translation of foreign operations are recognized in other comprehensive income and are accumulated in a separate translation reserve within consolidated equity.

#### Net investments in foreign operations

Exchange differences arising with the translation of long-term loans that form part of the net investment in a foreign operation are deferred to a translation reserve in other comprehensive income together with the related tax effects.

When a foreign operation is disposed of, the cumulative exchange differences relating to that foreign operation are realized through a reclassification from the translation reserve to the year's consolidated profit and loss.

### Reporting of operating segments

A segment is an identified part of the Group that engages in business activities from which it may earn revenues and incur expenses and for which discrete financial information is available. A segment's operating results are reviewed regularly by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess performance. In the Group, this function has been identified as the CEO. The segments correspond to the Group's business areas.

### Intangible assets

#### Capitalized costs for business systems

Expenditures for business systems are recognized as intangible assets at cost with a deduction for accumulated amortization. The investment in a business system includes costs incurred for adaptation and implementation of a fully integrated business system and consists of both internally generated and externally acquired assets. Capitalized costs for business systems are amortized straight-line over the expected useful life of the asset, which is three years. Amortization is initiated when the business system is ready for use. Costs for maintenance of the business system are expensed as they are incurred.

#### Capitalized development costs

Mycronic develops high-tech products on the cutting edge of technology. Several different types of development projects need to be conducted in order to achieve a few commercial products.

Costs related to research undertaken with the prospect of gaining new scientific or technical knowledge in the Group's operations are expensed as they are incurred. Development projects, where knowledge and understanding gained from research

and practical experience are directed towards developing new products or processes, are recognized as intangible assets in the statement of financial position when they meet the criteria for capitalization. Development costs may be capitalized if the company can demonstrate the technical and commercial feasibility of completing the product or process, the intention and ability to complete the development and use or sell the asset. It must also be probable that future economic benefits related to the asset will flow to the company and the asset cost can be reliably measured. The reported value includes all directly attributable costs, such as those for materials and services as well as compensation to employees.

Other development costs are expensed in the profit and loss account for the period in which they arise.

Individual assessment is made of all ongoing research and development projects to determine which costs for the respective project are capitalizable and to look for any indications of impairment.

Amortization of capitalized development expenditure is started when the development project in question is completed, normally when it begins generating revenue, and is carried out on a straight-line basis. Expenses for mask writers are written off over three years, while surface mount equipment is written off over five years. Amortization was recognized as research and development costs in the profit and loss accounts until the second quarter of 2018. From the third quarter of 2018, the amortization of capitalized development costs is included in the acquisition cost of inventories, which by extension impacts the cost of goods sold in the Group.

#### Goodwill

Goodwill is measured at cost less accumulated impairment losses. Goodwill is allocated to cash-generating units and is annually tested for impairment. Goodwill is attributable to acquisitions.

#### Other intangible assets

Other intangible assets consist of brand, technology and customer relationships, and are measured at cost less accumulated amortization and possible impairment losses. These assets are attributable to acquisitions.

### Tangible assets

Tangible assets are measured at cost less accumulated depreciation and possible write-downs. The acquisition costs include the acquisition price as well as charges for transportation to the site and preparation efforts in order to use the equipment according to the intended purpose of the acquisition.

The item Equipment includes self-produced equipment used primarily for research and development as well as test and training equipment. The acquisition cost of self-produced, non-current assets includes expenses for materials, employee benefits and salaries and other production costs that are considered to be directly attributable to the assets.

The reported value of a tangible asset is removed from the statement of financial position upon disposal or sale of the asset or when there are no future economic benefits anticipated from using or disposing/selling the asset. Gains/losses on the sale or disposal of tangible assets are calculated as the difference between the net realizable value and carrying amount of the item and are recognized in the profit and loss account among other operating income/expenses. Gains and losses are recognized as other operating income/expenses.

Subsequent expenses are added to the acquisition cost if it is likely that the future economic benefits of the assets will be realized by the company and the acquisition cost can be estimated reliably. All other additional expenditures are accounted as costs when they arise.

A future expense is added to the acquisition cost if the expense involves the replacement of identified components or parts thereof. In cases where a new component has been produced, the expense is added to the acquisition cost. Any non-depreciated costs for replacement components or parts of such components are discarded and expensed as the replacement is made. Repairs are expensed on an ongoing basis.

Tangible assets are depreciated on a straight-line basis over their expected useful life starting from when they are accessible for use.

### Leases

A majority of all Group leases are recognized in the statement of financial position. Mycronic assesses at the inception of a contract whether the contract is or contains a lease. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Mycronic recognizes right-of-use assets and lease liabilities in the statement of financial position starting on the commencement date of the lease. Mycronic applies the practical exemptions regarding leases where the underlying asset has a low value and for leases with a lease term of less than twelve months. These leases are not included in amounts recognized in the statement of financial position.

At the commencement date of a lease, Mycronic measures the lease liability at the present value of the lease payments that are not paid at that date. Lease payments are discounted using the interest rate implicit in the lease, if this rate can be readily determined. If this rate cannot be readily determined, Mycronic's incremental borrowing rate is used. Mycronic's incremental borrowing rate is based on country-specific information, the lease term and the currency. Lease payments included in the

measurement of the lease liability comprise payments for the right to use the underlying asset during the lease term and can include fixed payments, variable lease payments, payments for the possibility of an extension or the exercise price for an option to buy the underlying asset if Mycronic has reasonable assurance that it will utilize one of these possibilities. For subsequent measurement of the lease liability, Mycronic uses amortized cost by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payments made, and remeasuring the carrying amount to reflect any reassessment or lease modifications or to reflect revised in-substance fixed lease payments.

At the commencement date, Mycronic measures the right-of-use asset at cost, which includes the amount the lease liability was originally measured at, any initial direct costs, and an estimate of any costs for dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories. Mycronic applies a cost method for subsequent measurement of the right of use, which includes deductions for accumulated depreciation and any accumulated impairment losses adjusted for any remeasurement of the lease liability. Mycronic depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Mycronic's material leases currently primarily comprise rented premises, but also vehicles and office equipment. Rented premises are presented as one class of underlying assets, and vehicles and office equipment is presented under Other in the note. Right-of-use assets are presented as tangible assets, and the lease liability is presented as current or non-current interest-bearing liabilities, respectively, in the consolidated statement of financial position.

When the standard entered into force, Mycronic decided to apply the modified retrospective approach, entailing that comparative information from prior periods are not presented. Lease payments are recognized on a straight-line basis over the lease term in comparative periods, and the right-of-use asset and the lease liability are thus not recognized in the statement of financial position.

#### Financial instruments

The financial instruments recognized in the statement of financial position include cash and cash equivalents, trade receivables and derivatives as assets. Financial liabilities include trade payables, loans payable, lease liabilities, contingent considerations and derivatives.

#### Recognition and derecognition from the statement of financial position

A financial asset or liability is recognized in the statement of financial position when the company initially becomes party to the contractual provisions of the instrument. Financial assets are recognized when the company has performed and there is a contractual obligation for the counterparty to pay, even if no invoice has been sent. Trade receivables are recorded in the statement of financial position when an invoice has been sent. Financial liabilities are recognized when the counterparty has performed and there is a contractual obligation to pay, even if no invoice has been received. Trade payables are recorded when an invoice has been received.

A financial asset is derecognized from the statement of financial position when the company's rights under the agreement are realized, expire or the company has relinquished control of the asset. The same applies for a part of a financial asset. A financial liability is derecognized from the statement of financial position when the obligation specified in the agreement is fulfilled or otherwise extinguished. The same applies for a part of a financial liability.

A financial asset and a financial liability are set off and netted in the statement of financial position only when a legal right of set off exists and there is an intent and ability to set off and net these items or to simultaneously realize the asset and settle the liability.

Acquisitions and sales of financial assets are recognized on the trade date. The trade date is the date on which the company commits to acquire or sell the asset.

#### Classification and valuation of financial assets

Debt instruments: the classification of financial assets that are debt instruments is based on the Group's business model for managing the asset and the character of the asset's contractual cash flow.

The instruments are classified as:

- Amortized cost
- Fair value through other comprehensive income
- Fair value through profit and loss

The Group's assets in the form of debt instruments are classified at amortized cost. Financial assets classified at amortized cost are measured initially at fair value with the addition of transaction costs. Trade receivables are recognized initially at the invoiced value. Following initial recognition, the assets are measured in accordance with the effective interest method. Assets classified at amortized cost are held in accordance with the business model to collect contractual cash flows that are solely the payment of the principal and interest on the principal outstanding. Assets are subject to a loss allowance for expected loan losses.

Derivative instruments are classified at fair value in profit and loss, except where hedge accounting is applied, see also below. Fair value is determined according to the description in Note 34.

#### Classification and valuation of financial liabilities

Financial liabilities are classified at amortized cost with the exception of derivatives and contingent considerations. Financial liabilities classified at amortized cost are measured initially at fair value including transaction costs. After initial recognition, these are measured at amortized cost according to the effective interest method.

Derivative instruments are classified at fair value in profit and loss, except where hedge accounting is applied, see also below. Contingent considerations related to business combinations are recognized at fair value in profit and loss. Upon valuation of contingent considerations, level 3 in the valuation hierarchy is applied.

#### Reporting of derivative instruments and hedges

Derivative instruments consist of forward exchange contracts that are used to reduce transaction exposure in foreign currencies. Derivative instruments are not used for speculative purposes. All derivative instruments are measured at fair value in the statement of financial position.

In the Group, derivatives that are used to hedge probable future commercial inflows in foreign currency, in other words, inflows from sales, and which meet the requirements for hedge accounting, are reported according to the rules for hedge accounting for cash flow hedges. The Group applies hedge accounting in accordance with IFRS 9. This means that the effective portion of fair value changes on derivative instruments is recognized in the hedge reserve in other comprehensive income. The profit and loss attributable to the ineffective portion is recognized immediately in the income statement under other operating income/expenses. The fair value of derivatives is measured through current market prices of currency and interest rates on the closing date.

Amounts accumulated in other comprehensive income are reversed to net sales in the income statement in the periods when the hedged item is reflected in profit and loss, i.e. upon revenue recognition. When a hedged instrument expires, is sold or no longer meets the hedge accounting criteria and the cumulative gains/losses are recognized in other comprehensive income, these gains/losses are retained in other comprehensive income, and are recognized in profit and loss when the forecast transaction is ultimately recognized in the profit and loss account. The effective portion is recognized in net sales when the hedged item affects profit and loss, while the ineffective portion is recognized in other operating income/expenses. When a forecast transaction is no longer expected to occur, the cumulative gains/losses recognized in other comprehensive income are immediately released to the profit and loss account among other operating income/expense.

As of 2018, the Group also applies hedge accounting of net investments in foreign operations. The exchange rate effects on hedging instrument debt in foreign currency is recognized in other comprehensive income, insofar as the hedge is effective. With this, exchange rate changes on the debt meet exchange rate differences from net investments in foreign operations as presented in other comprehensive income, and the amount accumulates in the translation reserve. The exchange rate effects remain in the translation reserve until such time as the net investment is divested, when the accumulated amount in the reserve is reclassified to profit and loss.

When hedge transactions are entered into, the relationship between the hedge instrument and the hedged risk is formally documented, including the company's risk management objective and strategy for undertaking the hedge. The Group also documents its assessment, both at the inception of a hedge and at each reporting date, on the effectiveness of the hedge instrument used in the hedge transaction in offsetting changes in cash flows or value. Changes in the hedge reserve and translation reserve are reported in other comprehensive income.

#### Inventories

Inventories are valued at the lowest of acquisition cost or net realizable value.

Inventories are carried out at cost calculated on a first-in, first-out basis and include all costs arising from the purchase of the inventory assets and costs incurred in bringing the goods to their existing location and condition. For manufactured goods and work in progress, the cost includes a reasonable share of indirect costs based on normal capacity. Deductions are made for internal profit arising from intra-group sales.

Net realizable value is the estimated selling price less the estimated costs for completion and selling costs in operating activities.

#### Impairment

##### Impairment testing of tangible and intangible assets and participations in subsidiaries

If there is an indication of impairment, the asset's recoverable amount is calculated (see below). For goodwill and other intangible assets with indefinite useful lives and intangible assets that are not ready for use, the recoverable value is calculated annually. If it is not possible to establish an independent cash flow for an individual asset, and its fair value less the sales costs cannot be used, the assets are grouped during impairment testing at the lowest level at which the identifiable cash flow can be identified, a so-called cash-generating unit.

An impairment is recognized when the recorded value of an asset or cash-generating unit (group of units) exceeds the recoverable value. An impairment is recognized as a cost in the profit and loss account for the year. When the need for impairment has been identified for a cash-generating unit (group of units) the impairment amount is firstly distributed to goodwill. Then the remaining assets in the unit (group of units) are impaired proportionally.

The recoverable value is the highest of fair value less selling costs and the value

in use. In measuring the value in use, future cash flows are discounted using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

#### *Impairment of financial instruments*

The Group's financial assets and contract assets, except for those classified at fair value in profit and loss, are subject to impairment for expected credit losses. Impairment for credit losses according to IFRS 9 is forward-looking and a loss allowance is made when there exists an exposure for credit risk, normally in initial recognition. Expected credit losses are reflected in the present value of all deficits in cash flow relating to default either for the next twelve months or for the anticipated remaining term of the financial instrument, depending on the type of asset and on the credit deterioration since initial recognition. The expected credit losses reflect an objective, probability-weighted outcome that takes into account a number of scenarios based on reasonable and verifiable forecasts. The valuation of expected credit losses reflects any collateral and other credit enhancements in the form of guarantees.

The simplified approach applies for trade receivables and contract assets. A loss allowance is recognized, in the simplified approach, for the receivable or asset's anticipated remaining time to maturity.

For other items covered by expected credit losses, an impairment model is applied with three steps. Initially, and on every balance-sheet date, a loss allowance is recognized for the next twelve months, or alternatively for shorter periods depending on the remaining time to maturity (step 1). If a material increase in credit risk has occurred since the initial recognition, a loss allowance is recognized for the asset's remaining term (step 2). For assets where credit is deemed to have deteriorated, a provision remains for expected credit losses for the remaining term (step 3). For assets and receivables where credit is deemed to have deteriorated, the calculation is based on interest income on the asset's carrying amount, net of loss allowance, unlike the gross amount used in the earlier steps.

The financial assets are recognized in the balance sheet at amortized cost, meaning net of gross value and loss allowance. Changes to the loss allowance are recognized in profit and loss.

#### **Taxation**

Income tax consists of current tax and deferred tax. Income tax is reported in the profit and loss account for the year, except when underlying transactions were reported in other comprehensive income or in equity, whereby related tax effects are reported in other comprehensive income or in equity.

Current tax is the tax payable or refundable for the current year, with the tax rates enacted or substantively enacted by the closing date. Current tax also includes adjustment of current tax from previous periods.

Deferred tax is calculated according to the balance sheet method on the basis of temporary differences between the carrying amount of an asset or liability and its tax base. Temporary differences are not taken into consideration in consolidated goodwill. Also not observed are temporary differences for participations in subsidiaries that are not expected to be reclassified in the foreseeable future. The valuation of deferred tax is based on how underlying assets or liabilities are expected to be recognized or paid. Deferred tax is calculated using the tax rates and tax regulations enacted or substantively enacted by the closing date.

Deferred tax assets for deductible temporary differences and tax loss carry-forwards are only recognized to the extent that they are expected to be used. The value of deferred tax assets is reduced when it is no longer expected to be used.

Any additional income tax that arises in relation to dividend is recognized on the same date as the dividend is recognized as a liability.

#### **Employee benefits**

##### *Pension commitments and other post-employment benefits*

Pension commitments are classified either as defined contribution or defined benefit pension plans. Pension commitments in the Group are mainly fulfilled through payment of premiums according to a defined contribution pension plan. A defined contribution pension plan is classified as the plans where a company's obligation is limited to the charges the company has undertaken to pay. In such cases, the size of the employee's pension is dependent on the charges paid by the company to the plan or to an insurance company and the capital return offered by the charges. Consequently, the employee carries the actuarial risk (that the compensation may be lower than expected) and the investment risk (that the invested assets will be insufficient to offer the expected compensation). The company's obligations regarding charges to defined contribution plans are charged to the profit and loss account for the period in which the employees render the related service to the company.

In the Japanese, Korean and French subsidiaries, there are defined benefit commitments to employees for benefits after the end of employment. When employment ceases, through termination or retirement, the accumulated amount of benefit is paid out immediately. The commitment is valued in the Group in accordance with IAS 19. Defined benefit pension plans set forth an amount for the pension benefit that an employee will receive at retirement depending on factors such as age, period of service and salary. The liability on the balance sheet for defined benefit pension plans is the present value of the defined benefit commitment at the end of the reporting period less the fair value of the plan assets.

The defined benefit pension commitment is calculated annually by independent actuaries with the application of what is known as the projected unit credit method.

Revaluation of defined benefit net liability is recognized in other comprehensive income. Other costs are recognized in operating profit.

##### *Termination benefits*

An expense is recognized on the termination of employees only when the company is demonstrably committed, without realistic possibility of withdrawal, by a detailed, formal plan to terminate an employee or group of employees before the normal retirement date. When termination benefits are provided as a result of an offer made to encourage voluntary redundancy, the expense is recognized if it is probable that the offer will be accepted and the number of employees who will accept the offer can be reliably estimated.

##### *Short-term employee benefits*

For short-term employee benefits, the undiscounted amount of benefits expected to be paid in respect of service rendered in a period are recognized in that period. A provision for the expected cost of profit sharing and bonus payments is recognized when the Group has a legal or informal obligation to make such payments in respect of service rendered by employees and a reliable estimate of the expected cost can be made.

##### *Long-term incentive programs*

The cost of long-term incentives (LTI) are recognized in the period when the vesting conditions are met, until the date on which the relevant employees become fully entitled to the compensation.

Certain key staff, including senior executives, in the Group receive remuneration in the form of share-based remuneration (LTIP), through which employees provide services in exchange for shares in Mycronic (share-based remuneration that is settled with equity instruments). Mycronic has no share-based remuneration settled in cash.

The cost of share-based remuneration is the fair value at the time of allocation, which is calculated using accepted measurement models. This cost is recognized as personnel costs together with a corresponding increase in equity during the period when the service, and where applicable, the performance conditions are met (the vesting period). The accumulated cost recognized for share-based remuneration at each reporting date until final vesting reflects the achieved percentage of the vesting period and the Group's best estimate of the number of equity instruments that will ultimately be vested. The impact on profit/loss for a period represents the change in the accumulated cost for the period.

Service- and non-market-related vesting conditions are not considered when determining the fair value on the allotment date, but the probability that the conditions will be met is part of the Group's best estimate of the number of equity instruments that will ultimately be vested. Any market-related vesting conditions are reflected in the fair value on the allotment date.

No cost is recognized for equity instruments that are not vested due to failure to comply with service and/or performance conditions that are not market-related.

#### **Provisions**

A provision is different from other liabilities because the payment time or the size of the payment is not clear. A provision is recognized in the statement of financial position when there is a legal or informal obligation as a result of an event occurring, and it is likely that an outflow of financial resources will be needed to meet the obligation and that this amount can be reliably estimated.

Provisions are made using the best estimate of what will be required to fulfill the existing obligation on the closing date.

##### *Warranties*

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical data regarding warranties and an overall review of potential outcomes in relation to the probabilities of such outcomes.

##### *Restructuring*

A provision for restructuring is recognized when there is an established, detailed and formal restructuring plan, and the restructuring has either been started or has been made public. No provisions are made for future operating costs.

#### **Revenue recognition**

The Group's net sales consist of revenue arising from the sale of goods (systems and system upgrades, spare parts and accessories) and services. Sales are denominated mainly in USD, EUR, JPY and CNY.

Revenue is recognized when a promised product or service is transferred to the customer, i.e., when the client has obtained control over it, which can happen over time or at a point in time. Revenue shall consist of the amount that the company expects to receive in exchange for the delivered goods or services. Revenue is reported net of any discounts.

Revenue related to sale of services, primarily linked to service agreements, is recognized upon provision of the service. Service agreements that are invoiced in advance are progressively recognized over the term of the agreement. Service contracts that are invoiced in arrears are reported as income over the course of the agreement. Costs for the provision of service are expensed as incurred.

See Note 6 Revenue from Contracts with Customers.

**Financial income and expenses**

Financial income consist of interest income on invested assets, and dividends. Dividend is reported when the right to receive dividends has been established. Financial expenses consist mainly of interest expenses.

**Operating expenses**

The Group's expenses mainly refer to materials and supplies, personnel costs and other external expenses, primarily consisting of consulting fees. An assessment is made of costs incurred but not invoiced by suppliers for work performed during the financial year, and a corresponding provision is recognized in accrued expenses in the statement of financial position. Costs related to research are expensed as incurred. Costs for development projects that meet the criteria for capitalization are reported as intangible assets. From the third quarter of 2018, the amortization of capitalized development costs is included in the acquisition cost of inventories, which by extension impacts the cost of goods sold in the Group.

**Earnings per share**

Earnings per share are calculated on consolidated profit for the year attributable to the Parent Company's owners and the weighted average number of outstanding common shares during the year. When calculating earnings per share after dilution, the weighted average number of outstanding common shares is adjusted for the dilution effect of all potential common shares.

**Note 3 Accounting policies of the Parent Company**

The annual report of the Parent Company are presented in accordance with the Swedish Annual Accounts Act (1995:1554) and the Swedish Financial Reporting Board's recommendation RFR 2, Accounting for Legal Entities (January 2018). The Swedish Financial Reporting Board's statements for listed enterprises are also applied. RFR 2 means that in the report for the legal entity, the Parent Company shall apply all EU-approved IFRSs and statements as far as possible within the framework of the Annual Accounts Act, the law of safeguarding pension commitments and with respect to the connection between accounting and taxation. The recommendation indicates which exceptions and additions to IFRS that shall be made.

The differences between the Group's and the Parent Company's accounting policies are shown below. The accounting policies for the Parent Company shown below have been consistently applied to all periods presented in the Parent Company's financial statements.

**Changes in accounting policies**

Unless otherwise specified below, the Parent Company's accounting policies in 2019 have been modified in accordance with what is specified above for the Group.

**Classification and disposition**

A profit and loss account, a statement of comprehensive income and a statement of cashflow are reported for the Parent Company and the Group. The Parent Company is using the title of balance sheet for the statement that in the Group is titled as statement of financial position. Profit and loss account and balance sheet for the Parent Company are presented according to the Swedish Annual Accounts Act structure, while the statement of comprehensive income, report of changes in equity and statement of cash flow are based on IAS 1 Presentation of Financial Statements and IAS 7 Consolidated Cash Flow Statements.

**Development expenses**

All costs, for both research and development, are expensed as incurred.

**Taxation**

In the Parent Company untaxed reserves are reported in the balance sheet with no split to equity and deferred tax liability, unlike the Group reporting. Correspondingly, no split is done between appropriations and deferred tax costs in the profit and loss accounts in the Parent Company.

**Group contribution**

Group contributions, received and submitted, are reported as appropriations in the Parent Company.

**Leases**

The Parent Company utilizes the exemption set out in RFR 2 Accounting for Legal Entities and recognizes lease payments as a cost on a straight-line basis over the period of the lease. The right-of-use asset and the lease liability are thus not reported in the balance sheet. The property leasing charge, consisting of a fixed portion and an interest portion, is recognized as a lease expense in the profit and loss account. Variable charges are expensed in the period in which they incur.

**Merger reporting**

Mergers of subsidiaries are recognized in accordance with the consolidated value method. According to the method, if there are any differences between assets and liabilities booked in the merged company and consolidated values, the latter are used. The profit and loss in the merged company is included in the profit and loss accounts of the acquiring company from the beginning of the period in which the merger was finalized.

**Subsidiaries**

In the Parent Company, participation in Group companies are accounted for according to the cost method. This means that transaction expenses and contingent considerations are included in the reported value of holding in subsidiaries. Transaction expenses are recognized in the consolidated financial statements directly in profit and loss when these arise. Contingent considerations are measured in the Parent Company assuming the probability that a purchase consideration will be paid and any changes impact historical cost. The consolidated financial statements recognize contingent considerations at fair value with changes in value in profit and loss. The Parent Company recognizes the full amount of dividends received from subsidiaries as revenue in profit and loss for the year.

Exchange-rate differences on long-term loans that form part of the Parent Company's net investments in foreign operations are recognized in profit and loss.

**Financial instruments and hedge accounting**

In view of the connection between accounting and taxation, the rules on financial instruments and hedge accounting in IFRS 9 are not applied by the Parent Company as a legal entity.

In the Parent Company, financial non-current assets are valued at cost, less any impairment and financial current assets at the lower of cost and net realizable value. In connection with impairment and recognition according to the lower of cost or net realizable value, impairment of the debt instrument is applied for expected credit losses in accordance with IFRS 9.

When hedging receivables and liabilities in foreign currency using forward contracts, the spot exchange rate is used on the day when the currency is hedged to value the hedged receivable or liability. The difference between the forward contract rate and the spot rate at the time of entering into the contract (forward premium) is allocated over the life of the forward contract. Allocated forward premiums are reported as other operating income and other operating expenses, respectively.



## Note 4 Critical accounting estimates and assumptions

The Group management and the Audit Committee discuss the development, selection and information regarding the Group's critical accounting policies and estimates, as well as the application of these policies and estimates.

### Critical estimates when applying the Group's accounting policies

The preparation of financial statements to conform with IFRS requires the management to make certain assumptions that affect the application of the company's accounting policies. When preparing the financial statements, the Group management is also required to make certain estimates and assumptions about the future that affect the reported amounts of assets and liabilities on the closing date. Revenues and expenses are also affected by the estimates. The actual results may differ from these estimates. The key assumptions and estimates are specified below.

### Capitalized development expenditure

Development projects, where knowledge and understanding gained from research and practical experience are directed towards developing new products or processes, are recognized as intangible assets in the statement of financial position when they meet the criteria for capitalization. The reported value includes all directly attributable costs, such as those for materials and services as well as compensation to employees. Individual assessment is made of major ongoing research and development projects to determine whether these criteria have been met.

Because it may be difficult to distinguish between research and development projects, this judgment can be affected by individual interpretations.

### Evaluating useful life periods and impairment requirements for intangible assets

Assets with an indefinite useful life, meaning goodwill and brands, are not amortized but are tested annually, or as required, for impairment. Assets that are subject to amortization/depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairment losses are recognized in the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable value is the highest of an asset's fair value less selling costs and the value in use. During impairment testing, assets are grouped at the lowest level with separate identifiable cash flow (cash-generating units). The value in use is based on cash flow forecasts, built on the Group management's and Board's business plan for the coming five years, for the cash-generating unit to which the values belong. These assessments can have a large impact on the Group's reported values of intangible assets.

Amortization of intangible assets is based on the estimated useful life of the asset. Depending on which useful life is determined for an asset, this can have a significant impact on the Group's reported profit. The expected residual value of an intangible asset at the end of its useful life is always set to zero.

### Inventories

Inventories are valued at the lowest of acquisition cost or net realizable value. For manufactured goods and works in progress, the acquisition cost includes a fair share of indirect costs based on normal production capacity. Incorrect assumptions in the company's inventory accounting model give an incorrect cost allocation which affects the book value of inventories and the reported cost of goods sold.

### Acquisitions and valuation of contingent considerations

In connection with business combinations, acquired assets, liabilities and contingent considerations are valued at fair value. Contingent considerations are subsequently valued at fair value at each reporting period. The valuation model is based on assumptions about future financial performance of the acquired company. These estimates have a major impact on the valuation of acquired assets and liabilities as well as reported values of contingent considerations. See Note 22 for reporting of acquisitions.

## Note 5 Capital management and proposal on disposition of accumulated results

The Board supervises the Group's capital structure and financial management, approves matters related to acquisitions, investments and financing and monitors the Group's exposure to financial risks. In early 2017, the Board and Group management decided on new financial goals:

### Growth

Net sales including acquisitions shall reach SEK 5 billion at the end of the business plan period, 4 to 7 years.

### Profitability

EBIT shall exceed 15 percent of net sales over a business cycle.

### Capital structure

Net debt shall be less than 3 times average EBITDA (operating profit before interest, tax, depreciation and amortization). The average is calculated over 3 years.

### Mycronic's dividend policy

The objective of the company is to provide both good returns and value growth. Between 30 and 50 percent of net profit will be distributed to the shareholders, provided the company has a net debt lower than 3 times EBITDA after stipulated dividend. In each case, account shall be taken of the company's financial position, profitability trends, growth potential and future investment needs.

Mycronic defines capital as equity according to the statement of financial position SEK 2,978 million (2,379), adjusted for unrealized gains/losses reported in other comprehensive income included in the hedge reserve. Capital amounts to SEK 2,976 (2,396).

### At the Annual General Meeting's disposal are the following amounts in SEK:

Share premium reserve	201,915,502
Retained earnings	1,021,954,867
Profit for the year	637,173,762
<b>Total</b>	<b>1,861,044,131</b>

### The Board of Directors proposes that the retained earnings and non-restricted equity be managed as follows:

Dividend	318,228,654
Carried forward to new account	1,542,815,476

### Proposal on dividend

The Board of Directors proposes to the Annual General Meeting a dividend of SEK 3.25 per share, amounting to SEK 318.2 million. The dividend corresponds to 37 percent of the Group's net profit after tax.

**Note 6** Revenue from Contracts with Customers

The distribution of Revenue from Contracts with Customers by business area, geographical markets and type of good or service is summarized in the table below.

	2019			2018		
	Assembly Solutions	Pattern Generators	Group	Assembly Solutions	Pattern Generators	Group
<b>Geographical market</b>						
EMEA	743	-	743	756	-	756
Americas	607	398	1,005	512	178	690
Asia	1,114	1,445	2,559	744	1,591	2,335
<b>Total</b>	<b>2,463</b>	<b>1,844</b>	<b>4,307</b>	<b>2,012</b>	<b>1,769</b>	<b>3,781</b>
<b>Type of good/service</b>						
System	1,866	1,233	3,099	1,505	1,173	2,677
Aftermarket	597	611	1,208	507	596	1,103
<b>Total</b>	<b>2,463</b>	<b>1,844</b>	<b>4,307</b>	<b>2,012</b>	<b>1,769</b>	<b>3,781</b>

Revenue from aftermarket sales consists primarily of service revenue from both business areas, upgrades from the Pattern Generators business area and spare parts and accessories from the Assembly Solutions business area.

The distribution of Revenue from Contracts with Customers by timing of revenue recognition is summarized in the table below.

<b>Timing of revenue recognition</b>	Group	
	2019	2018
Products transferred at a point in time	3,533	3,126
Service transferred over time	774	655
<b>Total</b>	<b>4,307</b>	<b>3,781</b>

Information about trade receivables, contract assets and contract liabilities from contracts with customers are summarized in the table below.

<b>Contract balances</b>	Group		Parent Company	
	2019	2018	2019	2018
Non-current trade receivables	27	-	26	-
Trade receivables, see Note 26	826	664	233	117
Contract assets	64	103	32	87
Contract liabilities	420	691	226	548
<b>Total</b>	<b>1,337</b>	<b>1,458</b>	<b>518</b>	<b>753</b>

Contract assets mainly pertain to the Group's right to reimbursement for work performed but not invoiced linked to system sales in the Pattern Generators business area. Contract assets are transferred to trade receivables when the Group issues an invoice to the customer, which normally takes place when the terms for the installation are met.

Contract liabilities mainly consist of advance payments on orders received in the Pattern Generators business area, unmet performance obligations related to system sales in the Pattern Generators business area and prepaid service revenue in both business areas. Of the SEK 691 million recognized as contract liabilities on the opening date, SEK 669 million was recognized as revenue as of December 31, 2019.

In the Pattern Generators business area, payment is made for system orders when the order is confirmed and in conjunction with shipping, and a smaller portion is paid after installation is approved. Payments for upgrades are normally received after installation is approved. Service contracts are paid monthly or every quarter in arrears.

In the Assembly Solutions business area, payment is made for system orders when the order is confirmed and after shipping, and a smaller portion is paid after installation is approved. Payments for spare parts and accessories normally take place after delivery. See Note 33 for average credit periods. Service contracts are normally paid in advance, annually or every quarter.

**Performance obligations***Assembly Solutions*

System sales in the Assembly Solutions business area is normally divided into two separate performance obligations; system and installation. The system portion is recognized as income at a point in time while the installation is recognized over time. Aftermarket sales in Assembly Solutions includes goods, such as spare parts and accessories, which are recognized as income at a point in time and service revenue that is recognized over time.

*Pattern Generators*

System sales in the Pattern Generators business area is divided into three separate performance obligations; system, installation and service-type warranty. The system portion is recognized as income at a point in time while the installation and warranty are recognized over time. Aftermarket sales mainly comprise revenue from service contracts that is recognized as income over time and upgrades that are normally recognized at a point in time.

In the Pattern Generators business area, combined agreements exist where two or more agreements are signed at the same time, or almost at the same time, with the same customer and when other criteria for recognizing the agreements as combined are satisfied. These combined agreements can include performance obligations such as system, installation, service-type warranty and upgrades.

*Remaining performance obligations*

Remaining performance obligations as per December 31, 2019 amounted to SEK 2,164 million, including advances and deferred income recognized as contract liabilities. The remaining performance obligations include ten mask writers, of which seven with planned delivery in 2020, and a major upgrade with delivery in 2020.

## Note 7 Segment reporting

The company has two segments. One segment comprises operations in the Assembly Solutions business area. Operations include the development, manufacture and marketing of advanced production equipment for flexible electronics production.

The other segment comprises operations in the Pattern Generators business area. Operations comprise development, manufacture and marketing of highly accurate laser mask writers for the production of photomasks, which are used by electronics companies to manufacture displays and other items. The systems that are used in photomask production are produced in a similar manner, despite different application areas, distributed in a similar manner and largely sold to similar customers.

The accounting principles of the segments are the same as for the Group, with the exception of IFRS 16 Leases; see Note 1. Net sales per geographical market are determined using the domicile of the customer. Consolidated net sales consist of revenue from sales of goods and services. Services mainly consist of service contracts, which normally include spare parts.

Net sales per geographical market	Group		Parent Company	
	2019	2018	2019	2018
Sweden	36	32	36	32
Europe outside Sweden	695	710	398	373
USA	953	641	700	448
Other Americas	52	49	-	-
China	1,294	888	509	341
Rest of Asia	1,265	1,447	1,187	1,414
Other countries	12	14	4	12
<b>Total</b>	<b>4,307</b>	<b>3,781</b>	<b>2,833</b>	<b>2,621</b>
of which, system sales	3,099	2,677	1,949	1,784
of which, aftermarket sales	1,208	1,103	884	837
	<b>4,307</b>	<b>3,781</b>	<b>2,833</b>	<b>2,621</b>

Non-current assets per geographical market	Group		Parent Company	
	2019	2018	2019	2018
Sweden	303	162	92	56
Europe outside Sweden	136	113		
USA	753	620		
China	593	571		
Rest of Asia	29	20		
<b>Total</b>	<b>1,813</b>	<b>1,487</b>	<b>92</b>	<b>56</b>

Net sales and profit/loss before taxes	2019					2018				
	Assembly Solutions	Pattern Generators	Group-wide	Effects of IFRS 16	Group	Assembly Solutions	Pattern Generators	Group-wide	Group	
Income from external customers	2,463	1,844			4,307	2,012	1,769		3,781	
<b>Total income</b>	<b>2,463</b>	<b>1,844</b>	<b>-</b>	<b>-</b>	<b>4,307</b>	<b>2,012</b>	<b>1,769</b>	<b>-</b>	<b>3,781</b>	
<i>of which 2 (0) customers represent more than 10 percent of the Group's total sales</i>					944				-	
Gross profit	1,011	1,389		-1	2,399	839	1,259		2,098	
Gross margin, %	41	75			56	42	71		55	
<b>Operating expenses and EBIT</b>										
R&D expenditure	-340	-227		0	-567	-312	-154		-466	
Capitalized development expenditure	17	12			29	10	-		10	
Amortization of capitalized development expenditure	-	-			-	-4	-		-4	
Amortization of acquired technology	-20	-			-20	-16	-		-16	
Selling expenses	-456	-81	-4	0	-541	-340	-77	-4	-421	
Administrative expenses	-161	-76		0	-237	-149	-79		-228	
Other income and expenses	60	2			62	41	7		48	
Financial income and expenses			-2		-2			-9	-9	
<b>Profit before tax</b>	<b>110</b>	<b>1,019</b>	<b>-6</b>	<b>-1</b>	<b>1,122</b>	<b>69</b>	<b>955</b>	<b>-13</b>	<b>1,011</b>	
<b>Assets</b>										
Capitalized development expenditure	38	12			51	32			32	
Inventories	778	331			1,109	571	297		868	
Trade receivables	522	304			826	506	158		664	
<b>Investments</b>										
Capitalized development expenditure	17	12			29	10	-		10	

**Note 8** Transactions with related parties**Intra-Group transactions**

Of the Parent Company's purchases during the year, SEK 382 million (317) was attributable to Group companies. Of the year's sales, SEK 1,216 million (1,028) was attributable to Group companies. All transactions are conducted on market terms.

**Transactions with persons in senior positions**

Except what is described in Note 14 "Employees, personnel costs and remuneration to senior executives", no transactions have taken place with closely related persons.

**Note 9** Operating expenses

	Group	
	2019	2018
<i>Functionalized expenses allocated by type of cost</i>		
Raw materials and consumables	1,330	1,147
Changes in finished goods and products in progress	-164	-102
Personnel costs	1,128	924
Depreciation/amortization and impairment of assets	182	74
Other external costs	925	866
	<b>3,401</b>	<b>2,909</b>

The table above shows costs allocated by type of cost excluding capitalized work for own use. Capitalized work for own use amounts to SEK 148 million.

**Note 10** Fees for auditing and non-auditing services

	Group		Parent Company	
	2019	2018	2019	2018
<i>Fees and compensation, auditing, etc.:</i>				
Auditing assignments, EY	8.1	7.4	2.3	2.4
Auditing assignments, other	0.3	0.3	-	-
Non-auditing assignments, EY	0.6	0.5	0.4	0.5
Tax consulting, EY	1.2	1.2	-	-
Other assignments, EY	2.1	3.9	2.1	-
	<b>12.3</b>	<b>13.3</b>	<b>4.9</b>	<b>2.9</b>

Auditing assignments refer to the auditing of the consolidated financial statements, the accounts and the administration of the Board of Director's and the CEO, other tasks that befall on the company's auditor and advice or other assistance prompted by observations from such audits or the performance of such tasks. All other work is classified as other assignments. The 2019 Annual General Meeting re-elected Ernst & Young (EY) as auditor.

**Note 11** Other operating income/expenses

	Group		Parent Company	
	2019	2018	2019	2018
<b>Other operating income</b>				
Exchange rate gains	-	14	22	32
Other	70	34	11	1
	<b>70</b>	<b>48</b>	<b>33</b>	<b>32</b>
<b>Other operating expenses</b>				
Exchange rate losses	-8	-	-	-
Other	-	-	-	-
	<b>-8</b>	<b>-</b>	<b>-</b>	<b>-</b>
of which, exchange rate differences on derivatives recognized in profit and loss at fair value	-22	-18	-24	-36

Other operating income and operating expenses excluding exchange rate gains/losses, are mainly attributable to value changes in contingent considerations.

**Note 12** Research and development expenses

	Group		Parent Company	
	2019	2018	2019	2018
<i>R&amp;D expenditure</i>				
Assembly Solutions	340	312		
Pattern Generators	227	154		
	<b>567</b>	<b>466</b>	<b>406</b>	<b>353</b>
<i>Capitalized development</i>				
Assembly Solutions	-17	-10		
Pattern Generators	-12	-		
	<b>-29</b>	<b>-10</b>	<b>-</b>	<b>-</b>
<i>Amortization on capitalized development<sup>1</sup></i>				
Assembly Solutions	-	4		
	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Cost research and development</b>	<b>538</b>	<b>460</b>	<b>406</b>	<b>353</b>
Amortization of acquired technology	20	16		
<b>Reported cost</b>	<b>559</b>	<b>476</b>	<b>406</b>	<b>353</b>

1) From the third quarter 2018, the amortization of capitalized development costs is included in the acquisition cost for inventories, which by extension impacts the cost of goods sold in the Group.

**Note 13** Depreciation/amortization by function

Group	2019						2018					
	Customer relationships	Brands	Business systems	Development expenses	Tangible assets	Total	Customer relationships	Brands	Business systems	Development <sup>1</sup> / technology expenses	Tangible assets	Total
Cost of goods sold	-	-	0	-	38	38	-	-	-	4	10	14
Research and development	-	-	1	-	26	27	-	-	1	20	9	30
Selling expenses	57	4	0	31	11	104	20	4	-	-	2	26
Administrative expenses	-	-	1	-	13	13	-	-	0	-	4	5
	<b>57</b>	<b>4</b>	<b>2</b>	<b>31</b>	<b>88</b>	<b>182</b>	<b>20</b>	<b>4</b>	<b>1</b>	<b>24</b>	<b>25</b>	<b>74</b>
<b>Parent Company</b>												
Cost of goods sold	-	-	0	-	6	6	-	-	0	-	5	5
Research and development	-	-	0	-	9	9	-	-	0	-	7	7
Selling expenses	-	-	0	3	0	4	-	-	0	-	1	1
Administrative expenses	-	-	1	-	2	3	-	-	0	-	1	1
	<b>-</b>	<b>-</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>22</b>	<b>-</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>13</b>	<b>13</b>

1) From the third quarter 2018, the amortization of capitalized development expenditure is included in the cost of inventories, which by extension impacts the cost of goods sold in the Group.

**Note 14** Employees, personnel costs and remuneration to senior executives**Remuneration to the Board and senior executives – Principles applied in 2019**

The Chair and the members of the Board are remunerated according to Annual General Meeting decision. Members of the Board that are appointed by unions do not receive remuneration. No fees are paid to the Boards of the subsidiaries.

Other senior executives refer to the eight individuals who together with the CEO made up the Group management team in 2019. Reported remuneration refers to the senior executives who were part of Group management in 2019, which differs from the incoming Group management presented on pages 52–53.

Remuneration to the CEO and other senior executives consists of a fixed basic salary, short-term incentive (STI) program, long-term incentive (LTI and LTIP) programs, pension, and other benefits.

STI is paid according to the fulfillment of Group targets and may total a maximum of 100 percent of the basic salary. For 2019, STI could reach a maximum of SEK 9.5 million, excluding social security expenses.

The company has for some time had an annual recurring share-based incentive program (LTI), with two remaining years outstanding in 2019. LTI is to encourage the acquisition of shares in Mycronic. If a senior executive buys shares in Mycronic, the company matches the amount by cash payment of the same amount. The matching amount shall be used to acquire shares in the company. The shares are to be held for a minimum of four years. LTI is maximized to SEK 100 thousand after tax for the departing CEO and SEK 50 thousand after tax for other senior executives. If certain requirements are met after three years, the company shall make an additional payment corresponding to a maximum of 150 percent of the matching amount. Under these requirements, the employee must still be employed and have retained their acquired shares. In addition, the Board's established goals for financial performance must be met. This matching amount must also be used to acquire shares in the company, and these shares must be held for at least one year.

The 2019 Annual General Meeting resolved to replace the program with a new program (LTIP). LTIP targets senior executives and other key personnel as a means of increasing and strengthening opportunities to recruit, retain and motivate employees, and to encourage personal, long-term ownership in Mycronic. Each participant is entitled, after the end of the qualification period, subject to the employee still being employed, and dependent on the fulfillment of specific performance requirements linked to Mycronic's earnings per share, to an allotment of common shares in Mycronic, referred to as performance shares. The allotment of performance shares within LTIP 2019 will take place during a limited period following the 2022 Annual General Meeting.

Other benefits include company car, housing, travel and health insurance. Pension and health insurance benefits are premium-based.

The principles for remuneration to the CEO and other senior executives are approved by the Annual General Meeting. The proposed principles are prepared by the Board's Remuneration Committee. The Board passes a decision on the proposed principles, which is then put to the Annual General Meeting for approval.

In handling matters related to remuneration, external advice is sought when necessary. The main principle is to offer senior executives competitive remuneration and other terms of employment. Actual levels of remuneration are determined on the basis of factors such as competence, experience and performance.

**Total remuneration**

Salaries and remuneration	Group		Parent Company	
	2019	2018	2019	2018
Board, CEO and senior executives	32	29	32	29
Other employees	812	660	222	203
<b>Total salaries and remuneration</b>	<b>844</b>	<b>689</b>	<b>254</b>	<b>232</b>
Social security expenses	179	145	85	80
Pension expenses	65	59	40	38
<b>Total expenses</b>	<b>1,088</b>	<b>893</b>	<b>378</b>	<b>350</b>

The reported remuneration to employees includes variable salary for the Group of SEK 121 million (88) excluding social security expenses, of which SEK 21 million (26) refer to the Parent Company. The STI program covers all employees in Sweden.

	2019			2018		
	Board fees	Committee fees	Total	Board fees	Committee fees	Total
<b>Remuneration to the Board</b>						
Patrik Tigerschiöld, Chair of the Board and Chair of the Remuneration Committee	0.7	0.1	0.8	0.7	0.1	0.8
Anna Belfrage, Chair of the Audit Committee	0.3	0.1	0.4	0.3	0.1	0.4
Katarina Bonde	0.3	0.1	0.3	0.3	0.1	0.3
Per Holmberg	-	-	-	0.3	0.0	0.3
Ulla-Britt Fräjdin-Hellqvist	0.3	0.1	0.4	0.3	0.1	0.4
Robert Larsson	0.3	0.0	0.3	0.3	-	0.3
Staffan Dahlström	0.3	-	0.3	-	-	-
<b>Total remuneration to the Board</b>	<b>2.1</b>	<b>0.4</b>	<b>2.4</b>	<b>2.1</b>	<b>0.4</b>	<b>2.4</b>

<b>Remuneration to the CEO and other senior executives in 2019</b>	Basic salary	Other remuneration	STI	LTI	Other benefits	Pension expenses	Total
Anders Lindqvist, CEO from May 16, 2019	3.2	0.0	2.2	0.0	0.0	1.2	6.6
Lena Olving, CEO until May 15, 2019	3.3	1.2	0.9	0.3	0.4	1.1	7.3
Other senior executives (8 persons)	13.7	0.3	3.6	0.8	0.4	6.1	24.8
<b>Total remuneration</b>	<b>20.2</b>	<b>1.5</b>	<b>6.7</b>	<b>1.1</b>	<b>0.8</b>	<b>8.4</b>	<b>38.6</b>

Reported remuneration refers to the senior executives who were part of Group management in 2019, which differs from the incoming Group management presented on pages 52–53. The LTI remuneration refers to the year's payments. Expensed amounts for long-term incentive (LTI) programs amounted to SEK 1,368 thousand, of which SEK 560 thousand refers to the new program (LTIP).

<b>Remuneration to the CEO and other senior executives in 2018</b>	Basic salary	Other remuneration	STI	LTI	Other benefits	Pension expenses	Total
Lena Olving, CEO	4.3	0.5	2.9	0.6	0.4	2.2	11.0
Other senior executives (8 persons)	12.6	0.5	3.8	1.6	0.3	5.7	24.6
<b>Total remuneration</b>	<b>17.0</b>	<b>1.0</b>	<b>6.8</b>	<b>2.2</b>	<b>0.8</b>	<b>7.9</b>	<b>35.6</b>

In 2019, the following principles for remuneration to the CEO and other senior executives were applied. The Group management team consists of 9 (9) persons.

#### Fixed salary

The fixed basic salary for the previous CEO amounted in 2019 to SEK 367,990 per month until May 15, 2019. For the incoming CEO, the fixed basic salary amounted to SEK 400,000 per month in 2019.

#### Short-term incentive (STI) program

STI is paid according to the fulfillment of Group targets with a maximum of 100 percent of the basic salary. For 2019, STI to the incoming CEO amounts to SEK 2,190 thousand and to other senior executives SEK 3,578 thousand. The outcome of STI for 2019 reached 71 percent of the maximum amount.

#### Long-term incentive programs, LTI and LTIP

The company has for some time had an annual recurring share-based incentive program (LTI), with two remaining years outstanding in 2019 (page 75). The amount paid was SEK 1,133 thousand in 2019.

The 2019 Annual General Meeting resolved to replace the LTI program with a new program, LTIP. The program gives each senior executive the right, after the end of the qualification period, subject to the employee still being employed and dependent on the fulfillment of specific performance requirements linked to Mycronic's earnings per share, to receive an allotment of common shares in Mycronic, referred to as performance shares (see page 75). The cost for the LTIP program amounted to SEK 560 thousand in 2019.

#### Other benefits

Other benefits consist of company car and free health care insurance. For the previous CEO, other benefits also included housing and a free rail pass.

#### Pension

Pension and health insurance benefits are premium-based. The contractual retirement age was 62 for the previous CEO and 65 for the incoming CEO and other senior executives. There are no other pension benefits other than paid pension premiums.

#### Employment terms and severance

The employment contract with the CEO specifies a notice period of twelve months in the event of dismissal by the company. The CEO is entitled to fixed salary and other benefits during the notice period. No benefits are payable after this period. After the notice period, the CEO is entitled to termination benefits corresponding to twelve months' salary.

For other senior executives, a period of notice of six months and six months' severance pay apply upon termination by the company. The employment contract, with related benefits, is valid during the notice period.

% of women	Group		Parent Company	
	2019	2018	2019	2018
Board of Directors	50	50	50	50
Other senior executives	33	44	33	44

Board and senior executives in the Parent Company consist of 17 (17) persons. The proportion of women in the Parent Company's Board is based on the members who are elected by the Annual General Meeting.

Average number of employees	2019		2018	
	Total	of which women	Total	of which women
<i>Parent Company</i>				
Sweden	357	81	336	71
<b>Total in Parent Company</b>	<b>357</b>	<b>81</b>	<b>336</b>	<b>71</b>
France	81	18	81	19
Japan	80	10	72	9
China	488	64	395	48
Netherlands	13	2	11	2
Singapore	11	1	10	1
United Kingdom	14	3	13	3
South Korea	39	8	35	6
Germany	54	7	44	6
USA	213	30	177	25
<b>Total in subsidiaries</b>	<b>993</b>	<b>143</b>	<b>838</b>	<b>119</b>
<b>Total in Group</b>	<b>1,349</b>	<b>224</b>	<b>1,175</b>	<b>190</b>

**Note 15** Net financial items

	Group		Parent Company	
	2019	2018	2019	2018
Interest income from Group companies	-	-	24	17
Other interest income (loans and trade receivables)	9	3	7	2
<b>Total interest income in accordance with effective interest method<sup>1</sup></b>	<b>9</b>	<b>3</b>	<b>31</b>	<b>19</b>
Dividend from Group companies	-	-	29	15
<b>Financial income/Interest income and similar profit/loss items</b>	<b>9</b>	<b>3</b>	<b>59</b>	<b>34</b>
Interest expenses	-11	-12	-8	-8
<b>Total interest expenses in accordance with effective interest method</b>	<b>-11</b>	<b>-12</b>	<b>-8</b>	<b>-8</b>
<b>Financial net/Profit/loss from financial investments</b>	<b>-2</b>	<b>-9</b>	<b>51</b>	<b>26</b>

1) Financial instruments classified at amortized cost.

**Note 17** Income tax

	Group		Parent Company	
	2019	2018	2019	2018
<i>Current tax</i>				
The year's tax expense	-217	-173	-170	-157
	<b>-217</b>	<b>-173</b>	<b>-170</b>	<b>-157</b>
<i>Deferred tax</i>				
Deferred tax on temporary differences	-45	-45	2	-4
	<b>-45</b>	<b>-45</b>	<b>2</b>	<b>-4</b>
<b>Total reported tax</b>	<b>-263</b>	<b>-219</b>	<b>-169</b>	<b>-161</b>

	Group		Parent Company	
	2019	2018	2019	2018
<b>Parent Company</b>				
Profit before tax	1,122	1,011	806	734
Tax according to tax rate in the Parent Company 21.4% (22%)	-240	-222	-172	-161
Effect of different tax rates in foreign subsidiaries	0	3	-	-
Non-deductible/non-taxable items	-1	0	5	1
Increase in loss carryforwards without corresponding capitalization of deferred tax	-11	-7	-	-
Temporary differences for which deferred tax assets have not been accounted	-1	-1	-	-
Other	-9	9	-1	0
<b>Reported effective tax</b>	<b>-263</b>	<b>-219</b>	<b>-169</b>	<b>-161</b>

**Note 16** Appropriations and untaxed reserves

	Parent Company	
	2019	2018
<b>Appropriations</b>		
Changes in tax allocation reserve	-264	-235
Changes in depreciation exceeding plan	-9	0
	<b>-273</b>	<b>-235</b>
<b>Untaxed reserves</b>		
Allocation reserve	900	636
Accumulated additional depreciation	19	10
	<b>919</b>	<b>646</b>
<b>Allocation reserves that fall due within</b>		
one year	15	-
one to five years	621	401
later than five years	264	235
	<b>900</b>	<b>636</b>

Recognized deferred tax assets and liabilities, Group	2019		2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Tangible assets	1	-6	-	-4
Intangible assets	5	-51	-	-27
Derivatives used as hedging instruments	-	-1	2	-
Trade receivables	28	-	8	-
Inventories	21	-	30	-
Untaxed reserves	-	-200	-	-142
Provisions	17	-	14	-
Accrued expenses and deferred income	8	-	8	-
Other liabilities	16	-	9	-
Other	11	-1	6	0
Loss carryforwards	21	-	15	-
<b>Tax assets/liabilities</b>	<b>130</b>	<b>-259</b>	<b>94</b>	<b>-173</b>
Set-off	-33	33	-10	10
<b>Net tax assets/liabilities</b>	<b>97</b>	<b>-226</b>	<b>83</b>	<b>-163</b>

Recognized deferred tax assets and liabilities, Parent Company	2019		2018	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Trade receivables	3	-	1	-
Provisions	3	-	2	-
Accrued expenses and deferred income	0	-	1	-
<b>Tax assets/liabilities</b>	<b>6</b>	<b>-</b>	<b>4</b>	<b>-</b>

Set-off of tax assets and tax liabilities is carried out within the same tax entity. The Group's deferred tax liabilities net amounted to SEK 129 million (79). Of the change for the year of SEK 49 million, SEK 45 million (45) was recognized in the profit and loss account and SEK 4 million (-14) was recognized in other comprehensive income. Tax assets regarding loss carryforwards are only recognized to the extent that they

are expected to be used. At the end of the year, the Group's accumulated loss carry forwards amounted to SEK 385 million. Tax assets were recognized at an amount of SEK 21 million, corresponding to loss carryforwards of SEK 84 million. Loss carryforwards mainly refer to subsidiaries in France and can be utilized without a time limit.

## Note 18 Intangible assets

Group	Business systems		Development expenses		Technology		License	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>Accumulated cost</i>								
Opening balance at January 1	36	30	821	811	171	121	17	17
Investments during the year	14	5	29	10	-	-	-	-
Investments through business combinations	-	1	-	-	-	45	-	-
Historical cost sold/scrapped assets	0	-	-	-	-	-	-17	-
Exchange rate differences for the year	1	0	-	-	3	6	-	-
<b>Closing balance, accumulated cost at December 31</b>	<b>50</b>	<b>36</b>	<b>850</b>	<b>821</b>	<b>175</b>	<b>171</b>	<b>0</b>	<b>17</b>
<i>Accumulated amortization</i>								
Opening balance at January 1	-31	-30	-789	-782	-51	-34	-17	-17
Depreciation sold/scrapped assets	0	-	-	-	-	-	17	-
Amortization and impairment for the year	-2	-1	-11	-7	-20	-16	-	-
<b>Closing balance, accumulated amortization at December 31</b>	<b>-33</b>	<b>-31</b>	<b>-800</b>	<b>-789</b>	<b>-71</b>	<b>-51</b>	<b>0</b>	<b>-17</b>
<b>Closing balance, residual value according to plan at December 31</b>	<b>17</b>	<b>5</b>	<b>51</b>	<b>32</b>	<b>103</b>	<b>121</b>	<b>0</b>	<b>0</b>



Group	Customer relationships		Brands		Goodwill		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>Accumulated cost</i>								
Opening balance at January 1	192	155	74	63	1,020	742	2,332	1,939
Investments during the year	-	-	-	-	-	-	43	15
Investments through business combinations	-	29	-	10	-	240	-	325
Historical cost sold/scrapped assets	-	-	-	-	-	-	-17	-
Exchange rate differences for the year	5	8	1	2	27	38	37	53
<b>Closing balance, accumulated cost at December 31</b>	<b>198</b>	<b>192</b>	<b>76</b>	<b>74</b>	<b>1,046</b>	<b>1,020</b>	<b>2,394</b>	<b>2,332</b>
<i>Accumulated amortization</i>								
Opening balance at January 1	-53	-33	-10	-6	-	-	-951	-902
Depreciation sold/scrapped assets	-	-	-	-	-	-	18	-
Amortization and impairment for the year	-57	-20	-4	-4	-	-	-94	-49
<b>Closing balance, accumulated amortization at December 31</b>	<b>-110</b>	<b>-53</b>	<b>-14</b>	<b>-10</b>	<b>-</b>	<b>-</b>	<b>-1,028</b>	<b>-951</b>
<b>Closing balance, residual value according to plan at December 31</b>	<b>87</b>	<b>139</b>	<b>62</b>	<b>64</b>	<b>1,046</b>	<b>1,020</b>	<b>1,366</b>	<b>1,381</b>
<b>Parent Company</b>								
Parent Company	Business systems		Technology		License		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>Accumulated cost</i>								
Opening balance at January 1	34	30	-	-	17	17	51	47
Investments during the year	14	4	17	-	-	-	30	4
Cost, disposals	0	-	-	-	-17	-	-18	-
<b>Closing balance, accumulated cost at December 31</b>	<b>47</b>	<b>34</b>	<b>17</b>	<b>-</b>	<b>0</b>	<b>17</b>	<b>64</b>	<b>51</b>
<i>Accumulated amortization</i>								
Opening balance at January 1	-30	-30	-	-	-17	-17	-47	-47
Disposals for the year	0	-	-	-	17	-	18	-
Amortization for the year	-2	0	-3	-	-	-	-5	0
<b>Closing balance, accumulated amortization at December 31</b>	<b>-31</b>	<b>-30</b>	<b>-3</b>	<b>-</b>	<b>0</b>	<b>-17</b>	<b>-35</b>	<b>-47</b>
<b>Closing balance, residual value according to plan at December 31</b>	<b>16</b>	<b>4</b>	<b>13</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>4</b>

Each development project is assessed individually to determine whether the criteria for capitalization in the statement of financial position have been met. Capitalized expenditure consists of internally produced assets. The estimated useful life for mask writers is three years and surface mount equipment five years.

Other intangible assets mainly refer to business combinations. See Note 22.

In June 2018, intangible assets in the form of technology, customer relationships, brand and goodwill were added through the acquisition of MRSI. Technology and customer relationships have estimated useful lives of seven years.

The acquisition of Vi TECHNOLOGY was carried out at the end of October 2017. In connection with the acquisition, intangible assets were identified in the form of technology and goodwill. The estimated useful life of technology is seven years.

In conjunction with the acquisition of AEI in November 2016, intangible assets in the form of customer relationships, technology and goodwill were added. The estimated useful life of technology and customer relationships is 10 years. In the third quarter 2019, a write-down of SEK 36 million was recognized for customer relationships in AEI, depending on slightly downward adjusted growth expectations in the global vehicle industry.

The acquisition of Axxon was carried out at the end of October 2016. In the acquisition analysis, assets in technology, customer relationships, brand and goodwill were identified. Technology and customer relationships have estimated useful lives of seven years.

Information about depreciation/amortization by function is provided in Note 13. The carrying amount of intangible assets with indefinite useful lives, excluding goodwill, amount to SEK 56 million (54) and refers to brands. Useful life has been defined as indefinite where the time period, during which an asset is deemed to contribute economic benefits, cannot be determined.

#### Impairment testing of intangible assets

The recognized value of goodwill and brands with indefinite lives are annually assessed through impairment testing of the cash-generating unit based on the unit's value in use. The cash-generating units referred to are the acquired company MRSI and the Assembly Solutions business area excluding MRSI. The carrying amount of goodwill and brands in MRSI amount to SEK 253 million and SEK 11 million respectively. The carrying amount of goodwill and brands in Assembly Solutions, excluding MRSI, amount to SEK 793 million and SEK 45 million respectively. The value in use is based on cash flow forecasts, built on the Group management's and Board's business plan for the coming five years. After the business plan period, the expected growth rate is 2 percent (2). The discount factor used to determine recoverable value is 15.2 percent (14.8) before tax and 12.2 percent (12.0) after tax. The most important assumptions in the five-year business plan relate to sales volumes, margins, operating profit, working capital, capital expenditure and discount factors. Since the recoverable value thus calculated exceeds the carrying amount, no indication of impairment has been reported. Impairment due to probable changes in important assumptions is not expected.

**Note 19** Tangible assets

Group	Rented premises and improvements to leased property		Machinery and equipment		Construction in progress		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<i>Accumulated cost</i>								
Opening balance at January 1	6	-	424	392	16	4	446	396
IFRS 16 adjustment, January 1, See Note 1	168	-	11	-	-	-	179	-
Purchases/add-ons during the year	199	5	26	34	29	14	254	54
Reclassifications to machinery and equipment	-	-	34	2	-34	-2	0	-
Reclassifications to inventory	-	-	-13	-10	-	-	-13	-10
Reclassifications other	4	1	-1	0	-	0	3	0
Investments through business combinations	-	0	-	11	-	-	0	11
Historical cost sold/scrapped equipment	0	-	-80	-8	-	-	-80	-8
Exchange rate differences for the year	1	0	2	3	-	-	4	3
<b>Closing balance, accumulated cost at December 31</b>	<b>379</b>	<b>6</b>	<b>403</b>	<b>424</b>	<b>11</b>	<b>16</b>	<b>793</b>	<b>446</b>
<i>Accumulated depreciation, amortization and impairment</i>								
Opening balance at January 1	-1	-	-339	-326	-	-	-340	-326
Depreciation reclassifications to inventory	-	-	1	2	-	-	1	2
Depreciation sold/scrapped equipment	-	-	80	8	-	-	80	8
Reclassifications other	-4	0	4	1	-	-	0	1
Depreciation for the year	-51	-1	-38	-24	-	-	-88	-25
<b>Closing balance, accumulated depreciation and impairment at December 31</b>	<b>-56</b>	<b>-1</b>	<b>-291</b>	<b>-339</b>	<b>-</b>	<b>-</b>	<b>-346</b>	<b>-340</b>
<b>Closing balance, residual value according to plan at December 31</b>	<b>324</b>	<b>5</b>	<b>112</b>	<b>85</b>	<b>11</b>	<b>16</b>	<b>447</b>	<b>106</b>

Tangible assets in the Group include right-of-use assets as of January 1, 2019, as a result of the transition to IFRS 16 Leases, see Note 1.

Parent Company	Machinery and equipment		Construction in progress		Total	
	2019	2018	2019	2018	2019	2018
<i>Accumulated cost</i>						
Opening balance at January 1	261	249	16	4	278	253
Investments during the year	4	16	29	15	33	31
Reclassifications to machinery and equipment	34	2	-34	-2	-	-
Reclassifications to inventory	-6	-6	-	-	-6	-6
Reclassifications other	-	-	-	0	-	0
Historical cost sold/scrapped equipment	-76	-	-	-	-76	-
<b>Closing balance, accumulated cost at December 31</b>	<b>218</b>	<b>261</b>	<b>11</b>	<b>16</b>	<b>229</b>	<b>278</b>
<i>Accumulated depreciation, amortization and impairment</i>						
Opening balance at January 1	-226	-215	-	-	-226	-215
Depreciation reclassifications to inventory	1	2	-	-	1	2
Depreciation sold/scrapped equipment	76	-	-	-	76	-
Depreciation for the year	-17	-13	-	-	-17	-13
<b>Closing balance, accumulated depreciation and impairment at December 31</b>	<b>-166</b>	<b>-226</b>	<b>-</b>	<b>-</b>	<b>-166</b>	<b>-226</b>
<b>Closing balance, residual value according to plan at December 31</b>	<b>52</b>	<b>35</b>	<b>11</b>	<b>16</b>	<b>63</b>	<b>52</b>

Tangible assets are depreciated on a straight-line basis over their expected useful life. Depreciation is started when the assets are available for use, as follows:

Land improvements	20 years
Clean room facilities	10 years
Other permanent equipment	5-40 years
Machinery and equipment	3-5 years
Computers	3 years

Right-of-use assets recognized as tangible assets are presented separately in the following table.

Group	Rented premises	Other	Total
<i>Cost</i>			
IFRS 16 adjustment, January 1, See Note 1	168	11	179
Add-on during the year	138	8	146
Exchange rate differences for the year	2	0	3
<b>Closing balance, accumulated cost at December 31</b>	<b>309</b>	<b>19</b>	<b>328</b>
<i>Depreciation/impairment</i>			
Depreciation for the year	-48	-6	-54
<b>Closing balance, accumulated depreciation and impairment at December 31</b>	<b>-48</b>	<b>-6</b>	<b>-54</b>
<b>Closing balance, residual value according to plan at December 31, 2019</b>	<b>260</b>	<b>13</b>	<b>273</b>

Mycronic's material leases currently primarily comprise rented premises, but also vehicles and office equipment. Rented premises are presented as one class of underlying assets, and vehicles and office equipment are presented under Other, as they are not considered material individually. Rental premises have remaining lease terms for up to ten years.

Leases where the underlying asset has low value and the contract for the lease

period is less than twelve months are not included in the statement of financial position. The value of these lease contracts amount to significant amounts.

This year's add-on consists primarily of new premises in the USA and the extension of the rental contracts in France and China. There are no significant lease commitments for lease contracts that have not yet started as at end of 2019.

## Note 20 Leases

The Parent Company utilizes the exemption set out in RFR 2 Accounting for Legal Entities and recognizes lease payments as a cost on a straight-line basis over the period of the lease. The right-of-use asset and the lease liability are thus not reported in the balance sheet.

	Parent Company	
	2019	2018
Expensed lease charges for the year	20	15
of which, variable fees	-	-
<i>Future payments under lease contracts (nominal)</i>		
Within one year	16	15
Between one and five years	67	61
Later than five years	26	41
<b>Total</b>	<b>109</b>	<b>117</b>

The major part of the Parent Company's lease charge refers to rental of premises.

**Note 21** Participation in Group companies

	Parent Company	
	2019	2018
Opening balance, historical cost	1,051	997
Acquisitions	-	10
Value changes contingent considerations	22	44
<b>Closing balance, accumulated cost</b>	<b>1,073</b>	<b>1,051</b>
Opening balance, impairment	-2	-2
<b>Closing balance, accumulated impairment</b>	<b>-2</b>	<b>-2</b>
<b>Closing balance, carrying amount</b>	<b>1,071</b>	<b>1,049</b>

**Holdings of shares and participations in Group companies**

<b>Directly owned subsidiaries</b>	Corp. ID no.	Domicile/country	No. of shares	% of capital	Carrying amount
Mycronic Technologies Corp.	607215	Japan	200	100	3.8
Mycronic Co., Ltd.	80271004	Taiwan	1,600,000	100	4.3
Mycronic Co., Ltd.	134111-0136974	South Korea	810	100	12.8
Mycronic (Shanghai) Co., Ltd.	310 000 400 631 000	China	-	100	5.9
Mycronic S.A.S.	333 906 139 000 355	France	10,000	100	8.1
Mycronic Ltd.	2524693	United Kingdom	24,000	100	5.8
Mycronic Inc.	04-3219080	USA	10,000	100	39.6
Mycronic Pte Ltd.	199601416W	Singapore	1,000	100	0.5
Mycronic BV	17131339	Netherlands	180	100	8.3
Mycronic GmbH	HRB 53381	Germany	4	100	29.6
Micronic Mydata AB	556963-0360	Stockholm	50,000	100	0.1
Mydata Automation AB	556963-0329	Stockholm	50,000	100	0.1
RoyoTech Digitalelektronik GmbH	HRB 92792	Germany	5	100	76.7
Kognitec Vertrieb and Service GmbH	HRB 203153	Germany	4	100	5.1
Shenzhen Axxon Automation Co. Ltd.	91440300682020147E	China	-	100	783.0
VIT S.A.S.	451 028 567	France	1,309,638	100	75.4
Mycronic Fukuoka Co., Ltd.	2 290 001 052 547	Japan	700	70	11.4
					<b>1,070.5</b>

**Indirectly owned Group companies**

Automation Engineering, Inc.		USA		100	
MRSI Systems, LLC		USA		100	
Vision Inspection Technology Asia Pte Ltd.		Singapore		100	
Shenzhen Axxon Piezo Co., Ltd.		China		70	

## Note 22 Business combinations

	MRSI	Other
	2018	2018
<b>Acquisition analyses</b>		
<b>Acquisition price</b>		
Cash paid for acquisitions	390	3
Deferred considerations for acquisitions	39	6
<b>Total</b>	<b>429</b>	<b>9</b>
<b>Acquired assets and liabilities at fair value</b>		
Technology	45	-
Customer relationships	29	-
Brands	10	-
Other intangible assets	-	1
Tangible assets	10	2
Non-current receivables	2	5
Inventories	84	-
Current receivables	30	13
Cash and cash equivalents	37	4
Non-current liabilities	-2	-5
Current liabilities	-55	-11
<b>Total</b>	<b>191</b>	<b>8</b>
<b>Goodwill</b>	<b>239</b>	<b>1</b>
<b>Changes in cash and cash equivalents from acquisitions</b>	2019	2018
Cash paid for acquisitions during the year	-	-393
Cash and cash equivalents in acquired subsidiaries	-	40
Paid deferred considerations for acquisitions in previous years	-248	-15
<b>Total</b>	<b>-248</b>	<b>-367</b>

No acquisitions were made in 2019.

### Acquisitions completed in 2018

#### MRSI

In the second quarter of 2018, 100 percent of shares were acquired in MRSI Systems, LLC in the USA. The purchase consideration was USD 40.7 million on a cash-free and debt-free basis. Under certain circumstances, based on parameters such as sales and earnings, there is a possible maximum contingent consideration of USD 20.2 million to be paid in 2020. The total acquisition price was SEK 429 million adjusted for contingent considerations measured at estimated fair value. In the acquisition analysis, which was adopted in 2018, intangible assets in the form of technology, customer relationships, brands and goodwill were identified. Technology and customer relationships have estimated useful lives of seven years. According to the acquisition analysis, goodwill amounted to SEK 239 million. The company was consolidated into the Mycronic Group as of June 1, 2018.

In 2019, a revaluation of the contingent consideration was confirmed, which had a positive impact on the Group's profit of SEK 50 million. Since the acquisition, MRSI has had a positive development with continued good market growth, but all criteria for the contingent consideration have not been met.

### Acquisition of Japanese development partner

In the second quarter of 2018, 70 percent of shares were acquired in a Japanese development partner, including an option to acquire the remaining 30 percent of shares not later than three years from the acquisition date. The total acquisition price was SEK 9 million. According to the adopted acquisition analysis, goodwill amounted to SEK 1 million. The company was consolidated into the Mycronic Group as of June 1, 2018.

### Paid deferred considerations for acquisitions in previous years

In October 2016, 80 percent of the shares in Axxon were acquired with the option of acquiring the remaining 20 percent after three years for CNY 80-180 million. At the end of 2018, it was confirmed that the conditions for the maximum contingent consideration had been met in accordance with the earlier assessment. The transaction, corresponding to SEK 248 million, was carried out in the fourth quarter 2019.

## Note 23 Non-current receivables from Group companies

	Parent Company	
	2019	2018
Opening balance, carrying amount	712	276
Additions	78	436
Deductions	-	-
<b>Closing balance, carrying amount</b>	<b>790</b>	<b>712</b>

The Parent Company applies similar impairment as the Group for anticipated credit losses for current and non-current receivables from Group companies. No material increase in credit risk is deemed to exist on the balance-sheet date for any receivable from Group companies. The assessment is that expected credit losses are not material and no provision has therefore been recognized.

## Note 24 Other non-current receivables

	Group		Parent Company	
	2019	2018	2019	2018
Opening balance, carrying amount	22	17	1	3
Additions	31	8	26	0
Deductions	-3	-3	0	-2
<b>Closing balance, carrying amount</b>	<b>50</b>	<b>22</b>	<b>27</b>	<b>1</b>

Receivables mainly refer to deposits regarding lease of premises, non-current trade receivables and pension insurance premiums for employees in Japan. Additional items primarily relate to non-current trade receivables.

**Note 25** Inventories

	Group		Parent Company	
	2019	2018	2019	2018
Components	399	323	227	222
Finished goods	483	310	94	71
Products in progress	227	236	142	153
	<b>1,109</b>	<b>868</b>	<b>463</b>	<b>446</b>

**Note 26** Trade receivables, impairment, age analysis and other

Group	2019			2018		
	Gross	Impairment	Loss given default	Gross	Impairment	Loss given default
Trade receivables not due	666	1	0.2%	540	1	0.3%
Trade receivables, overdue 0–30 days	66	1	0.8%	38	1	1.4%
Trade receivables, overdue > 30–90 days	54	2	3.1%	54	2	4.2%
Trade receivables, overdue > 90–180 days	20	3	16.1%	29	4	12.8%
Trade receivables, overdue > 180–360 days	33	15	45.1%	12	4	34.9%
Trade receivables, overdue >360 days	19	10	51.2%	9	6	67.0%
	<b>857</b>	<b>32</b>	<b>3.7%</b>	<b>682</b>	<b>18</b>	<b>2.7%</b>

Trade receivables overdue amount to 22 percent (21) of total gross trade receivables. In the Assembly Solutions business area, sales are conducted to a large number of customers in several countries where payment terms differ from those of the company. Part of the company's sales are also conducted via distributors, which can also contribute to longer payment processes. Historically, credit losses are very limited. The company judges that the risk of losses is very low except for impairment done. The maximum credit risk exposure refers to the reported value of trade receivables.

The Group's impairment of trade receivables is conducted in accordance with the simplified approach for recognizing expected credit losses. This means a provision is made for the remaining time to maturity for the expected credit losses, which are expected to be less than one year for all of the receivables above. The Group makes a provision for expected credit losses based on individual assessments concerning receivables in the Pattern Generators business area, where known information about the counterparty and forward-looking information is taken into account. The Assembly Solutions business area applies an impairment model based on historical percentage loss combined with forward-looking information and individual assessments. Changes to the provision for expected credit losses are recognized as selling expenses in EBIT.

Any credit enhancements in the form of credit insurance and letters of credit are taken into account in impairment. Mycronic writes down a receivable when there is no longer an expectation of payment and when active measures to receive payment are completed.

Five customers represent 27 percent (24) of trade receivables outstanding. For further information on the concentration and customer risk in trade receivables outstanding, see Note 33.

Provision for expected credit losses	Group	
	2019	2018
Opening balance, carrying amount	18	9
Additions	19	11
Utilized during the year	-2	-1
Unutilized during the year	-3	-1
<b>Closing balance, carrying amount</b>	<b>32</b>	<b>18</b>

**Note 27** Prepaid expenses and accrued income

	Group		Parent Company	
	2019	2018	2019	2018
Accrued sales revenue	64	103	32	87
Other prepaid expenses	57	37	45	29
	<b>122</b>	<b>140</b>	<b>78</b>	<b>116</b>

**Note 28** Non-current provisions

	Group	
	2019	2018
Post employment benefits	45	40
Other non-current provisions	6	8
<b>Closing balance, carrying amount</b>	<b>50</b>	<b>48</b>

**Post employment benefits**

In the Japanese and South Korean subsidiaries, provisions are made for long-term employee benefits. On certain conditions, a lump-sum payment is made to employees when their employment is terminated, either due to retirement or when the employee leaves the company for some other reason. The French subsidiaries also have small obligations regarding post employment benefits. In Korea, payments are made to plan assets after decision by the employer. Other pension obligations are unfunded. Defined benefit obligations expose the Group for risks related to, for example, discount rates and salary increases. Plan assets are affected by changes in market values.

Pension expenses	Group	
	2019	2018
<b>Amounts recognized in profit and loss accounts</b>		
Current service cost	6.7	4.2
Net interest	0.5	0.5
<b>Expenses, defined benefit plans</b>	<b>7.2</b>	<b>4.8</b>
<b>Amounts recognized in other comprehensive income</b>		
Remeasurement of pension obligations	2.3	2.6
Remeasurement of plan assets	0.0	0.1
<b>Expenses/(income) defined benefit plans</b>	<b>2.4</b>	<b>2.6</b>
<b>Total pension expenses, defined benefit plans</b>	<b>9.6</b>	<b>7.4</b>

Amounts recognized in statement of financial position	2019	2018
	Present value of defined benefit obligation, funded plans	39.3
Fair value of plan assets	-21.7	-18.2
<b>Net liability, funded plan</b>	<b>17.6</b>	<b>17.4</b>
Present value of defined benefit obligation, unfunded plans	27.1	22.4
<b>Net liability recognized in statement of financial position</b>	<b>44.6</b>	<b>39.8</b>

	2019	2018
<b>Change in present value of defined benefit obligation</b>		
Opening balance, defined benefit obligation	58.0	46.4
Current service cost	6.7	4.2
Interest expenses	0.9	0.9
Remeasurement of pension obligations,		
– demographic assumptions	1.6	1.2
– financial assumptions	0.3	0.4
– experience adjustments	0.4	1.0
Pension payments	-2.7	-2.4
Effect from acquired companies	-	3.4
Exchange rate difference	1.2	2.9
<b>Closing balance, defined benefit obligation</b>	<b>66.4</b>	<b>58.0</b>

	2019	2018
<b>Change in fair value of plan assets</b>		
Opening balance, plan assets	18.2	15.1
Interest income	0.4	0.4
Return excluding interest income	0.0	-0.1
Employer's contribution	4.7	2.8
Pension payments from plan assets	-1.7	-0.7
Exchange rate difference	0.1	0.7
<b>Closing balance, plan assets</b>	<b>21.7</b>	<b>18.2</b>

Significant actuarial assumptions	Japan		South Korea	
	2019	2018	2019	2018
Discount rate, %	0.3	0.5	2.1	2.4
Future salary increases, %	1.9	2.5	5.0	6.0

Sensitivity analysis discount rate	Change in assumption	Change in value, SEK million	
		Assumption	
Discount rate, %	-0.50/+0.50		+2.5/-2.3
Future salary increases	-0.50/+0.50		-2.7/+3.0

The sensitivity analysis is based on changes in a single actuarial assumption, while other assumptions remain unchanged. This method shows the obligation's sensitivity to a single assumption. This is a simplified method since the assumptions are usually correlated. Weighted duration for the defined benefit obligations are estimated to eleven years.

The discount rate is determined for each currency with reference to the market interest rate at the end of the report period, which is aligned with the average weighted duration of the pension liability. When determining the market interest rate, first-class corporate bonds are used.

Forecast pension payments to the plans for next year amount to SEK 1 million. Additional amounts can be paid to plan assets after decision of the employer.

#### Information on Alecta pension commitments

For some 40 employees in Sweden, the ITP 2 plan's defined-benefit pension commitments for retirement and family pension are secured through an insurance in Alecta. According to a statement from the Swedish Financial Reporting Board, UFR 10 Reporting of the ITP 2 pension plan financed through insurance in Alecta, this is a defined-benefit plan that comprises several employers. For the 2019 financial year, the company has not had access to information to be able to report its proportional share of the plan's obligations, plan assets and costs, making it impossible to report the plan as a defined benefit plan. The ITP 2 pension plan secured through insurance in Alecta is therefore reported as a defined contribution plan. The premium for the defined benefit retirement and family pension is individually calculated and depends on salary, previously vested pension and expected remaining period of service. Anticipated fees in 2020 for ITP 2 insurance taken out with Alecta amount to SEK 2 million. In 2019, the costs for premium based pension amounted to SEK 54 million (45).

	Group	
	2019	2018
<b>Other non-current provisions</b>		
Opening balance, carrying amount	8	4
Additions through acquisitions	-	3
The year's provision	-2	0
<b>Closing balance, carrying amount</b>	<b>6</b>	<b>8</b>

#### Note 29 Accrued expenses and deferred income

	Group		Parent Company	
	2019	2018	2019	2018
Salaries and social expenses	176	138	53	52
Commissions	13	12	0	0
Deferred income	84	385	54	355
Other accrued expenses	67	57	57	43
	<b>340</b>	<b>592</b>	<b>164</b>	<b>450</b>

Salaries and social expenses include, among other things, variable salaries, STI.

#### Note 30 Current provisions

	Group		Parent Company	
	2019	2018	2019	2018
Opening balance, carrying amount	46	26	11	8
The year's provision	46	47	11	12
Utilized during the year	-28	-14	-10	-10
Unutilized during the year	-14	-12	-	-
<b>Closing balance, carrying amount</b>	<b>50</b>	<b>46</b>	<b>13</b>	<b>11</b>

Current provisions mainly consist of warranty provisions. A provision for warranties is recognized when the underlying products are sold. The provision is based on historical data regarding warranties and an overall review of potential outcomes in relation to the probabilities of such outcomes.

#### Note 31 Pledged assets

	Group		Parent Company	
	2019	2018	2019	2018
Collateral provided for liability items in the balance sheet				
<i>Credit institutions</i>				
Chattel mortgages	89	89	89	89
	<b>89</b>	<b>89</b>	<b>89</b>	<b>89</b>

#### Note 32 Contingent liabilities

	Group		Parent Company	
	2019	2018	2019	2018
Commitment for billing by credit insurance through EKN	1	1	1	1
Parent Company guarantee	-	-	321	54
Other	-	0	-	-
	<b>1</b>	<b>2</b>	<b>323</b>	<b>55</b>
Of which, falling due:				
within one year	1	1	24	1
between one and five years	0	1	150	54
later than five years	-	-	149	-
	<b>1</b>	<b>2</b>	<b>323</b>	<b>55</b>

The Parent Company guarantees are attributable to subsidiaries in the USA, of which the largest portion refers to a rental guarantee.

## Note 33 Financial risks

Financial risks arise due to negative fluctuations in Mycronic's earnings and cash flow as a consequence of changes in exchange rates and interest rates, credit risks and financing risks. The single largest financial risk is exchange rate fluctuations. Financial risks are managed in accordance with the financial policy established by the Board.

### Foreign exchange risk – transaction exposure

Transaction exposure is the risk that changes in exchange rates for sales and sourcing in foreign currencies will affect consolidated earnings and the value of assets and liabilities.

Mycronic's sales are done almost exclusively in foreign currency. A large part of the Group's expenses are incurred in Swedish kronor. Sales within the Assembly Solutions business area occur primarily in USD and EUR. All sales within the Pattern Generators business area occur in foreign currency, primarily USD and JPY. Changes in exchange rates have a greater impact on income than on expenses. Mycronic has significant net currency exposure; see the following table. Currency hedging is undertaken in accordance with the established financial policy.

For sales of mask writers the company uses forward exchange contracts to hedge contracted cash flows, which consist of orders received. As the delivery date approaches, the lowest hedged portion of the respective contracted inflows increases, in accordance with the financial policy. Forecast inflows not covered by underlying orders are not hedged. Hedge accounting is used within the Pattern Generators business area.

For sales of surface mount equipment, forward exchange contracts corresponding to at least 50 percent of the order backlog in EUR, USD and JPY are used. Hedge accounting is not used within the Assembly Solutions business area.

### Effects from transaction exposure

If sales for 2019 within the Pattern Generators business area were translated at the average exchange rates for 2018, without considering forward exchange contracts, revenues would have been SEK 40 million lower. The majority derive from the appreciation of the Japanese yen in 2019. Turnover was negatively affected by forward exchange contracts in the amount of SEK 51 million. The EBIT for Pattern Generators was adversely affected by SEK 66 million as a result of forward exchange contracts.

If sales for 2019 within the Assembly Solutions business area were translated at the average exchange rates for 2018, revenues would have been SEK 141 million lower. EBIT for the business area was affected negatively by forward exchange contracts at an amount of SEK 8 million. Based on 2019 sales volumes and expenses, without consideration of forward exchange contracts, the effect on consolidated EBIT of a 10-percent change in the exchange rate of the most important currencies compared to SEK would be about SEK 220 million (199). Equity would be affected in the same amount after tax.

### Foreign exchange risk – translation exposure

Translation exposure is the risk Mycronic is exposed to when translating the financial statements of subsidiaries to SEK.

### Effects from translation exposure

As of 2018, the Group also applies hedge accounting of net investments in foreign operations. The exchange rate effects on hedging instrument debt in foreign currency are recognized in other comprehensive income, insofar as the hedge is effective. With this, exchange rate changes on the debt meet exchange rate differences from net investments in foreign operations as presented in other comprehensive income, and the amount accumulates in the hedging reserve. The exchange rate effects remain in the translation reserve until such time as the net investment is divested, when the accumulated amount in the reserve is reclassified to profit and loss.

Translation of the balance sheets of foreign subsidiaries to SEK generated a positive translation difference of SEK 43 million (69) after deductions for tax. At the end of 2019, net investment in foreign subsidiaries was SEK 710 million. A change of 10 percent against those currencies where Mycronic has foreign net investments would affect the Group's equity by SEK 71 million after tax, without consideration of hedge accounting.

### Exposure per currency

Currency	% of revenue	% of expenses	Average rate 2019	Average rate 2018	Closing rate 2019	Closing rate 2018
USD	50	25	9.4604	8.6921	9.3171	8.9710
EUR	13	13	10.5892	10.2567	10.4336	10.2753
JPY (100)	14	6	8.6839	7.8654	8.5320	8.1197
GBP	1	1	12.0658	11.5928	12.2145	11.3482
SEK	1	35	1.0000	1.0000	1.0000	1.0000
KRW (100)	6	2	0.8115	0.7894	0.8102	0.8038
CNY	14	17	1.3691	1.3135	1.3333	1.3068

### Interest risks

Interest risk refers to the risk for changes in interest rate levels affecting consolidated earnings.

Mycronic's interest risk is limited. Investments in interest-bearing financial instruments or bank accounts with fixed interest are done in accordance with liquidity plans, meaning that investments, which may not exceed six months, are held to maturity. During 2019, no investments were made in interest-bearing financial instruments.

### Credit risk

Credit risk is partly tied to sales and partly to liquidity management. For sales, there is a risk that customers do not fulfill their payment obligations. For liquidity management, there is a risk that the counterparty will not be able to fulfill its obligations.

### Exposure to credit risks

Mycronic sells only a few mask writers to a limited number of customers, which concentrates the credit risk. Customers are, however, major manufacturers of photomasks where the mask writers comprise a small portion of the equipment in a production facility. Customers are well-known and have good credit worthiness historically. In order to reduce customer credit risk, Mycronic strives to obtain advances from customers to the highest degree possible. Especially in business transactions with new customers or within new geographic areas, the credit risk is managed through Mycronic requiring letters of credit or other collateral. Sales of SMT equipment are spread over a large number of customers and the credit risk is therefore limited. Credit risk is managed through credit control. Credit limits are established and monitored.

Credit exposure in trade receivables at year-end was SEK 826 million (664). The average credit period was 76 days (79) for the Assembly Solutions business area and 46 days (32) for the Pattern Generators business area. For information on the aging structure of trade receivables and provisions for doubtful trade receivables, see Note 26.

Mycronic's maximum financial credit exposure consists of the fair values of financial assets, see Note 34. At year-end 2019, the total financial credit exposure, excluding trade receivables, was SEK 670 million (832), of which SEK 655 million (829) was cash and cash equivalents. Cash and cash equivalents consisted only of bank balances, as was the case one year earlier. Cash and cash equivalents are to be invested in banks or other interest-bearing financial instruments with credit ratings of at least A1/P1/K1. For cash and cash equivalents and other financial instruments, Mycronic applies a rating-based method combined with other known information and forward-looking factors. No material increase in credit risk is deemed to exist on the balance-sheet date for any receivable or asset. Such assessment is based on whether payment is 30 days or more past due or if the rating changes materially, resulting in a rating below investment grade. In cases where the amount is not considered immaterial, a provision is recognized for expected credit losses even for these financial instruments.

### Liquidity risks

Liquidity risk refers to the risk that the company may not be able to meet its payment obligations on the settlement date. Mycronic's net cash at the end of 2019 was SEK 337 million. Investments of excess liquidity are done in such a way that the Group assumes no significant liquidity risk. This means that excess liquidity is placed in bank deposits or in other interest-bearing instruments where it is possible to liquidate on short notice. Liquidity is monitored continuously. Liquidity forecasts are compiled quarterly in order to provide a basis for decisions on possible investments.

### Liquidity reserve

	2019	2018
Credit line	2,053	2,052
Cash and cash equivalents	655	829
<b>Total</b>	<b>2,708</b>	<b>2,880</b>



## Note 34 Financial assets and liabilities

The following table presents the Group's financial assets and liabilities, stated at book and fair value and classified in accordance with IFRS 9 categories.

### Risk management

A description of the Group's financial risks and risk management is provided according to IFRS 7 in Note 33.

### Fair value and carrying amount

IFRS 13 Fair Value Measurement includes a valuation hierarchy regarding data to be used in the valuation. This valuation hierarchy is divided into three levels:

- Level 1: According to quoted prices in active markets for identical instruments.
- Level 2: Based on inputs other than quoted prices included within Level 1 that are observable, either directly or indirectly.
- Level 3: Based on inputs that are not observable in market data.

Mycronic uses level 2 according to the valuation hierarchy when measuring forward exchange contracts at fair value through current market prices and current exchange rates on the closing day.

At valuation of contingent considerations related to business combinations, Level 3 in the valuation hierarchy is applied.

### Financial assets and liabilities per valuation category

Group 2019	Financial assets/liabilities measured at fair value in comprehensive income, hedge accounting	Financial assets/liabilities measured at fair value in profit and loss	Financial assets/liabilities measured at amortized cost	Total carrying amount	Total fair value
<i>Financial assets</i>					
Non-current trade receivables			27	27	27
Trade receivables			826	826	826
Forward exchange contracts	11	4		15	15
Cash and cash equivalents			655	655	655
<b>Total financial assets</b>	<b>11</b>	<b>4</b>	<b>1,508</b>	<b>1,523</b>	<b>1,523</b>
<i>Financial liabilities</i>					
Contingent considerations		8		8	8
Lease liabilities			271	271	271
Factoring			46	46	46
Trade payables			288	288	288
Forward exchange contracts	7	19		26	26
<b>Total financial liabilities</b>	<b>7</b>	<b>27</b>	<b>606</b>	<b>640</b>	<b>640</b>
<b>Recognized loss (change in value)</b>		<b>-22</b>			

The Group's maximum credit risk in financial assets consists of the net amount in the table above. The fair value of the Parent Company's derivatives is equal to the fair value of the Group's derivatives. At year-end, the balance sheet item Cash and cash equivalents consisted solely of bank balances, as it did in the preceding year. Granted unutilized bank overdraft facilities amount to SEK 2,053 million (2,052).

Group 2018	Financial assets/liabilities measured at fair value in comprehensive income, hedge accounting	Financial assets/liabilities measured at fair value in profit and loss	Financial assets/liabilities measured at amortized cost	Total carrying amount	Total fair value
<i>Financial assets</i>					
Trade receivables			664	664	664
Forward exchange contracts	1	2		3	3
Cash and cash equivalents			829	829	829
<b>Total financial assets</b>	<b>1</b>	<b>2</b>	<b>1,492</b>	<b>1,496</b>	<b>1,496</b>
<i>Financial liabilities</i>					
Contingent considerations		277		277	277
Current interest-bearing liabilities			1	1	1
Trade payables			236	236	236
Forward exchange contracts	10	1		11	11
<b>Total financial liabilities</b>	<b>10</b>	<b>278</b>	<b>238</b>	<b>526</b>	<b>526</b>
<b>Recognized loss (change in value)</b>		<b>-18</b>			

### Contingent considerations

	Group	
	2019	2018
Opening balance, carrying amount	277	248
Estimated liabilities related to acquisitions	-	46
Settled liabilities	-248	-15
Changes in value reported in profit and loss	-37	-11
Exchange rate differences recognized in other comprehensive income.	15	10
<b>Closing balance, carrying amount</b>	<b>8</b>	<b>277</b>

The balance sheet item consists of contingent considerations from the acquisition of a Japanese development partner. The maximum contingent consideration is dependent on the number of employed development engineers at the time of exercise of the call option for the remaining 30 percent of the shares in the company. As per December 31, 2019, the maximum contingent consideration was estimated at SEK 9 million.

In October 2016, 80 percent of the shares in Axxon were acquired with the option of acquiring the remaining 20 percent of the shares after three years for CNY 80-180 million. At the end of 2018, it was confirmed that the conditions for the maximum contingent consideration had been met. The transaction was completed in the fourth quarter 2019.

Changes in value reported in profit and loss include a positive effect of SEK 50 million from a revalued contingent consideration related to the acquisition of MRSI in 2018. Since the acquisition, MRSI has had a positive development with continued good market growth, but all criteria for the contingent consideration have not been met. See Note 22.

**Financial liabilities, maturity structure (future non-discounted cash flows)**

Group, December 31, 2019	Nom. amount in SEK					Group, December 31, 2018	Nom. amount in SEK			
	Within 3 months	3 months-1 year	1-5 years	>5 years	Within 3 months		3 months-1 year	1-5 years	>5 years	
Contingent considerations	9	-	4	4	-	295	-	235	60	
Lease liabilities	298	13	38	153	94	1	0	0	1	
Factoring	47	-	19	28	-	236	204	30	3	
Trade payables	288	162	123	3	-	23	2	11	11	
Forward exchange contracts	29	11	17	1	-	<b>556</b>	<b>205</b>	<b>276</b>	<b>75</b>	
	<b>671</b>	<b>186</b>	<b>201</b>	<b>190</b>	<b>94</b>					

The total cash flow for leases, i.e. amortization, amounted to SEK 53 million in 2019. Reported interest expense on lease liabilities amounted to SEK 2 million.

**Hedging instruments, December 31, 2019**

The Group's holdings of forward exchange contracts and debt in foreign currency at December 31, 2019, can be broken down into the following underlying amounts and maturities. The forward exchange contracts fall due at a time when the secured flows are expected to affect earnings. The table shows the nominal amounts of the forward exchange contracts in SEK million.

Group 2019	Maturity			Total
	within 3 months	3 months-1 year	1-3 years	
<b>Hedging instruments - hedge accounting applied</b>				
<i>Forward exchange contracts - cash flow hedge of currency risk, transaction exposure (contract sale)</i>				
Sold JPY, bought SEK, nominal amounts	7	-	-	7
Average hedged forward contract rate, JPY/SEK	0.0861	-	-	0.0861
Sold USD, bought SEK, nominal amounts	56	558	179	793
Average hedged forward contract rate, USD/SEK	9.1976	9.0616	9.3099	9.1557
<i>Debt in foreign currency - currency hedging of net investment in foreign operations</i>				
CNY debt, nominal amount (value on balance-sheet date)	-	-	-	-
<b>Hedging instruments - non-hedge accounting</b>				
<i>Forward exchange contracts - hedge of currency risk, transaction exposure (contract sale)</i>				
Sold EUR, bought SEK, nominal amounts	60	1	-	61
Average hedged forward contract rate, EUR/SEK	10.6031	10.4454	-	10.5888
Sold JPY, bought SEK, nominal amounts	1	-	-	1
Average hedged forward contract rate, JPY/SEK	0.0873	-	-	0.0873
Sold USD, bought SEK, nominal amounts	42	172	-78	136
Average hedged forward contract rate, USD/SEK	9.3745	8.9782	9.3388	9.2845

**Hedging instruments, December 31, 2018**

The Group's holdings of forward exchange contracts and debt in foreign currency at December 31, 2018, can be broken down into the following underlying amounts and maturities. The forward exchange contracts fall due at a time when the secured flows are expected to affect earnings. The table shows the nominal amounts of the forward exchange contracts in SEK million.

Group 2018	Maturity			Total
	within 3 months	3 months-1 year	1-3 years	
<b>Hedging instruments - hedge accounting applied</b>				
<i>Forward exchange contracts - cash flow hedge of currency risk, transaction exposure (contract sale)</i>				
Sold JPY, bought SEK, nominal amounts	17	208	-	225
Average hedged forward contract rate, JPY/SEK	0.0828	0.0796	-	0.0798
Sold USD, bought SEK, nominal amounts	28	173	261	463
Average hedged forward contract rate, USD/SEK	8.5209	8.6406	8.6195	8.6213
<i>Debt in foreign currency - currency hedging of net investment in foreign operations</i>				
CNY debt, nominal amount (value on balance-sheet date)	-	235	-	235
<b>Hedging instruments - non-hedge accounting</b>				
<i>Forward exchange contracts - hedge of currency risk, transaction exposure (contract sale)</i>				
Sold EUR, bought SEK, nominal amounts	28	-	-	28
Average hedged forward contract rate, EUR/SEK	10.2781	-	-	10.2781
Sold JPY, bought SEK, nominal amounts	10	-	-	10
Average hedged forward contract rate, JPY/SEK	0.0805	-	-	0.0805
Sold USD, bought SEK, nominal amounts	134	3	-	137
Average hedged forward contract rate, USD/SEK	8.9523	8.9505	-	8.9523

Effects of hedge accounting on financial position and earnings in 2019	Hedging instruments identified in hedging relationship as of December 31, 2019			Period – change in fair value for measurement of ineffectiveness	
	Nominal amount	Recognized value asset (+) liability (-)	Balance sheet item	Hedging instruments	Hedged item
<i>Cash flow hedge of currency risk, transaction exposure (contract sale)</i>					
Forward exchange contracts, Sold JPY, bought SEK	83	0	Other receivables		
Forward exchange contracts, Sold JPY, bought SEK	-	-	Other liabilities		
<b>Total Forward Exchange Contracts, JPY</b>	<b>83</b>	<b>0</b>		<b>-9</b>	<b>9</b>
Forward exchange contracts, Sold USD, bought SEK	51	11	Other receivables		
Forward exchange contracts, Sold USD, bought SEK	35	-7	Other liabilities		
<b>Total Forward Exchange Contracts, USD</b>	<b>86</b>	<b>4</b>		<b>-18</b>	<b>18</b>
<b>Total</b>		<b>4</b>		<b>-27</b>	<b>27</b>
<i>Currency hedging of net investment in foreign operations</i>					
Debt in foreign currency, CNY thousands	-	-	Other liabilities	-13	13

Effects of hedge accounting on financial position and earnings in 2018	Hedging instruments identified in hedging relationship as of December 31, 2018			Period – change in fair value for measurement of ineffectiveness	
	Nominal amount	Recognized value asset (+) liability (-)	Balance sheet item	Hedging instruments	Hedged item
<i>Cash flow hedge of currency risk, transaction exposure (contract sale)</i>					
Forward exchange contracts, Sold JPY, bought SEK	33	1	Other receivables		
Forward exchange contracts, Sold JPY, bought SEK	191	-5	Other liabilities		
<b>Total Forward Exchange Contracts, JPY</b>	<b>225</b>	<b>-4</b>		<b>-20</b>	<b>20</b>
Forward exchange contracts, Sold USD, bought SEK	222	1	Other receivables		
Forward exchange contracts, Sold USD, bought SEK	241	-5	Other liabilities		
<b>Total Forward Exchange Contracts, USD</b>	<b>463</b>	<b>-4</b>		<b>-36</b>	<b>36</b>
<b>Total</b>		<b>-8</b>		<b>-56</b>	<b>56</b>
<i>Currency hedging of net investment in foreign operations</i>					
Debt in foreign currency, CNY thousands	180	-227	Other liabilities	-6	6

#### Hedge accounting

The Group applies hedge accounting in accordance with IFRS 9 regarding debt in foreign currency used to hedge currency risk in net investments in foreign operations and for forward exchange contracts used to currency hedge future cash flows in the Pattern Generators business area. When entering into the hedge transaction, the relationship between the hedging instrument and the hedged item is documented, as is the objective of risk management and the strategy. The Group determines the hedge ratio between hedging instruments and the hedge item based on the hedge ratios in place in the actual hedges. The hedge ratio is 1:1 for all hedges.

In 2019, the debt in CNY associated with a net investment in the foreign operations was amortized. The exchange rate effects remain in the translation reserve until such time as the net investment is divested.

Hedges are designed such that they are expected to be effective, meaning there is an expectation of a financial link in that the hedging instrument counteracts changes to fair value or cash flow for currency risk in the hedged item. The financial link is preferably determined through a qualitative analysis of critical terms in the hedging relationship. If changes in circumstances influence the hedging relationship so that critical terms no longer match, the Group uses quantitative methods (hypothetical derivative approach) to assess its effectiveness. Sources of hedge ineffectiveness pertaining to the hedge of net investments in foreign operations include the risk that the volume of the hedging instrument exceeds the net investment. Sources of hedge ineffectiveness pertaining to cash flow hedge of currency risk in future sales includes the impact of the parties' credit risk in measuring forward exchange contracts and imperfectly matching cash flows between hedge instruments and hedged cash flows.

**Note 35** Reconciliation alternative performance measures

The European Securities and Markets Authority (ESMA) has issued guidelines regarding alternative performance measures for listed companies. These relate to financial key figures used by management, to control and evaluate the Group's business, which cannot be directly inferred from the financial statements. Alternative performance measures are also considered to be of interest to external investors and analysts who monitor the company. For financial definitions, see page 94. Amounts below are stated in SEK million.

<b>Return on equity</b>	2019	2018
Profit for the year	859	792
Average equity	2,679	2,080
	<b>32.1%</b>	<b>38.1%</b>
<b>Return on capital employed</b>		
Profit before tax	1,122	1,011
Financial expenses	11	12
<i>Profit before financial expenses</i>	1,133	1,023
Average balance sheet total	4,500	3,722
Average non-interest-bearing liabilities	1,661	1,635
<i>Average capital employed</i>	2,838	2,087
	<b>39.9%</b>	<b>49.0%</b>
<b>Capital turnover rate</b>		
Net sales	4,307	3,781
Average balance sheet total	4,500	3,722
Average non-interest-bearing liabilities	1,661	1,635
<i>Average capital employed</i>	2,838	2,087
	<b>1.5</b>	<b>1.8</b>
<b>Book-to-bill</b>		
Order intake	4,567	3,642
Net sales	4,307	3,781
	<b>1.1</b>	<b>1.0</b>
<b>EBITDA</b>		
EBIT	1,124	1,020
Depreciation/impairment	182	74
	<b>1307</b>	<b>1094</b>
<b>Underlying EBIT</b>		
EBIT	1,124	1,020
<i>Acquisition-related costs</i>		
Cost of goods sold	-	19
Operating expenses	45	37
	<b>1169</b>	<b>1076</b>
<b>Equity per share</b>		
Equity at balance day	2,978	2,379
Number of outstanding shares at year-end, thousand	97,775	97,917
	<b>30.46</b>	<b>24.30</b>
<b>Earnings per share</b>		
Profit/loss for the year attributable to owners of the Parent Company	855	790
Average number of outstanding shares before dilution, thousand	97,893	97,917
Average number of outstanding shares after dilution, thousands	97,895	97,917
	<b>8.74</b>	<b>8.09</b>
<b>Net cash</b>		
Cash and cash equivalents	655	829
Interest-bearing liabilities	-318	-1
	<b>337</b>	<b>827</b>

**Note 36** Events after year-end

In order to be better equipped for continued profitable growth, a new Group structure was introduced in January 2020 with the aim of achieving the company's strategic priorities. The new Mycronic organization goes into effect on April 1, 2020, at which point the Group will consist of four divisions: Assembly Solutions High Flex, Assembly Solutions High Volume, Assembly Solutions Global Technologies and Pattern Generators.

With operations in large parts of the world, Mycronic is expected to be affected by the covid-19 outbreak. The company is continuously working to assess the impact and to take appropriate measures. It is not possible to estimate the financial effects in a reliable manner at the time of publication of the annual report.

# Auditor's report

To the general meeting of the shareholders of Mycronic AB (publ), corporate identity number 556351-2374

## REPORT ON THE ANNUAL ACCOUNTS AND CONSOLIDATED ACCOUNTS

### Opinions

We have audited the annual accounts and consolidated accounts of Mycronic AB (publ) except for the corporate governance statement on pages 46–53 for the year 2019. The annual accounts and consolidated accounts of the company are included on pages 39–90 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2019 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2019 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the corporate governance statement on pages 46–53. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statements and statements of financial position for the group and income statements and balance sheets for the parent company.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

### Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

### Key Audit Matters

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

## VALUATION OF FINISHED GOODS AND PRODUCTS IN PROGRESS

### Description

As of December 31, 2019, Inventory of finished goods and products in progress amount to 710 MSEK. A detailed specification of the composition of the inventory is presented in note 25 of the annual report. Inventories are valued at the lower of cost and net realizable value. Finished goods and products in progress is recognized at production cost less any obsolescence. Production cost is calculated using a stock accounting model to allocate direct and indirect production related costs to the manufactured products. The allocation of costs is affected by management's estimates and assumptions and an incorrect allocation of costs affects the valuation of finished goods and products in progress as well as cost of goods sold. Thus, we have considered valuation of finished goods and products in progress as a key audit matter. A presentation of the applied accounting principles on valuation of finished goods and products in progress is described in the section of accounting principles in note 2 of the annual report. The estimates and assumptions associated with the valuation of inventory of finished goods and products in progress is described in note 4.

## VALUATION OF GOODWILL

### Description

Goodwill amounts to 1 046 MSEK in the statement of financial position as of December 31, 2019. A presentation of the applied accounting principles on goodwill is described in the section of accounting principles in note 2 of the annual report. As described in note 2, the Company tests for impairment annually and when an indication of impairment of goodwill exists. The recoverable amounts are determined with a calculation of the value in use of each cash generating unit by calculating the present value of estimated future cash flows. Used forecasts of future cash flows are based on the forecast set for the following year, supplemented by an individual assessment of an additional four years.

Note 18 describes significant assumptions used in the calculation of the value in use. As the value in use is dependent upon these assumptions, we have assessed valuation of goodwill as a key audit matter.

### How our audit addressed this key audit matter

In our audit, we have evaluated the company's accounting procedures for determining the acquisition cost of finished goods and products in progress and evaluated whether applied accounting principles are in accordance with current regulations.

Further, we have also examined calculations, tested a sample for pricing of materials, components and processing costs as well as assessed the reasonableness of used prices and assumptions when distributing direct and indirect production costs. We have evaluated used calculations by comparing outputs to historical data as well as estimated forecasts of future production costs. We have tested a sample of direct and indirect costs allocated to inventory of finished goods and products in progress.

Finally, we have examined the information provided in the annual report.

### How our audit addressed this key audit matter

In the audit for the financial year, we have evaluated the company's process for conducting impairment tests. Based on established criteria, we have examined how the company identifies cash-generating units. We have evaluated the valuation methods and calculation models used. We have assessed the reasonableness of assumptions, conducted sensitivity analysis, and compared historical outcomes to evaluate the reliability of previous forecasts. The reasonableness of the discount rate and long-term growth used for each unit has been evaluated through comparisons with other companies in the same industry.

Finally, we have examined the information disclosed in the annual report.

**Other information than the annual accounts and consolidated accounts**

This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1–38. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

**Responsibilities of the Board of Directors and the Managing Director**

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

**Auditor's responsibility**

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the company's and the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company and a group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts and consolidated accounts represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated accounts. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes disclosure about the matter.

## REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

### Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Mycronic AB AB (publ) for the year 2019 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

### Basis for opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

### Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

### Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional skepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss we examined the Board of Directors' reasoned statement and a selection of supporting evidence in order to be able to assess whether the proposal is in accordance with the Companies Act.

### The auditor's examination of the corporate governance statement

The Board of Directors is responsible for that the corporate governance statement on pages 46–53 has been prepared in accordance with the Annual Accounts Act.

Our examination of the corporate governance statement is conducted in accordance with FAR's auditing standard RevU 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2–6 of the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the other parts of the annual accounts and consolidated accounts and are in accordance with the Annual Accounts Act.

Ernst & Young AB, Jakobsbergsgatan 24, 111 44 Stockholm, was appointed auditor of Mycronic AB (publ) by the general meeting of the shareholders on the May 9, 2019 and has been the company's auditor since the May 6, 2013.

Stockholm 19 March 2020  
Ernst & Young AB

Erik Sandström  
Authorized Public Accountant

# Definitions

## Acquisition-related costs

Acquisition-related costs include expensing of acquired inventories at fair value, amortization of acquired intangible assets, revaluation of contingent considerations and transaction costs.

## Book-to-bill

Order intake in relation to net sales. Used to show future expected net sales development.

## Capital employed

Total assets reduced by non-interest bearing liabilities. Used to show the ability to meet capital needs from operations.

## Capital turnover rate

Net sales divided by average capital employed. Used to show how much capital operations use.

## Cash flow from financing activities

Payments of dividends, increase and amortization of loans.

## Cash flow from investing activities

Net capital investments in subsidiaries and other business combinations, building, machinery and equipment, capitalized development and financial non-current assets.

## Cash flow from operating activities

Profit after financial items adjusted for non-cash items, income tax paid and changes in working capital.

## Earnings per share

Profit attributable to the owners of the Parent Company divided by the average number of outstanding shares before and after dilution. Used to set the value of the company's earnings per share.

## EBIT

Profit from operations, before financial items and tax.

## EBIT margin

Operating profit as a percentage of net sales. Used to show profitability from operations.

## EBITDA

Operating result, EBIT, before depreciation and amortization. EBITDA is a component in the company's financial goals and dividend policy.

## Equity per share

Equity at balance day divided by the number of outstanding shares at the end of the year. Used to set the value of the company per share.

## Equity/assets ratio

Equity as a percentage of total assets. Used to show how much of assets are financed by equity.

## Gross margin

Gross profit as a percentage of net sales. Used to show profitability from sales of goods and services.

## Gross profit

Net sales less costs for goods sold. Used to show profitability from sales of goods and services.

## Net debt/net cash

Interest-bearing liabilities less cash and cash equivalents. Used to show ability to repay all debts at expiry date.

## Order backlog

Remaining orders for goods, valued at balance exchange rate. Used to show secured future net sales of goods.

## Order intake

Orders received for goods and services, valued at average exchange rates. The order intake also includes revaluation of the order backlog at closing exchange rate. Used to show orders received.

## Organic growth

Change in net sales or order intake excluding increases attributable to acquisitions, recalculated to the preceding year's exchange rates, as a percentage of the preceding year's net sales or order intake. Net sales and order intake from acquired companies are included in calculating organic growth from the first turn of the month occurring 12 months after acquisition.

## P/E ratio per share

Share price at December 31 divided by earnings per share.

## R&D costs

Costs attributable to R&D activities including costs of personnel engaged in R&D. Reduced by capitalized development costs.

## Return on capital employed

Profit before financial expenses as a percentage of average capital employed. Used to show return on capital needed by operations.

## Return on equity

Net profit as a percentage of average equity. Used to show return on shareholders capital over time.

## Underlying EBIT and underlying EBIT margin

Underlying EBIT consists of operating profit excluding acquisition-related costs. The underlying EBIT margin is underlying EBIT as a percentage of net sales. Used to describe how operations are developing and performing excluding acquisition-related costs.

## Working capital

Current assets less current liabilities. Used to show short-term capital needs for operations.



# Glossary

## ADAS

Advanced Driver Assistance System. Systems to support the driver of a vehicle.

## AMOLED

Active-Matrix Organic Light-Emitting Diode. In an AMOLED display, each pixel is its own light source. This enables the production of thinner, more energy-efficient displays.

## AR/VR

Augmented Reality/Virtual Reality. Augmented Reality (AR) is a live view of a physical, realistic environment where elements have been enhanced using computer-generated sensory impressions, such as sound, video, graphics or GPS data. The technology can be used to increase understanding of the current reality in contrast to Virtual Reality (VR) that replaces the real world with a simulated world.

## Assembly fluids

In electronics manufacturing many different types of fluids are used in the assembly process. A few examples are adhesives and conductive adhesives.

## Circuit board

A circuit board is a board of insulated material containing a pattern of electrical conductors. See also Printed circuit board (PCB).

## Die Bonding

Die Bonding is a process where Die, which is a small block of semiconductor material on which a specified functional circuit is manufactured, is bonded either to its packaging or to a substrate, which enables communication with the external environment.

## Dispensing

Dispensing is used in the manufacturing of electronics to apply adhesives, solder paste or other mounting fluids onto circuit boards. This also includes conformal coating of circuit boards

## Electronic packaging

The manufacturing step that packages a semiconductor chip so that it is protected and can be connected to other electronics components in electronic products.

## Fine metal mask

The photomask used for the deposition process of organic material used when manufacturing OLED displays

## Internet of Things

A collective term for when machines, vehicles, goods, household appliances, clothing and other items are equipped with built-in sensors. Units can communicate and in this way behavior adapted to the situation is created.

## Jet printing

A technology for non-contact application of solder paste on circuit boards.

## LCD

LCD (Liquid Crystal Display) is a technology for the manufacturing of displays. LCD is based on liquid crystal material, an electrically active fluid. There are two main LCD technologies: active (TFT-LCD) and passive (PM-LCD or TN/STN LCD).

## Lithography

A technique to transfer a pattern from a template to a solid material.

## Mask writer

Exposure equipment used for the manufacture of photomasks.

## Multi-purpose market

A broad market segment for many different application areas. Examples include electronic packaging and touch screen applications.

## Nanometer, nm

One billionth of a meter, or one millionth of a millimeter.

## OLED

Organic Light Emitting Diode. OLED works in the same manner as conventional light emitting diodes, but instead of semiconductors, thin organic films are used to produce strong and vivid colors with a very high level of contrast. OLED displays use the material in every pixel as a light source, which offers several advantages in image quality compared with LCD. OLED technology also enables flexible displays.

## Photomask

A photomask can be compared to a photo negative. A pattern is written with a Mycronic mask writer and transferred to the end product by a lithographic process. The photomask consists of a transparent substrate of glass or quartz that is covered with a thin layer of chrome and a layer of photoresist. Photoresist is a light-sensitive material that can be developed and then washed away after exposure to light. After writing, the photoresist is developed and the pattern is transferred to the chrome layer by etching.

## Pick and Place

A term for robots that pick and place electronic components on a circuit board.

## Pixel

Earlier called "dot" and "pel" (short for picture element), the smallest element in a raster graphic. Uses include showing images on displays.

## Printed circuit board (PCB)

Circuit boards are PCBs with mounted electrical components. A circuit board can have surface or through-hole mounting or a combination. The components can be mounted on one side or both.

## Semiconductors

An electronic component containing more than one circuit element. Examples include memories, processors and amplifiers.

## Solder paste

Material that creates electrical and mechanical connection between the PCB and its electronic components.

## Surface mounting

The dominant technology within electronics production where components are mounted onto the surface of a circuit board.

## TFT-LCD

TFT-LCD, an active LCD display, providing better image quality and faster response than a passive. It is the standard technology in computers and LCD-TVs. The active LCD displays have at least one Thin Film Transistor (TFT) in each pixel.

# Shareholder information

## FINANCIAL REPORTING FINANCIAL YEAR 2020

Interim Report January–March, April 23, 2020

Interim Report January–June, July 16, 2020

Interim Report January–September, October 22, 2020

Year-End Report 2020, February 10, 2021

## FINANCIAL INFORMATION

The 2019 annual and sustainability report will be published on the website and through a press release on April 6, 2020.

Financial reports and press releases are available on the website. Through a subscription service on the investor pages of the website, it is possible to register to obtain reports and press releases.

## DISTRIBUTION OF THE ANNUAL AND SUSTAINABILITY REPORT 2019

A printed annual and sustainability report is distributed to those who request it. The annual and sustainability report is also available at Mycronic's website, [www.mycronic.com](http://www.mycronic.com).

## ANNUAL GENERAL MEETING 2020

The Annual General Meeting of Mycronic AB will be held on Thursday, May 7, 2020, at 5:00 p.m. at Vasateatern, Vasagatan 19 in Stockholm.

### Right to participate in the Annual General Meeting

Shareholders, who wish to participate in the Annual General Meeting, must be listed in the share register kept by Euroclear Sweden AB by Thursday, April 30, 2020, and must make notification of their and any advisors' participation at the Annual General Meeting not later than Thursday, April 30, 2020 at 12:00 p.m.

### Registration

Registration can take place on the website, [www.mycronic.com](http://www.mycronic.com) or by telephone +46 8 518 01 559. The notification shall state name, personal ID number or corporate registration number, address and telephone number, number of shares held and names of any advisors.

Shareholders who are represented by a proxy should include in the notification of participation the written proxy and a copy of the registration certificate or an equivalent document which shows who is authorized to sign for the shareholder per email to [mycronic@computershare.se](mailto:mycronic@computershare.se) or by mail to Computershare AB, "Mycronics årsstämma", Box 5267, 102 46 Stockholm, Sweden.

### Re-registration of nominee shares

Shareholders whose shares are registered in the name of a nominee must, to be entitled to participate in the Annual General Meeting, request temporary registration of the shares in their own name. Shareholders must notify their nominee well before Thursday, April 30, 2020, as the temporary registration must be done by this date.

# GRI Appendix



# About this GRI Appendix

Mycronic's Sustainability Report for 2019 has been prepared in accordance with the GRI Standards: Core option. The disclosures focus on the sustainability topics that are considered to be the most material regarding Mycronic's economic, social and environmental performance. The Sustainability Report is an integral part of Mycronic's Annual Report. Pages 24-35 in the Annual Report constitute Mycronic's statutory Sustainability Report, in accordance with the Swedish Annual Accounts Act.

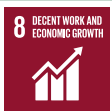








This GRI Appendix is a supplement to the statutory Sustainability Report and provides, inter alia, the reporting principles and in-depth GRI information and data.

Mycronic reports on sustainability performance on an annual basis. This report refers to the period January 1 to December 31, 2019, which corresponds to Mycronic's fiscal year. The non-financial data provided in this report covers all Mycronic companies worldwide that are globally integrated into our financial reports. Any exception in boundary or scope

is clearly indicated in each disclosure presented in this GRI Appendix. Further limitations in scope and omission statements according to the GRI standard are included where relevant. Information on definitions and calculation methods applied are described in connection to each disclosure presented in this GRI Appendix. The company applies the Precautionary Approach to reduce or to avoid negative impacts on the environment.

The most recent sustainability report, "Mycronic Annual and Sustainability Report 2018", was published on April 8, 2019. Changes have not been made to the information supplied in the 2018 Sustainability Report. Historical data is provided where this is possible and have not been recalculated, unless otherwise stated. Data for companies acquired in 2016 and 2017, i.e. AEI, Axxon, RoyoTech and ViT, is included since 2018. Data from MRSI, acquired in 2018, has been included in the report for the first time this year.

## Mapping of Mycronic's material sustainability topics 2019, against the UN Sustainable Development Goals

Material sustainability topics 2019	UN Sustainable Development Goals	UN Sustainable Development Goals – Targets
<b>Responsible business</b> <ul style="list-style-type: none"> <li>• Business ethics and anti-corruption</li> <li>• Responsible sourcing</li> <li>• Information security</li> </ul>	 	8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment  16.5 Substantially reduce corruption and bribery in all their forms
<b>Reduce environmental impact</b> <ul style="list-style-type: none"> <li>• Energy consumption during product use</li> <li>• Material consumption</li> <li>• Reduced carbon dioxide emissions</li> <li>• Efficient waste management</li> </ul>	 	7.3 By 2030, double the global rate of improvement in energy efficiency  12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment  12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
<b>Social responsibility</b> <ul style="list-style-type: none"> <li>• Attractive employer</li> <li>• Efficient health and safety management</li> <li>• Diversity and equality</li> <li>• Positive contribution to local communities</li> </ul>	  	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.  5.1 End all forms of discrimination against all women and girls everywhere  8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
<b>Enable innovation</b> <ul style="list-style-type: none"> <li>• Innovation capacity</li> </ul>	 	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship  9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

GRI Index	Page
<b>GENERAL DISCLOSURES</b>	
<b>GRI 102: General disclosures</b>	
<b>Organizational profile</b>	
GRI 102-1 Name of the organization.	p. 1
GRI 102-2 Activities, brands, products, and services	AR p. 14-23
GRI 102-3 Location of headquarters	Back of Annual Report
GRI 102-4 Location of operations	AR p. 40
GRI 102-5 Ownership and legal form	AR p.46
GRI 102-6 Markets served	AR p. 13-23
GRI 102-7 Scale of the organization	p. 1, p. 2, p. 40, p. 58-59
GRI 102-8 Information on employees and other workers	GRI Appendix p. 101
GRI 102-9 Supply chain	AR p. 29
GRI 102-10 Significant changes to the organization and its supply chain	AR p. 29, p. 37-38, p. 40, p. 42
GRI 102-11 Precautionary Principle	GRI Appendix p. 98
GRI 102-12 External initiatives	AR p. 25, GRI Appendix p. 98
GRI 102-13 Membership of associations	AR p.101
<b>Strategy</b>	
GRI 102-14 Statement from senior decision-maker	AR p. 4-5
<b>Ethics and integrity</b>	
GRI 102-16 Values, principles, standards, and norms of behavior	AR p. 12, p. 28-29
<b>Governance</b>	
GRI 102-18 Governance structure	AR p. 46-49
<b>Stakeholder engagement</b>	
GRI 102-40 List of stakeholder groups	AR p.25, GRI Appendix p. 101
GRI 102-41 Collective bargaining agreements	GRI Appendix p.101
GRI 102-42 Identifying and selecting stakeholders	AR p.25, GRI Appendix p. 101
GRI 102-43 Approach to stakeholder engagement	AR p.25, GRI Appendix p. 101
GRI 102-44 Key topics and concerns raised	AR p.28-35, GRI Appendix p. 101
<b>Reporting practise</b>	
GRI 102-45 Entities included in the consolidated financial statements	AR p. 40
GRI 102-46 Defining report content and topic Boundaries	AR p. 24-27, GRI Appendix p. 98
GRI 102-47 List of material topics	AR p. 24, GRI Appendix p. 98
GRI 102-48 Restatements of information	GRI Appendix p. 98
GRI 102-49 Changes in reporting	GRI Appendix p. 98
GRI 102-50 Reporting period	GRI Appendix p. 98
GRI 102-51 Date of most recent report	GRI Appendix p. 98
GRI 102-52 Reporting cycle	GRI Appendix p. 98
GRI 102-53 Contact point for questions regarding the report	GRI Appendix p. 107
GRI 102-54 Claims of reporting in accordance with the GRI Standards	GRI Appendix p. 98
GRI 102-55 GRI content index	GRI Appendix p. 99-100
GRI 102-56 External assurance	AR p. 36

GRI Index	Page	Material topic in Myconic's materiality analysis
<b>MATERIAL DISCLOSURES</b>		
<b>GRI 205: Anti-corruption 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 28-29	Business ethics and anti-corruption
GRI 205-3 Confirmed incidents of corruption and actions taken	GRI Appendix p. 102	
<b>GRI 308: Supplier environmental assessment 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 28-29	Responsible sourcing
GRI 308-1 New suppliers that where screened using environmental criteria	AR p. 29, GRI Appendix p. 105	

GRI Index	Page	Material topic in Myconic's materiality analysis
<b>GRI 301: Materials 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 30-31	Material consumption
GRI 301-1 Materials used by weight	GRI Appendix p. 102	
<b>GRI 302: Energy 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 30-31	Energy consumption during product use
GRI 302-1 Energy consumption within the organization	GRI Appendix p. 102	
GRI 302-2 Energy consumption outside of the organization	GRI Appendix p. 103	
<b>GRI 305: Emissions 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 30-31	Reduced carbon dioxide emissions
GRI 305-1 Direct (Scope 1) GHG emissions	GRI Appendix p. 103	
GRI 305-2 Energy indirect (Scope 2) GHG emissions	GRI Appendix p. 103	
GRI 305-3 Other indirect (Scope 3) GHG emissions	GRI Appendix p. 104	
<b>GRI 306: Effluents and waste 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 30-31	Effective waste management
GRI 306-2 Waste by type and disposal method	GRI Appendix p. 105	
<b>GRI 401: Employment 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 30-31	Attractive employer
GRI 401-1 New employee hires and employee turnover	GRI Appendix p. 105	
<b>GRI 404: Training and education 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 32-33	Attractive employer
GRI 404-3 Percentage of employees receiving regular performance and career development reviews	GRI Appendix p. 106	
<b>GRI 403 Occupational health and safety 2018</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 32-33	Efficient health and safety management
GRI 403-9 Work-related injuries	GRI Appendix p. 106	
<b>GRI 405: Diversity and equal opportunity 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 32-33	Diversity and equality
GRI 405-1 Diversity of governance bodies and employees	GRI Appendix p. 106	
<b>GRI 406: Non-discrimination 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 32-33	Diversity and equality
GRI 406-1: Incidents of discrimination and corrective actions taken	GRI Appendix p. 107	
<b>GRI: 413 Local communities 2016</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 32-33	Positive contribution to local communities
GRI 413-1: Operations with local community engagement, impact assessments, and development programs	AR p. 33	
<b>GRI 414: Supplier social assessment 2016</b>		
GRI 414-1: New suppliers that were screened using social criteria	GRI Appendix p. 107	Responsible sourcing
<b>COMPANY SPECIFIC TOPICS AND DISCLOSURES</b>		
<b>Innovation capacity</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 34-35	Innovation capacity
Company specific indicator: Number of granted patents	GRI Appendix p. 107	
<b>Information security</b>		
GRI 103: Management approach 2016, GRI 103-1, 103-2, 103-3 Management approach	AR p. 28-29	Business ethics and anti-corruption
Company specific indicator: Participation in online information security training session.	AR p. 29	

## GRI 102: GENERAL DISCLOSURES

## GRI 102-8 Information on employees and other workers

Per region	Asia		Europe		USA		Group (total)	
	2018	2019	2018	2019	2018	2019	2018	2019
Women		91		123		31		245
Men		591		428		174		1,193
Total	554	682	497	551	203	205	1,254	1,438
Share of nr of employees globally	44%	48%	40%	39%	16%	15%	100%	100%
Share women %	12%	13%	21%	29%	16%	15%	16%	17%

Per group company	Axxon China		AEi USA		MRSI USA		ViT France		Mycronic AB and subsidiaries <sup>1</sup>		Group (total)	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Women	42	60	9	8	10	13	16	17	124	147	201	245
Men	333	434	67	69	60	68	46	51	547	571	1,053	1,193
Total	375	494	76	77	70	81	62	68	671	718	1,254	1,438
Share women %	11%	12%	12%	10%	14%	16%	26%	25%	18%	20%	16%	21%

1) Sweden (headquarter), and subsidiaries in Japan, South Korea, China, Singapore, France, Germany, Netherlands, UK and USA. Except Axxon, AEi, MRSI and ViT.

Data was compiled through Mycronic's global Human Capital Management (HCM) system, which was fully implemented throughout the group in 2019. Consolidated group data regarding the type of employment contract (Permanent/Temporary or Full time/Part time) is not yet available and therefore not disclosed.

In the previous GRI Appendix from 2018, the total number of employees disclosed under disclosure 102-8 did not include employees from the company MRSI, which was acquired in 2018. To enable comparisons of data, we have included figures for MRSI both for 2018 and 2019 in this year's GRI Appendix.

## GRI 102-13 Membership of associations

## 2019

Mycronic has memberships in several business and sector associations, such as: the Confederation of Swedish Enterprises, The association of Swedish Engineering Industries, The Royal Academy of Engineering Sciences (IVA), Association Connecting Electronics Industries (IPC), Institute of Electrical and Electronics Engineers (IEEE), The international society for optics and photonics (SPIE), Society of Rheology (SoR), American Physical Society (APS), SMTA - Surface Mount Technology Association, IMAPS - International Microelectronics Assembly and Packaging Society, International Council on Systems Engineering (INCOSE), The International Electronics Manufacturing Initiative (iNEMI), Photonics Sweden and the Hermes Standard.

## GRI 102-41 Collective bargaining agreements

## 2019

All employees in Sweden and in the subsidiary in France (ViT), which equals 33% of Mycronic's employees, are covered by collective bargaining agreements.

## GRI 102-44 Stakeholder engagement: Key topics and concerns raised

## 2019

Key topics raised by stakeholders in our latest stakeholder dialogue process.

Overall top-5	Top-5 according to customers	Top-5 according to capital market	Top-5 according to employees	Top-5 according to suppliers
Topics	Topics	Topics	Topics	Topics
Product quality	Product quality	Business ethics	Employment conditions	Product quality
Economic value creation	Product development & innovation	Economic value creation	Worklife balance	Product development & innovation
Product development & innovation	Economic value creation	Human rights in the supply chain	Product quality	Economic value creation
Business ethics	Business ethics	Product quality	Competence development, training and education	Business ethics
Energy efficiency	Energy efficiency	Chemical management, Product development & innovation	Product development & innovation	Workplace health and safety

In order to understand how Mycronic fundamentally impacts individuals, society and the environment, and to identify risks and opportunities at an early stage, targeted stakeholder dialogues on sustainability are conducted every three years. The dialogues are conducted through surveys, interviews and workshops and lay the foundation for our materiality analysis and continued work on sustainability.

Stakeholder dialogues took place in 2017 with customers, the capital market, employees and suppliers. This was supplemented in 2018 with information from stakeholders to the newly acquired companies AEi, Axxon and Vi TECHNOLOGY. The table above shows the key topics identified per stakeholder group following these dialogues. The next formal stakeholder dialogues will be carried out in 2020.

## GRI 205: ANTI-CORRUPTION

### GRI 205-3 Confirmed incidents of corruption and actions taken

**2019**  
In 2019, there was no confirmed incident of corruption. Mycronic has established a whistleblower service, handled by an external law firm, which enables employees and external parties to report suspected breaches of the Code of Conduct, including e.g. suspicions of corruption. In 2019, two cases were reported to the Whistleblower service, which were both thoroughly investigated with the help of external experts. The result from the investigation led to the conclusions that no violation of the Code of Conduct could be detected.

## GRI 301: MATERIALS

### GRI 301-1 Material used by weight

(Metric tons)	Sweden			Group <sup>1</sup>
	2017	2018	2019	2019
Material consumption – products	824	886	900	20,113
Packaging materials, incl. paper, cardboard and plastics	86	65	51	333

1) Data covers all units except MRSI (acquired in 2018). MRSI is expected to provide data next year.

#### Comments

The figures show the weight of main materials that are used to produce and package Mycronic's primary products. The data includes materials whose weight exceeds 1% of the product's total weight. Total weight is calculated by multiplying estimated material proportion in products and known weight of the products with the number of manufactured products during the year.

The materials covered in the figure are metals, composite and stone, plastics, and electronics. Of the reported materials, metals represent more than 70%. The second most significant material is composite and stone, accounting for 15% of the total weight of materials.

## GRI 302: ENERGY

### GRI 302-1 Energy consumption within the organization

Energy consumption per type (MWh)	Electricity		Burning oil		Natural gas	
	2018	2019	2018	2019	2018	2019
Mycronic HQ (Sweden)	5,231	5,273	26	8	0	0
Subsidiaries, except AEI, Axxon, ViT & MRSI	904	941	0	0	458	537
AEI	616	615	0	0	320	405
Axxon	578	686	0	0	0	0
ViT	119	132	0	0	15	27
MRSI	n/a	629	n/a	0	n/a	44
<b>Total</b>	<b>7,448</b>	<b>8,276</b>	<b>26</b>	<b>8</b>	<b>793</b>	<b>1,013</b>

Total energy consumption within the organization (MWh)	2018	2019
<b>GRAND TOTAL</b>	<b>8,267</b>	<b>9,297</b>

Energy consumption from renewable sources (MWh)	Electricity	
	2018	2019
Mycronic HQ (Sweden)	5,231	5,273

#### Comments

Historical data is not comparable due to changes in scope. Data for 2018 did not include MRSI, acquired in 2018. Data before 2018 did not include AEI, Axxon and ViT and is therefore not provided. Data regarding natural gas consumption for previous years has proven to be incorrect for several entities. This has been corrected when possible.

An indicative comparison of data may be obtained by excluding figures from MRSI. The total energy consumption for the group, excluding MRSI, in 2019 is then 8,624 MWh, compared to 8,267 MWh in 2018, which indicates a stable two-year trend for the group.

No energy is sold.

Energy consumption from renewable sources: The electricity bought in Sweden comes from hydro power and is climate neutral, in accordance with certified EDP® (Environmental Product Declaration).

#### Omissions

For operations outside Sweden, data regarding energy consumption from renewable sources is unavailable.

Not applicable: Cooling and steam consumption is minimal and as a consequence not disclosed.



## GRI 302-2 Energy consumption outside of the organization

Energy consumption outside of the organization (MWh)	2017	2018	2019
Pattern Generator Systems			
- Sweden HQ	81,850	79,400	80,839
Assembly Solution's SMT division			
- Sweden HQ	n/a	16,036	16,770
AEi	n/a	603	724
Axxon	n/a	10,492	14,924
MRSI	n/a	n/a	5,656
ViT	n/a	12,826	13,538
<b>Total</b>		<b>119,357</b>	<b>132,452</b>

### Comments

The data covers energy consumption from the installed base at customers' sites (Mycronic's products used at customers' sites).

Historical data is not comparable due to changes in scope. Data for 2018 did not include MRSI, acquired in 2018. Data before 2018 only covered the Pattern Generator business area.

Comparable data may be obtained by excluding figures from MRSI. The total energy consumption for 2019 is then 126,795 MWh, compared to 119,357 MWh in 2018. The increase is mainly linked to an increased number of products in use, in particular by Axxon's customers.

## GRI 305: EMISSIONS

### GRI 305-1 Direct (Scope 1) GHG emissions

Scope 1 Greenhouse gas emissions, (metric tons CO <sub>2</sub> e)	2017	2018	2019
<b>Total</b>	<b>508</b>	<b>469</b>	<b>595</b>

### Comments

Mycronic reports carbon emissions in accordance with the recommendations of the Greenhouse Gas Protocol Corporate Standard ("GHG Protocol"). Mycronic uses a carbon emissions calculation tool from an external provider, which also provides emissions factors. Climate consultant ZeroMission has performed a quality verification of the calculations. We use the operational control consolidation approach. The following gases are included in the calculation: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>. Biogenic CO<sub>2</sub> emissions are included in the calculation and were 2 metric tons in 2019. The following global warming potential (GWP, AR5) rates have been used: 1 for CO<sub>2</sub> and for CO<sub>2</sub>eq, 28 for CH<sub>4</sub>, 265 for N<sub>2</sub>O and 0 for biogenic CO<sub>2</sub>.

Historical data is not comparable due to changes in scope. Data for 2018 did not include MRSI, acquired in 2018. Data before 2018 did not include AEi, Axxon and ViT. Moreover, some of the results have been impacted either by an improved data collection in 2019 or by a change of the emissions factor used for the calculations, which is a consequence of our implementation of the emissions calculation

tool in 2019 (mentioned above).

Data included:

- Other energy: MRSI, AEi and ViT uses natural gas. Mycronic in Sweden has an additional heating system using oil. The system is only used as a complement to the geothermal heating.
- Company owned cars are included in the data.

### Sources of the emissions factors used:

- Department for Business, Energy and Industrial Strategy (2019). 2019 Government GHG Conversion Factors for Company Reporting.
- EPA (2018). GHG Emission Factors Hub. Center for Corporate Climate Leadership. March 2018.
- EPA (2019). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017. United States Environmental Protection Agency.
- GIO, CGER, NIES (2019). National Greenhouse Gas Inventory of Japan. Greenhouse Gas Inventory Office of Japan (GIO), Center for Global Environmental Research (CGER), National Institute for Environmental Studies (NIES).
- SEPA (2019). Emissionsfaktorer och värmevärden 2019. Swedish Environmental Protection Agency.

### GRI 305-2 Energy indirect (Scope 2) GHG emissions

Scope 2 Greenhouse gas emissions, (metric tons CO <sub>2</sub> e)	2017	2018	2019
<b>Total</b>	<b>578</b>	<b>908</b>	<b>1,222</b>

### Comments

Mycronic reports carbon emissions in accordance with the recommendations of the Greenhouse Gas Protocol Corporate Standard ("GHG Protocol"). Mycronic uses a carbon emissions calculation tool from an external provider, which also provides emissions factors. Climate consultant ZeroMission has performed a quality verification of the calculations. We use the operational control consolidation approach. The following gases are included in the calculation: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>. Biogenic CO<sub>2</sub> emissions are included in the calculation but were 0 in 2019. The global warming potential (GWP, AR5) rates used: 1 for CO<sub>2</sub> and for CO<sub>2</sub>eq, 28 for CH<sub>4</sub>, 265 for N<sub>2</sub>O and 0 for biogenic CO<sub>2</sub>.

Historical data is not comparable due to changes in scope. Data for 2018 did

not include MRSI, acquired in 2018. Data before 2018 did not include AEi, Axxon and ViT. Moreover, some of the results have been impacted by a change of the emissions factor used for the calculations, which is a consequence of our implementation of the emissions calculation tool in 2019 (mentioned above).

Data included: Electricity consumption within the organization.

### Sources of the emissions factors used:

- AIB (2019). European Residual Mixes 2018. Version 1.1, 28th May 2019. Association of Issuing Bodies.
- Market-based instrument emission factor provided by the electricity supplier
- EPA (2018). eGrid2016. Release : 2/15/2018. O.
- IEA (2019). Statistics. IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
- WBCSD/WRI (2014). Emissions Factors from Cross Sector Tools.

## GRI 305-3 Other indirect (Scope 3) GHG emissions

### Scope 3

#### Greenhouse gas emissions, (metric tons CO<sub>2</sub>e)

	2017	2018	2019
<b>Total</b>	<b>58,290</b>	<b>70,753</b>	<b>95,967</b>

#### Comments

Mycronic reports carbon emissions in accordance with the recommendations of the Greenhouse Gas Protocol Corporate Standard ("GHG Protocol"). Mycronic uses a carbon emissions calculation tool from an external provider, which also provides emissions factors. Climate consultant ZeroMission has performed a quality verification of the calculations. We use the operational control consolidation approach. The following gases are included in the calculation: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>. Biogenic CO<sub>2</sub> emissions are included in the calculation but were 0 in 2019. The following global warming potential (GWP, AR<sub>5</sub>) rates have been used: 1 for CO<sub>2</sub> and for CO<sub>2</sub>eq, 28 for CH<sub>4</sub>, 265 for N<sub>2</sub>O and 0 for biogenic CO<sub>2</sub>.

Historical data is not comparable due to changes in scope. Data for 2018 did not include MRSI, acquired in 2018. Data before 2018 did not include AEI, Axxon and ViT. Moreover, some of the results have been impacted either by an improved data collection in 2019 or by a change of the emissions factor used for the calculations, which is a consequence of our implementation of the emissions calculation tool in 2019 (mentioned above).

A dominant part of scope 3 emissions, 79% or 75,476 metric tons CO<sub>2</sub>e for 2019, comes from the use of products by our customers (i.e. energy consumption outside of the corporation). The increase of emissions between 2018 and 2019 is mainly linked to an increased number of products in use by Axxon's clients.

#### Data included and additional information regarding applied estimation methods:

##### Materials - products

The total weight is calculated using manufacturing statistics and net weights for each product. To the extent that weights for products are missing (about 10–20% depending on the site or business area), the total weights were increased by a corresponding proportion. The type and weight of material are estimated proportionally for the largest products within the production site. The same proportions are then applied to all other products within the sites.

##### Materials - packaging

At the Swedish site (headquarter), the amount of packaging material is estimated to be 2.5 times greater than the material purchased from our main supplier of packaging materials. Other manufacturing sites made a rough estimation on both the type and amount of packaging material.

##### Materials - office material

Measured by purchased amount of print paper.

##### Electricity

Energy consumption outside of the company, i.e. for products in use at the customer. For each type of product we have information on power consumption (as stated in product specifications/data sheets) and estimated running hours per year in low energy mode (stand-by) and in high energy mode. This is multiplied by the estimated number of products in use by our customers.

##### Business travel by airplane

Reports from travel agencies and internal accounting.

##### Transports

The request for data collection is sent only to the, for us, largest suppliers of transports and to suppliers who themselves transport products to our sites. Selection criteria are based on a spent-analysis, which is purchased value on a yearly basis. The collected data covers 80–90% of the value. The remaining 10–20% was estimated. In some cases, our customers themselves are responsible for transporting products. In such cases, the impact of the transports is estimated.

#### Sources of the emissions factors used:

- APP (2016). APP Sustainability Report 2015.
- Market-based instrument emission factor provided by the electricity supplier
- Department for Business, Energy and Industrial Strategy (2019). 2019 Government GHG Conversion Factors for Company Reporting.
- Ecometrica 2010. Internal Paper Profiles Database.#Defra/DECC (2011). Guidelines to Defra/DECC's GHG conversion factors for company reporting. Department of Environment Food and Rural Affairs/Department for Energy and Climate Change, London.
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- EPA (2019). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2017. United States Environmental Protection Agency.
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- Paper Profiles (2019). Paper Profiles database. Updated September 2019.
- SEPA (2019). Emissionsfaktorer och värmevärdet 2019. Swedish Environmental Protection Agency.

## GRI 306: EFFLUENTS AND WASTE

### GRI 306-2 Waste by type and disposal method

Hazardous waste, amount (kg)	Sweden		
	2017	2018	2019
Recycling	4,049	4,753	9,978
Recovery, including energy recovery	10,467	10,256	6,209
<b>Total</b>	<b>14,516</b>	<b>15,009</b>	<b>18,206</b>

Non-hazardous waste, amount (kg)	Sweden			Group <sup>1</sup>
	2017	2018	2019	2019
Recycling	280,559	492,313	243,962	281,591
Recovery, including energy recovery	80,035	135,624	131,788	138,006
Landfill	14,106	19,650	127,500	130,860
<b>Total</b>	<b>374,700</b>	<b>647,587</b>	<b>505,269</b>	<b>550,457</b>

1) Data for non-hazardous waste covers all operations except MRSI and AEI (USA).

Reuse (kg)	Sweden		
	2017	2018	2019
	36,500	14,700	68,344

#### Comments

Data includes all types of waste, including product end-of-life disposal. Our assumption is that all materials that can be recycled have been recycled at the end of products' life. To calculate amounts, we have used information provided by the waste disposal contractor, and, for recycling at products' end of life, we have estimated the number of units recycled together with known product content.

Data before 2019 only covered Swedish operations. The breakdown by disposal method was reviewed in 2019, which led to differences in the end result for each category compared to previous years. As a consequence, only the total amounts are comparable from one year to another.

The majority of the increase of non-hazardous waste in 2018 compared to 2017 was related to a large renovation of the site in Sweden.

Reuse refers to material reused through Mycronics buyback program (see p. 31 in the Sustainability Report for further information)

#### Omissions

Data for non-hazardous waste is unavailable for our operations in the USA, due to the waste disposal contractor not being able to provide the information. Data for hazardous waste is currently unavailable for all locations outside Sweden.

## GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT

### GRI 308-1 New suppliers that were screened using environmental criteria

#### 2019

Since January 2019, environmental and social topics are included in our standard evaluation of new suppliers to the Swedish purchasing organization. The standard evaluation consists of a self-assessment and an on-site audit, and covers issues related to, for example, greenhouse gas emissions, water and electricity use, waste recycling, human rights, health and safety, and diversity. During the year, 100% of our new critical suppliers - 4 suppliers, including 3 in Sweden and 1 in Japan - were evaluated through this process and thus underwent self-assessments and on-site audits covering environmental criteria.

About half of our critical suppliers worldwide have also signed our Supplier Code of Conduct, which covers both environmental and social criteria.

#### Comments

Data covers the Swedish purchasing organisation. Similar supplier evaluations might be integrated in other countries of operation in coming years, following evaluation of the process implemented in Sweden since 2019.

Critical suppliers are those accounting for 80 percent of the total purchase value of direct materials.

## GRI 401: EMPLOYMENT

### GRI 401-1 New employee hires and employee turnover

Number of new employee hires	2019		
	Total	Female	Male
under 30 years	11	2	9
30 - 50 years	21	10	11
over 50 years	13	5	8
<b>Total Sweden</b>	<b>45</b>	<b>17</b>	<b>28</b>

<b>Employee turnover rate</b>	2019
Sweden	5.30%

#### Comments

Definition employee turnover rate: (employees who left the company / average number of employees) \* 100

#### Omissions

The data provided covers Swedish operations. Consolidated group data regarding these disclosures is not yet available and therefore not disclosed.

## GRI 403: OCCUPATIONAL HEALTH AND SAFETY

## GRI 403-9 Work-related injuries

	Number		Rate	
	2018	2019	2018	2018
<b>Number and rate of fatalities as a result of work-related injury</b>				
Sweden		0		0
<b>Number and rate of high-consequence work-related injuries (excluding fatalities)</b>				
Sweden		0		0
<b>Number and rate of recordable work-related injuries</b>				
Sweden		6		15
<b>Number of hours worked</b>				
Sweden		495,959		

**Comments**

The data provided covers Swedish operations.

The data cannot be compared with data from earlier years, due to a change in definitions used and due to the improved scope of data. Since 2019, Mycronic uses the GRI definitions for the disclosures, i.e.:

- (Number of fatalities as a result of work-related injury/Number of hours worked) X 200,000 hours worked
- (Number of high consequence workrelated injuries excluding fatalities/Number of hours worked) X 200,000 hours worked
- (Number of recordable work-related injuries/Number of hours worked) X 200,000 hours worked

The main types of work-related injury in 2019 were minor pinching/crushing and cutting injuries in connection with assembly and handling of materials.

**Omissions**

The data provided covers Swedish operations. Consolidated group data regarding these disclosures is not yet available and therefore not disclosed. .

## GRI 404: TRAINING AND EDUCATION

## GRI 404-3 Percentage of employees receiving regular performance and career development reviews.

	2018		2019	
	Male	Female	Male	Female
<b>Have completed EDP<sup>1</sup></b>				
Group total, except MRSI (USA) and Axxon (China)	95%	95%	95%	95%

1) EDP = Employee Development Process

The Employee Development Process (EDP) is an evaluation of each employee's annual performance and a process to set new development goals for the next year.

The data covers a total of 61% of Mycronic's employees worldwide, corresponding to all operations except the two subsidiaries MRSI (USA) and Axxon (China). MRSI and Axxon currently do not implement the Corporate EDP, but both have local employee performance and career development processes.

**Omissions**

The abovementioned data divided per employee category is currently not available.

## GRI 405: DIVERSITY AND EQUAL OPPORTUNITY

## GRI 405-1 Diversity of governance bodies and employees

The tables below show the total number of employees, the Group management and the Board of Directors including employee representatives per 2019-12-31, broken down by age and gender.

	2018			2019		
	Total	Female	Male	Total	Female	Male
<b>Employees</b>						
under 30 years				341		
30 - 50 years				674		
over 50 years				423		
<b>Total</b>	<b>1,254</b>	<b>201</b>	<b>1,053</b>	<b>1,438</b>	<b>245</b>	<b>1,193</b>
Share		16%	84%		17%	83%

	2018			2019		
	Total	Female	Male	Total	Female	Male
<b>Women in management positions</b>						
<b>Total</b>				<b>155</b>	<b>34</b>	<b>121</b>
Share %					22%	78%

	2018			2019		
	Total	Female	Male	Total	Female	Male
<b>Group Management</b>						
under 30 years	0	-	-	0	0	0
30 - 50 years	2	0	2	2	0	2
over 50 years	7	4	3	7	3	4
<b>Total</b>	<b>9</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>3</b>	<b>6</b>
Share	100%	44%	56%	100%	33%	67%

	2018			2019		
	Total	Female	Male	Total	Female	Male
<b>Board of Directors</b>						
under 30 years	0	-	-	0	0	0
30 -50 years	1	0	1	1	0	1
over 50 years	7	3	4	7	3	4
<b>Total</b>	<b>8</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>3</b>	<b>5</b>
Share	100%	38%	63%	100%	38%	63%

**Comments**

The tables show the total number of employees, employees in management positions, Group management and the Board of Directors, including employee representatives, when available broken down by age and gender. Consolidated group data regarding age interval is not yet available for all the abovementioned disclosures and therefore not disclosed.

Women in management position:

Definition used for management position = Line Managers.

## GRI 406: NON-DISCRIMINATION

### GRI 406-1 Incidents of discrimination and corrective actions taken

#### 2019

Mycronic Sweden has established an action plan for discrimination prevention, which includes:

1. Policies against discrimination, abusive discrimination, harassment and sexual harassment. The policy also includes preventive measures.
2. Distribution of responsibilities and procedures have been defined for the managers, employees and the individual(s) exposed
3. A template for conversations with the designated and exposed individuals has been developed as part of facilitating documentation for managers
4. An annual follow-up of discrimination is conducted in collaboration with local trade unions

#### Comments

Data covers Swedish operations.

#### Omissions

Information is currently unavailable for operations outside Sweden. Local discrimination prevention and diversity action plans are planned to be implemented globally in 2020.

## GRI 414: SUPPLIER SOCIAL ASSESSMENT

### GRI 414-1 New suppliers that were screened using social criteria

#### 2019

Since January 2019, environmental and social topics are included in our standard evaluation of new suppliers to the Swedish purchasing organization. The standard evaluation consists of a self-assessment and an on-site audit, and covers issues related to, for example, greenhouse gas emissions, water and electricity use, waste recycling, human rights, health and safety, and diversity. During the year, 100% of our new critical suppliers – 4 suppliers, including 3 in Sweden and 1 in Japan – were evaluated through this process and thus underwent self-assessments and on-site audits covering social criteria.

About half of our critical suppliers worldwide have also signed our Supplier Code of Conduct, which covers both environmental and social criteria.

#### Comments

Data covers the Swedish purchasing organization. Similar supplier evaluations might be integrated in other countries of operation in coming years, following evaluation of the process implemented in Sweden since 2019.

Critical suppliers are those accounting for 80 percent of the total purchase value of direct materials.

### Company specific indicator: Number of granted patents

Number of granted patents during the year	2016	2017	2018	2019
Group	26	19	46	37

For more information about this GRI Appendix, please contact:

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**Production:** Mycronic and Springtime-Intellecta  
**Photo:** Mycronic, Magnus Elqvist and Shutterstock  
**Print:** TMG Sthlm



# Product overview

## Assembly Solutions

### Application of solder paste



**MY700**  
**Next-generation jet printing technology**  
 Mycronic's jet printer MY700 precisely applies tiny drops of solder paste at high speeds onto all of the circuit board contact faces.

### 3D solder paste inspection (SPI)



**PI 3D SPI**  
**Perfect soldered joints, quite simply**  
 The PI series of advanced inspection machines is used for automatic three-dimensional inspection of solder paste on circuit boards.

### Component assembly



**MY300**  
**Productivity for smart factories**  
 The surface mount machine MY300 mounts components on circuit boards and offers high precision and great flexibility on a fast, compact and smart platform.

### 3D circuit board inspection (AOI)



**K3D AOI**  
**The smart way to the perfect circuit board**  
 The K series of advanced inspection machines is used for three-dimensional inspection of component placement and soldered joints on circuit boards.

### Production software



**Mycronic APM SW**  
**Intelligent software for the smart factory**  
 Mycronic offers a broad range of software tools for efficient control of electronics production, including tools for job preparation and planning, control of material flows, data analysis and traceability.

### Process control software



**SIGMA Link**  
**Turn your data into better products**  
 SIGMA Link is a process control tool for the manufacture of circuit boards, linking SPI and AOI data in order to measure, control and predict process variations.

### Die bonding



**MRSI-HVM**  
**Fast and flexible, with high precision**  
 Automated systems for production of microelectronics and optoelectronics used in the telecommunications industry, defense and aviation industry and AR/VR electronics.

### Camera Module Assembly and Test (CMAT)



**CMAT Modular Assembly System**  
**What leading sensor production system**  
 Fully automated solutions for assembly and testing of camera modules for the automotive industry and applications such as advanced driver assistance systems (ADAS).

### Component storage



**SMD Tower**  
**Intelligent material handling**  
 SMD Tower is an automated, scalable solution for safe storage of electronic components in a controlled environment.

### Tabletop robots for dispensing



**MYSmart MYT**  
**From prototype to mass production**  
 The MYT series of freestanding small tabletop robots is used for dispensing mounting fluids during electronics production. These robots are suitable for both prototype manufacturing and larger-series production.

### Dispensing system



**MYSmart MYD**  
**Mass production and 24/7**  
 The MYD series is used for dispensing mounting fluids during electronics production. This platform includes a wide range of applicators for many different applications.

### Conformal coating of circuit boards



**MYSmart MYC**  
**Protecting electronics with precision and versatility**  
 MYC50 is a high-performance system for conformal coating of circuit boards, permitting continuous high-volume production for a wide range of applications.

### Mask writer for displays



**Precision**  
**Unique world position**  
 The Precision series is used to manufacture photomasks, which in turn are used in the manufacture of displays.

### Measuring machine for display masks



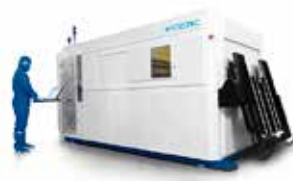
**Precision MMS**  
**Quality assurance**  
 Measuring machines that provide quality assurance of photomasks through precise measurement of the positioning of the written pattern.

### Mask writer for the semiconductor industry



**SLX**  
**Speed and cost-effectiveness**  
 SLX is used to manufacture photomasks, which in turn are used in the manufacture of semiconductors such as processors.

### Multi-purpose mask writer



**FPS**  
**Flexibility, productivity and stability**  
 The FPS series is used in the field of multi-purpose applications to produce slightly less complex photomasks for applications such as electronic packaging, touchscreens and MEMS (micro-electromechanical systems).

## Pattern Generators





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