



Made by Munksjö™

Part of Munksjö Annual Report

# Business Review

# 2016

## Content

### Group overview

- 1 The year in brief
- 2 This is Munksjö
- 4 CEO's comments
- 6 Vision, goals and strategy
- 8 Market focus

### Munksjö 2016

#### Business areas

- 10 Decor
- 14 Release Liners
- 18 Industrial Applications
- 22 Graphics and Packaging
- 26 Sustainability report
- 36 Munksjö for investors

### Munksjö + Ahlstrom

- 38 The new combined company

Munksjö's Annual Report 2016 consists of two parts. This part, the Business Review, is available in pdf format. The other part, the Financial Report and Governance is available also in Swedish and Finnish, in pdf versions on [munksjo.com](http://munksjo.com) and in printed copies.



## Paper substitutes plastic

Munksjö's specialty paper Cristal Evolution substitutes plastic for envelope windows, enabling an all-paper envelope.

Read more on page 24.



## Munksjö + Ahlstrom

Munksjö and Ahlstrom to combine, creating a global leader in sustainable and innovative fiber-based solutions.

Read more on page 38.



# Together we will form an even stronger company.


Read Jan Åström's CEO comments on page 4.

## More information



### Financial information and GRI index


Munksjö's financial information can be read and downloaded on [munksjo.com](http://munksjo.com). There you also find the GRI index for our sustainability reporting.

 [munksjo.com](http://munksjo.com)



### Information about our business

News as well as historical information about Munksjö can be found on our homepage.

 [munksjo.com](http://munksjo.com)



## 2016 in brief

- In November 2016 Munksjö and Ahlstrom announced the plan to combine the two companies. In January 2017 the combination was approved by the Extraordinary General Meetings of Munksjö and Ahlstrom. After approval from relevant competition authorities, the combination is expected to be completed in the beginning of the second quarter of 2017.
- Munksjö extended its Aderpack™ range of single-use baking papers with a 35 g/m<sup>2</sup> low basis weight paper. This exceptionally light paper enables a lower environmental footprint while maintaining high release performance and temperature resistance.
- The decision was made to invest EUR 14 million at the Arches site in France, to secure the leading position within abrasive backings. One of the paper machines will be rebuilt to allow for new product applications.
- A new 9,200m<sup>2</sup> storage center was inaugurated at the Rottersac site in France. By replacing several external storages, logistic conditions improve and CO<sub>2</sub> emissions are estimated to decrease with 3,500 tonnes, due to reduced transports.
- Munksjö's production sites in Stenay, France and Jönköping, Sweden, were awarded with OHSAS 18001:2007, a certification for the occupational health and safety management system. All of Munksjö's 12 production sites are now certified according to this standard.
- Munksjö became a member of the Forest Stewardship Council (FSC®) to further contribute to responsible management of the world's forests.
- Munksjö proved compostability of silicone coated paper. Release papers, used as carriers of self-adhesive labels, are papers coated with a thin layer of silicone. A third party laboratory analysis, proved that even after silicone coating the release papers are both biodegradable and compostable.

## The year in figures

EBITDA MARGIN (ADJ.\*)

# 12.0%

 (2015: 8.3%)

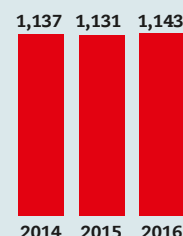
OPERATING CASH FLOW

# 114.3 MEUR

 (2015: 55.5 MEUR)

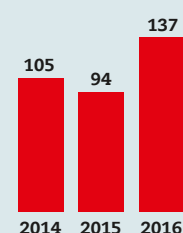
NET SALES

# 1,143 MEUR

 (2015: 1,131 MEUR)


EBITDA (ADJ.\*)

# 136.7 MEUR

 (2015: 93.6 MEUR)


RETURN OF EQUITY  
Decided at EGM in January 2017

# 0.45

EUR/SHARE

### Key figures

MEUR	2016	2015	2014
Net sales	1,142.9	1,130.7	1,137.3
EBITDA (adj.)*	136.7	93.6	105.0
EBITDA margin, % (adj.)*	12.0	8.3	9.2
Operating result (adj.)*	81.5	40.0	51.0
Operating margin, % (adj.)*	7.1	3.5	4.5
Capital expenditure	39.2	39.8	35.1

\* Adjusted for items affecting comparability

# Munksjö is a world-leading manufacturer of advanced paper products

**Munksjö's vision is to** be the leading manufacturer of advanced paper products developed with intelligent paper technology, enabling a customer-specific, innovative and environmentally friendly product design.

## Strategy for improved profitability

The profitability improvement plan to reach the 12% target for the EBITDA margin at the end of 2016 included measures to increase operational efficiency, profitable growth, product and service quality leadership and benefiting from our unique position and strong innovation platform.

EBITDA MARGIN 2016 (ADJUSTED)

# 12%

→ Read more about our strategy and financial goals on page 6.

## Munksjö's business areas

### DECOR

#### High quality demands

Decor paper is mainly used for surfacing of products such as floors, kitchens and furniture, among other things to imitate wood and stone patterns. Munksjö has an excellent reputation for quality and is a leading supplier to customers in 50 countries worldwide. The Group has been manufacturing decor paper since 1948.

SHARE OF NET SALES 2016

# 31%

Read more at page

10

### RELEASE LINERS

#### A high value-added range

Release papers are used as carriers of for example self-adhesive labels. The high value-added range covering all market applications is supplied to customers in more than 40 countries worldwide. Self-adhesive labelling was invented in the 1930s for price labels, and areas of usage have since then grown massively.

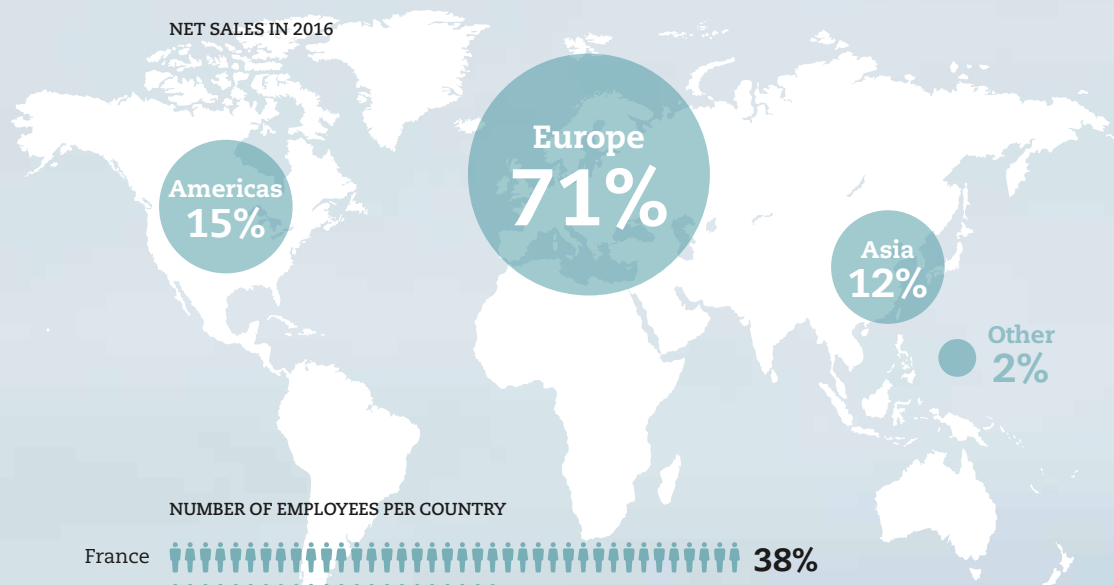
SHARE OF NET SALES 2016

# 39%

Read more at page

14

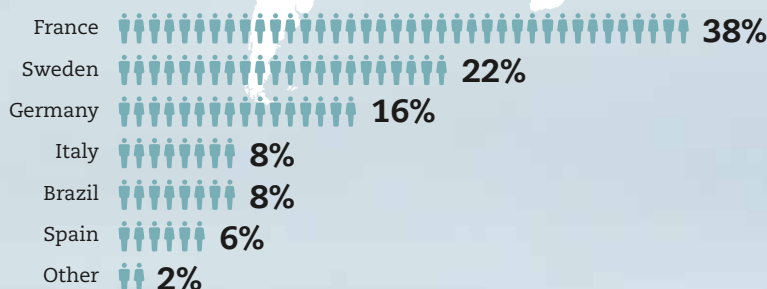
NET SALES IN 2016



### Global reach with local presence

Munksjö has approx. 2,900 employees worldwide. Operations are conducted in Europe, USA, Asia and South America. Most of the production facilities are located in Europe and the head office is in Stockholm, Sweden.

NUMBER OF EMPLOYEES PER COUNTRY



### Leading positions

Munksjö has leading global positions within decor paper, release liners, electrotechnical paper and abrasive backings.

➔ Read more about our offerings on pages 10–25.

### Selected niches

Munksjö focuses on selected niches of the specialty paper market, where products can be sold at a price premium.

➔ Read more on page 8.

### Sustainable solutions

With renewable wood fiber as the basis for all our materials, we have a fantastic starting point for a sustainable offering.

➔ Read more about our sustainability work on page 28.

### Strong share development

In 2016 the share price increased 84 per cent on Nasdaq Helsinki and 79 per cent on Nasdaq Stockholm.

➔ Read more in the section Munksjö for investors on page 37.

## INDUSTRIAL APPLICATIONS

### High-tech products

Products within this business area range from premium artist paper to electrotechnical paper and abrasive backings. Several products have advanced usage areas that must constantly evolve to meet new demands from customers and end consumers of applications that include our products. Munksjö started to manufacture electrotechnical paper for insulation of cables already in 1909.

SHARE OF NET SALES 2016

15%

Read more at page

18

## GRAPHICS AND PACKAGING

### Flexible solutions

Munksjö offers one of the widest paper ranges for flexible packaging, bottle labelling and process applications. Customers served are for example in the food and beverage industry worldwide. Collaboration with customers is essential to innovate and meet customers and end-users expectations and requirements.

SHARE OF NET SALES 2016

15%

Read more at page

22

# Record high full-year results and 12% target reached



I am proud of our team and strong execution and very pleased with the development in 2016. We have reached our ambitious targets and delivered an EBITDA margin of 12 per cent for 2016. We have further announced the plan to combine Munksjö and Ahlstrom through a merger to create a global leader in sustainable and innovative fiber-based solutions, with an expected EBITDA margin target of above 14 per cent.

2016 was a fantastic year for Munksjö. We continued to focus on streamlining the operations and on growing our business with excellent results. Net sales increased to EUR 1,142.9 (1,130.7) million, with an adjusted EBITDA of EUR 136.7 (93.6) million, an improvement of EUR 43 million or 46 per cent. Approximately half of the improvement was due to our own actions to increase efficiency, and the balance a result of favourable cost conditions. Our target, set in 2013, to reach an EBITDA margin of 12 per cent at the end of 2016 was met, despite a tough start from the level of 8.3 per cent when we entered the year.

Business wise, the business area Industrial Applications delivered organic growth, supported by innova-

tion. A new abrasive backings product line was launched and a decision to invest in the Arches site will secure the leading position within this product segment. In Release Liners, continued focus on product development resulted in a strengthened product portfolio and improved value proposition. The business in Brazil is still subject to a challenging business environment but showed a recovery supported also by increased export. The release paper mill in La Gère significantly improved its productivity, following strategic upgrade measures. Within Decor delivery volumes increased significantly and results improved due to overall strong demand and improved market shares in fast developing markets, such as China,

Iran and Asia. For Graphics and Packaging the competition is still tough but we managed to improve results, although from a low level.

A major event during the year was the announcement of the planned merger between Munksjö and Ahlstrom. It is a strategic fit adding scale, competence, geographies and products, making the combined company an excellent platform for further growth. Also, over the past few years both Munksjö and Ahlstrom have focused on streamlining their operations and improving operational efficiency, which is clearly visible in the 2016 results. Thus the planned combined company is in a healthy state with preliminary annual net sales of approximately EUR 2.2 billion.

## Leading positions and global reach

Munksjö's leading positions in abrasive backings and electrotechnical insulation paper have remained solid during the year, as have the positions within release liners and decor paper. In the new combined company, Ahlstrom will add a leading position within the product area of filtration, including products such as fuel filters, air filters and gas turbine filters. The planned combination will create a global leader in sustainable and innovative fiber-based solutions.

During 2016, Munksjö expanded its sales worldwide, but the platform and regional focus continued to be Europe. The combined Munksjö and Ahlstrom will generate a truly global presence and add possibilities to further expand especially in the North American and Asian region. Thus, the complementary geographical footprints open up new growth opportunities, and will enable a more diversified revenue base.

## Value added to customers

Product and service quality, technology know-how and innovation capacity are some of Munksjö's key assets. In 2016,

enhancing the existing product lines, focusing on quality and innovating new high-tech solutions have been part of the daily activities, resulting in innovative products such as the 2016 extension of the Aderpack™ range with a 35 g/m<sup>2</sup> low basis weight paper for baking and cooking applications.

The planned combination of Munksjö and Ahlstrom will enable further strengthening of the product portfolio in the areas of automotive, food and beverage and in building and construction. For example, Munksjö has a strong position in abrasive backings where automotive is an important end-market, while Ahlstrom has a strong position in for example oil, fuel and air filters used in automotive applications.

#### **Improved profitability**

During 2016 we have continued to optimize production capacity, supported by volume growth and improved productivity, and the profitability improvement programme with the 12 per cent EBITDA margin target has remained in focus all through the year. Continued focus on operational efficiency has contributed to the margin improvement. Product and service quality as well as market and innovation leadership also contributed to the outcome.

In the planned combined company, organisational streamlining within general, administrative and sales expenses, combination of administration for closely located sales offices and mills and coordination of purchasing and production are major factors for the planned annual synergies of EUR 35 million.

#### **Delivering growth**

An important element and also part of the EBITDA profitability improvement plan has been profitable growth. In addition to quality and innovation, our customer relationships and our ambition to be a partner remain cornerstones of our strategy.



Munksjö showed excellent results in 2016 and we managed to reach our 12 per cent EBITDA margin target. The planned combination with Ahlstrom will add scale, competence, geographies and products, making the combined company an excellent platform for further growth.

I personally believe that the merger between Munksjö and Ahlstrom will improve the position to serve customers, mainly due to operational scale but also to the expanded product portfolio. We can move further up the value chain from raw materials into converting and position ourselves as a global leader in sustainable and fiber-based solutions and in this way move closer to the end-customers.

#### **Safety and sustainability**

In our ambition to achieve our zero accident target, we launched a new suite of measures and leading indicators during 2016, to continue our efforts to create a culture of preventive safety. We also developed a new sustainability policy to further emphasize that sustainability shall be part of our way of conducting business. We implemented a new Supplier Code of Conduct and have initiated desk and field audits to develop long term cooperation with our suppliers. In addition, Munksjö participates in Forestry Stewardship Council (FSC®) meetings and working groups to contribute to sustainable forest management and trade in forest products.

#### **Skilled people**

Finally, I would like to take the opportunity to thank all employees for all the hard work during 2016 and for the

excellent results. 2016 was the best performing year since I became CEO of Munksjö nine years ago, and I now look forward to leading the combined company, once we have all the approvals needed and the transaction is completed. I firmly believe that we also have an enhanced ability in the combination to retain and attract talent. The skilled employees, the high quality service and technical support that make up an important share of our value added services to our customer, in combination with our innovative and high-tech products form a strong platform for 2017.

With this in mind I feel confident about the proposed targets for the new group: EBITDA margin above 14 per cent over a business cycle, net gearing below 100 per cent and an ambition of a stable and annually increasing dividend and I look forward to yet another exciting year at the helm of Munksjö and eventually of the combined Ahlstrom-Munksjö.

Jan Åström  
President and CEO

## Vision

Munksjö's vision is to be the leading manufacturer of advanced paper products developed with intelligent paper technology enabling a customer-specific, innovative and environmentally friendly product design.

## Financial goals

EBITDA margin over a business cycle

12%

OUTCOME 2016

12%

The plan to reach the target included measures to increase operational efficiency, profitable growth, quality leadership and utilizing the market leader position.

Debt/equity ratio

<80%

OUTCOME 2016

39%

The net debt/equity ratio shall not exceed 80 per cent. The net debt/equity ratio is interest-bearing net debt divided by total equity.

Dividends of operative cash flow

>1/3

OUTCOME 2016

0.45  
EUR/share

The payout ratio shall be at least one third of net cash flow from operating activities, after investments, calculated as an average over a three-year period.

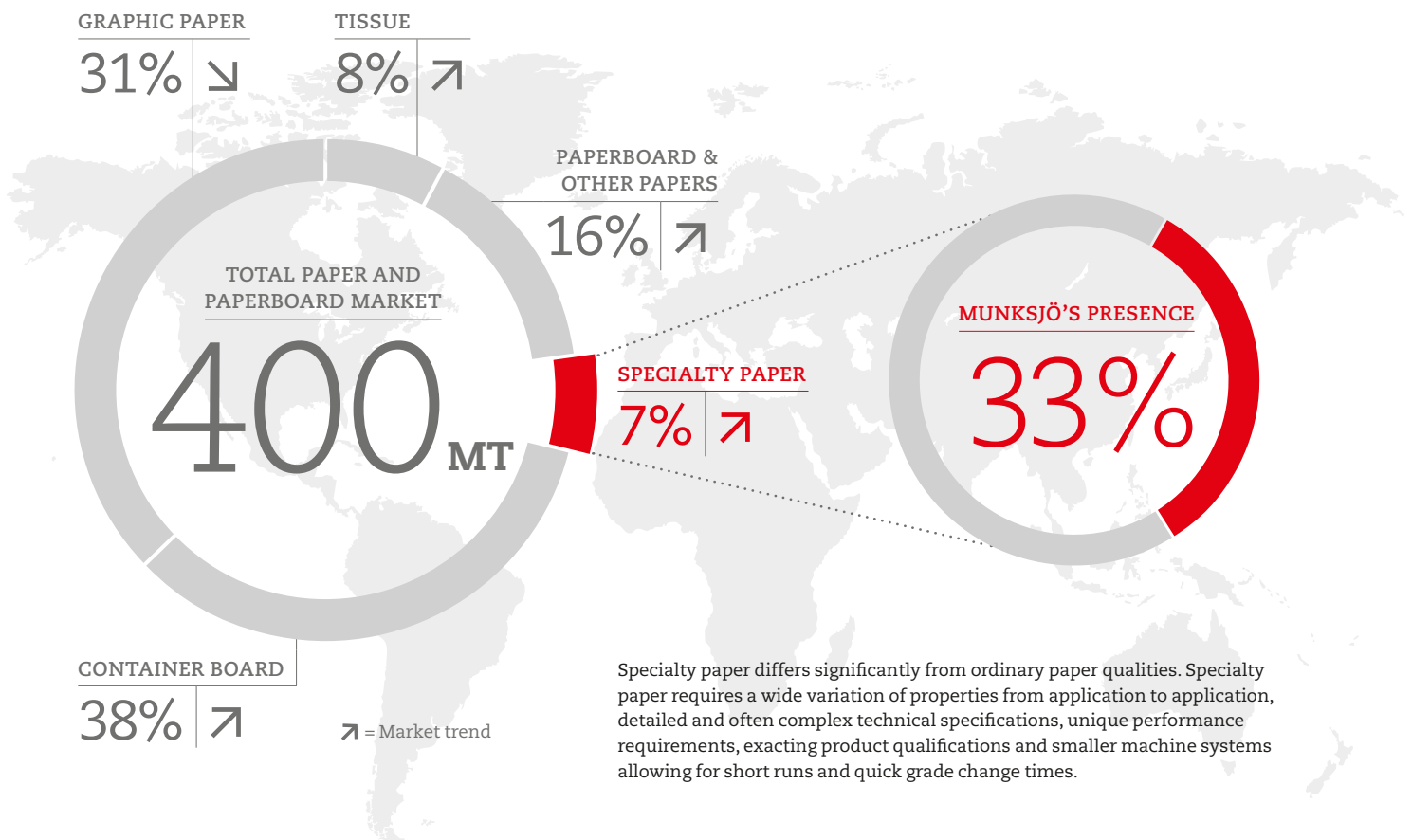


## Strategy

	STRATEGIC RATIONALE	EXAMPLES OF ACHIEVEMENTS IN 2016	EXAMPLES OF FOCUS AREAS GOING FORWARD
<b>Profitable growth in specialty paper</b>	We shall grow through organic and strategic initiatives, and focus on specialty paper markets with underlying growth (driven by a growing middle class, urbanisation, resource scarcity, upgrades of power grids and the transition to a sustainable society).	<ul style="list-style-type: none"> <li>→ Solid organic growth in volumes.</li> <li>→ Agreement with Ahlstrom to propose a combination of the companies.</li> <li>→ Decision to invest MEUR 14 in the Arches mill to secure leading position within abrasive backings.</li> </ul>	Reinforced focus on the next step in our strategic growth journey through the planned combination between Munksjö and Ahlstrom.
<b>A leading supplier in all our markets</b>	We want to be a leading supplier in all our markets, driving customer-specific innovation to stay top of mind for our customers.	<ul style="list-style-type: none"> <li>→ Red Line – abrasive backings with optimal tear strength.</li> <li>→ M-FOIL PN – formaldehyde free decor paper for the foil market (e.g. in furnitures).</li> <li>→ New grade of Acti-V® to serve industrial customers.</li> </ul>	Reinforcing joint innovation efforts focused on customer needs.
<b>Highest quality in products and services</b>	We offer superior quality and service, unique know-how, and reliable supply to meet our customers' needs.	<ul style="list-style-type: none"> <li>→ Global customer research to ensure we meet and exceed our customers' needs.</li> </ul>	Invest to further improve our quality leadership.
<b>Operational efficiency</b>	We continuously improve and streamline our operations to ensure cost efficiency in our production system, supporting functions, and ways of working.	<ul style="list-style-type: none"> <li>→ New storage center in Rottersac to facilitate logistic flows, reduce carbon footprint and enable a better quality control of packaging.</li> <li>→ Measures to significantly improve productivity in the La Gère mill in France.</li> </ul>	Roll-out of best-practice sharing structure between mills.
<b>Employees, organisation, health and safety</b>	We drive our improvements through engaged employees, entrepreneurial leaders, a lean and efficient organisation with accountability in focus – and with a health and safety mindset in all we do.	<ul style="list-style-type: none"> <li>→ New health and safety leading indicators to better prevent work-related accidents.</li> <li>→ The first common group-wide employee engagement survey was conducted.</li> </ul>	Continued focus on zero accident target.

# Strong focus on selected niches

Munksjö focuses on selected niches within the specialty paper market that account for 7 per cent of the total paper market. The specialty paper market is growing and requires specific competence and customized products, enabling a price premium. The strongest competitive factors are product performance and quality, service level and degree of customization.



## Customers' demand

In 2016 Munksjö's global customer survey showed that as many as 86 per cent are likely or very likely to choose Munksjö again as supplier, which was in line with the last survey. Area for improvement are supply chain flexibility. Areas that are especially important for our customers are product performance and quality, service level and degree of customization. Sustainability aspects on supply, production processes and products and services are of growing interest, and this goes hand in hand with Munksjö's own ambitions in this area.



For more information see the Sustainability report on pages 26–35.

## High product performance and quality

- Lifetime of paper
- Superior printability
- Flawless release properties
- Excellent insulation properties
- Lighter materials (lower basis weights, less waste)
- Strict food safety requirements

## High service level

- Deep technical expertise
- Cutting-edge innovation
- Flexibility and security in delivery

## High degree of customization

- Customer-specific solutions
- Often small volumes/batches

# Global megatrends drive long-term growth

Munksjö's specialty paper markets are growing, in contrast to traditional paper markets such as newsprint. Munksjö is affected by many of the megatrends that are shaping the world's future, and we see four of these as particularly important to our businesses: demographic trends, globalisation, sustainable society, and digitalisation.



## Demography

A growing middle class, especially in developing regions, drives demand for the automotive industry, and in turn Munksjö's abrasive backings. Also it increases demand for furniture in the low or mid prices ranges, driving demand for Munksjö's decor paper.

- Growing population and increasing middle class
- Urbanization
- Changing lifestyles and consumption habits



## Globalisation

The increased flow of goods globally leads to a growing need for product marking and labeling to track goods, which increases demand of Munksjö's release liners.

- Increasing cross border interdependence
- New markets and new supply chains
- Growing mobility and networked society



## Sustainable society

Munksjö's increased focus on sustainability is in accordance with the growing customer demand for products that are responsibly sourced, resource efficient, fit for purpose, recyclable, renewable and biodegradable.

- Growing environmental awareness
- Resource scarcity and growing waste concerns
- Increased safety awareness



## Digitalisation

"Print on demand" for small batches and customized designs are trends in several Munksjö businesses, for example decor paper for furniture. Digitalisation increases demand of new services and processes, and enables production efficiency.

- New trends and technologies such as Big Data, Internet of things, cloud services, digital printing
- Optimized processes and next level of automations
- New services in the value chain

# Decor: Advanced technology creates added value

SHARE OF NET SALES 2016

# 31%

EBITDA MARGIN (ADJ.\*)

# 14.7%

GOAL 15-16%

DELIVERY VOLUMES, TONNES



# 182,800 TONNES

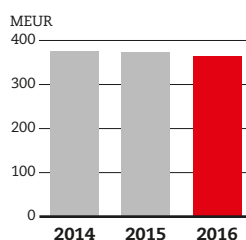
EMPLOYEES



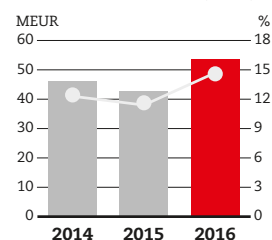
# 846



## Net sales



## EBITDA and margin (adj.\*)



## Key figures

MEUR	2016	2015	2014
Net sales	364.6	372.6	374.7
EBITDA (adj.*)	53.7	42.6	46.2
EBITDA margin, % (adj.*)	14.7	11.4	12.3
Operating result (adj.*)	46.3	34.6	37.1
Operating margin, % (adj.*)	12.7	9.3	9.9
Delivery volumes, tonnes	182,800	183,400	180,300
Employees, FTE	846	855	877

\* Adjusted for items affecting comparability (IAC)

**Munksjö Decor is one of the global leaders in decor paper and provides innovative product solutions and services designed for customers' specific needs. Decor paper is a specialty paper for surface upgrading of wood based panels that find their final application in furniture, interior and exterior architecture or laminate flooring. Munksjö's decor paper has an excellent reputation of quality, which is a key strength when customers choose Munksjö as their preferred supplier.**

### Profitable and sustainable growth

Delivery volumes in 2016 were stable. The business area reported net sales of EUR 364.6 (372.6) million with an EBITDA (adj) of EUR 53.7 (42.6) million, corresponding to an EBITDA margin (adj) of 14.7 (11.4) per cent.

The major megatrend clearly affecting the decor paper business positively is demography. A growing population and urbanization increases demand for furniture and interior products made of laminates. With increased welfare, there is a growing interest in innovative interior design solutions, where laminate products are an excellent option.

Decor has a strong global presence, with manufacturing in Europe via paper mills in Arches, France, in Unterkochen and Dettingen, Germany and in Tolosa, Spain. Decor's marketing and sales activities are run from a joint sales organization in Aalen, Germany, combined with local sales offices and sales agents around the world.

The Asian and American markets have the highest growth potential, offering opportunities for future business development.

### Product and solutions

Decor provides unique customized support to make the decor paper solutions work efficiently, thus making the customers more successful when choosing Munksjö's decor papers. With an expert technical customer service team, Munksjö delivers local assistance to customers all over the world, paper grade optimization, process interactions, trouble shooting analysis and support in defining the technical requirements from the colour matches to the industrial paper.



Munksjö produces decor paper in a wide range of colours according to customers' specifications. The colour range comprises some 10,000 colours, whereof the predominant colour is white with approximately 200 different shades. A major share is printed with designs like wood grain, stone or abstract decors. Subsequently, the decor papers are impregnated with melamine, polyester or a mixture of urea and melamine resin and laminated onto a wood based substrate such as particle board or MDF.

The final product is used in furniture manufacturing, interior and exterior architecture or laminate flooring. Surfaces utilizing impregnated decor paper offer several advantages including scratch and fade resistance and preservation of rare tropical woods. They are easy to clean and offer almost unlimited design variations.

The business area Decor divides its businesses into five categories:

**Print-base paper** is white or solid coloured decor paper ready for print, mainly used for laminate flooring and furniture production. It is a high-tech paper with a very smooth surface, dimensional stability and good printability behavior.

**Decor paper for high- and low-pressure lamination** is especially geared to this further processing step, offering high colour consistency and technological features for fast and economical impregnation. After lamination, decor papers become durable and achieve the surface properties that make this product best suitable for use in environments involving rough wear and tear, like kitchen furniture and worktops, office furniture and outdoor building facades.

**Backer paper** prevents wood-based boards from bending during lamination. Backer paper must withstand moisture and temperature fluctuations.

**Pre-impregnated decor paper** is a partly pre-impregnated foil base paper offering high internal bond level and high printability results suitable for finish foil applications. After printing, lacquering and gluing onto wood substrate the finished product is suitable for furniture, doors, laminate flooring, ceiling and wall covering applications.

**Thin print paper** is mainly used for pharmaceutical and cosmetic leaflets, as packaging inserts. The main component is pulp, selected according to strict criteria to ensure product quality and sustainability.

### Innovation

At Munksjö's unique research center in Apprieu, France, some 40 paper engineers and chemists work in cooperation with customers to develop the next generation of products with the intention to create future value for its customers.

Munksjö's innovation capacity is a key asset for its endeavor to grow. The strategy is to further develop and enhance the existing product line and innovate new high-tech solutions that can differentiate Munksjö's products from the competition. The in-depth expertise in paper technologies adds value.

Reflecting end user demands, sustainable solutions have become a key focus area for Munksjö's customers. This has resulted in a number of new innovations and collaborations between Munksjö and its customers to bring clean and green solutions to the market. The new generation pre-impregnated foil base papers, without formaldehyde in the resin system, is one example. Munksjö together with a partner succeed in developing a product, the M-FOIL PN, with enhanced capabilities such as glue ability and printability, without having to compromise on the sustainability parameters.

One of Munksjö's competitive advantages is its customer relationships, achieved through trustworthy customer services. The collaboration between Munksjö and its customers is close and involves technical partnerships to develop new concepts of sustainable solutions. This collaboration is a key

pillar of our innovation strategy: offering products with competitive advantage and profitable growth potential. At the same time, cost consciousness is a key driver for providing our customers with just the right paper solution.

### Quality and sustainability

Munksjö has a strong market position in paper-based surfacing for wood-based materials. The main contributor to this is the long-term proven quality in products and services, gained from years of experience and market understanding.

Sustainable sourcing has also become a prerequisite. The balance between the material mix and sustainability considerations is of great importance, as quality and consistency can never be compromised. Munksjö's decor papers are certified according to FSC® (Forest Stewardship Council®) or PEFC™.

For a laminator or an impregnator there are a number of significant quality requirements that steer their investment decisions in decor paper products. The specialty paper needs to be technically advanced and highly engineered to fulfill the requirements of printability, glue ability and certain high quality surface properties. Munksjö is also actively involved in trend analysis and monitoring interior design to under-

stand the end user requirements in terms of colour schemes and design patterns.

### Operational efficiency

The EBITDA margin (adj) of 14.7 (11.4) per cent for 2016 reached the range of the target of 15–16 per cent at the end of 2016. Profitability improvement actions and lower variable costs more than compensated for lower average price.

The aim is to continue to improve operational efficiency, as well as to optimize the manufacturing process and improve the product mix. All production lines in all mills are constantly monitored for efficiency, debottlenecking of processes and further reduction of energy costs. For example, when a paper machine in Unterkochen was upgraded to increase the speed by 10 per cent, this automatically resulted in a substantial increase in output and also in energy savings.

The streamlining of the manufacturing is done without compromising on the quality of the output, or levels of emissions, water volumes, energy efficiency and responsible sourcing. Being more efficient also means making safety a priority. Working in a safe environment is the best base for employees to contribute positively and efficiently to the development of the Decor business area.



### Kitchen furniture

In the kitchen furniture industry decor papers are used for the surface upgrading of wood based substrates. The decor papers are in white or solid colours or are printed with wood grains, stones or fantasy designs. Worktops, carcasses and cabinet fronts are some of the typical applications where decor paper gives the surface its final properties and aesthetics.



### Flooring

Laminate flooring is one of the most frequent applications of decor paper. The paper is printed with wood grains or other pattern designs and then saturated with thermosetting melamine resins. The laminate flooring surface is obtained by pressing the melamine film directly on the wood based panel. Decor paper offers a very good compromise between durability and cost level.



## Unique design and colour trends know-how brings customer value

Colour is a daily source of inspiration to create novelties and to renew our interior and exterior environment. Through the cooperation with a design studio, Munksjö Decor offers unique design competence and solid color trends know-how to its customers.

Every year Munksjö produces a new trend collection on solid colours, showing the future orientation of the decoration market, decor ideas, colour harmonies and atmospheres. The purpose is to contribute to our customers' success by delivering insights about coming end market requirements. Future colour orientations in the interior decoration market is typically the kind of high value information requested by the laminate manufacturers to anticipate the basic consumption reflex and standards to come.

With its unique design competence Munksjö is also in a position to assist in colour workshops, refreshment of existing customer collections, creation of combinations between printed designs and colours or other colour advice.

Munksjö's professional colour trend expertise is unique for a decor paper producer and a strong differentiator compared with its decor paper competitors.

# Release Liners: Product and service quality in focus

SHARE OF NET SALES 2016

# 39%

EBITDA MARGIN (ADJ)

# 13.3%

GOAL 12-13%

DELIVERY VOLUMES, TONNES



# 515,300 TONNES

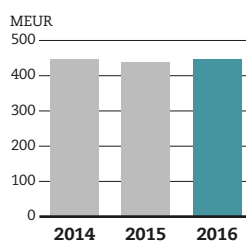
EMPLOYEES



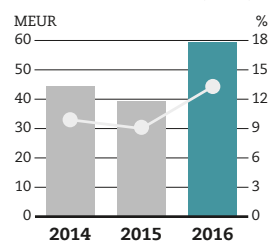
# 843



## Net sales



## EBITDA and margin (adj.\*)



## Key figures

MEUR	2016	2015	2014
Net sales	448.4	437.6	446.0
EBITDA (adj.*)	59.6	39.5	44.3
EBITDA margin, % (adj.*)	13.3	9.0	9.9
Operating result (adj.*)	31.3	11.4	16.1
Operating margin, % (adj.*)	7.0	2.6	3.6
Delivery volumes, tonnes	515,300	498,700	512,200
Employees, FTE	843	859	845

\* Adjusted for items affecting comparability (IAC)



The business area's broad range of high quality, reliable release papers perform the key function of carrying self-adhesive labels or materials. Application areas include printed labels for food, beverage, household consumer goods and carriers for adhesive components in industrial processes. The main customer segments, producers of self-adhesive laminates or silicone coated release liners, require consistent, high performance and efficient solutions, with sustainability as an increasing driver. The business area also produces specialty pulp for highly purity, technical applications.

### Profitable and sustainable growth

During 2016, the delivery volumes increased. The business area reported net sales of EUR 448.4 (437.6) million with an EBITDA (adj) of EUR 59.6 (39.5) million, corresponding to an EBITDA margin (adj) of 13.3 (9.0) per cent.

Out of several megatrends that influence global businesses, digitalization has a rather direct and concrete impact on usage of release liners. Changes in consumers' buying behavior and the steep growth of e-commerce create new packaging and logistic process needs. The growing requirements for tracking and identification through this complex supply chain are driving usage of self-adhesive solutions for coding packages.

### Products and solutions

Major customers for Munksjö's release papers are producers of self-adhesive laminates for labeling application and producers of silicone coated release liners.

The first type of industry represents by far the largest customer segment and share of the business area's turnover. These producers receive rolls of Munksjö's release papers and apply a silicon coating, an adhesive coating and a top face material, in a lamination process which can exceed speeds of 1,000 meters a minute. The laminate rolls are then supplied to printers of self-adhesive labels. Large application areas for the printed labels include food, beverage, household consumer goods, or

pricing and tracking, either in the supply chain or at point of sale. The market for self-adhesive laminates is rather consolidated and a few large global players own a considerable market share. Munksjö serves laminators in all major regions, with a relatively higher portion in Europe and South America, where its production sites are located. In South America, Munksjö also supplies laminators with face material, thanks to the production of coated label papers in its Brazilian mill.

Another key customer segment is industrial producers of silicone coated release liners. This industry represents a smaller but important share of the business area net sales, is relatively



### Lumimax™ Premium

This label paper produced in Jacareí, Brazil, receives a glossy coating on one side. Munksjö's customers for this product are laminators, who manufacture self-adhesive laminates for self-adhesive labelling of consumer products such as packed food or cosmetics. Lumimax™ Premium ensures a visually appealing result, thanks to very even formation, and to high whiteness, brilliance and smoothness of its coating, reliably delivering high impact printed labels.

more fragmented and regionally concentrated, with most companies operating only in one continent. These customers apply a layer of silicon coating on one or both sides of Munksjö's specialty papers, according to application specific formulations. They market silicone coated liners to a broad array of customer industries and applications who require carriers for adhesive materials and components or for industrial processes. Due to that, they have developed a diversified variety of silicon coatings for a variety of materials, which result in different performances depending on the specific industry's requirements. Some materials need to provide an easy release, others much tighter; some need to withstand high temperature, other chilly or wet environments. End use segments include medical, transportation, building and electronic industries, to name a few.

The main competitors for Munksjö release paper are products supplied by other producers of specialty papers and, to a lesser extent, plastic films.

In addition to papers for these customer groups, the business area also produces specialty pulp in Aspa Bruk in Sweden dedicated to manufacturing of bleached and unbleached long-fiber specialty pulp. Customer for bleached pulp include producers of sanitary and hygiene products and require high standards for brightness, purity and strength.

The main customers for unbleached pulp are producers of electrotechnical papers, filters, as well as hygiene products and cardboard.

### Innovation

The ability to innovate represents a key factor to support differentiation and strengthen value proposition, particularly in market segments otherwise subject to the risk of commoditization.

Munksjö has demonstrated competence in developing and enhancing products and services both independently as well as in collaboration with customers. The evolving range of Acti-V® family of release papers is a good example of such capability, and has been widely recognized as a highly innovative advance. The release paper

market has traditionally had few radical innovations, but Munksjö's patented Acti-V® has proven the possibility to develop and market remarkable novelty.

Flexibility and ability to customize certain product properties are often also an important element, especially when addressing the demands faced by producers of silicone coated release liners in the diverse segments they serve. A constant technical dialogue involves monitoring the evolution of performance requirements and fine tuning of product features accordingly. In many cases the speed and the efficacy in meeting new requirements and specifications are critical to success.

### Quality and sustainability

As in all Munksjö businesses, high quality is a fundamental requirement. It increasingly represents a prerequisite, though not a sufficient element for success.

Munksjö applies a continuous improvement methodology to all areas of activity. The business area products are used in complex value chains, where each transformation or end-use step relies on consistent quality of Munksjö's materials and set requirements for exact functional properties. A close supplier-customer bond is crucial to define the relevant parameters which determine the metrics of quality and performance. The business area has thus increased focus on this area, for further strengthening of technical relationship with customers and continuous improvement in quality and service levels. A similar and structured effort is applied in spreading quality awareness and accountability throughout the organization and to suppliers.

The business of producers of self-adhesive laminates is tightly connected to large retail and consumer brand owners, whose demand for sustainable materials and solutions continues to increase. Munksjö's release papers combine paper's inherent and unique environmental benefits of renewability, biodegradability and recyclability, with responsible policies of sourcing from sustainable and certified fiber sources. Collaboration in the value chain for setting of common sustainability metrics will also grow in relevance.

Even if the environmental demands faced by industrial siliconizers might still be less explicit, some sustainability considerations have a significant impact on this release liner segment as well. One is miniaturization, or the aim to reduce weight and size of electronics or other consumer goods, and thereby reduce energy and materials consumption. In order to achieve these goals, the process of joining components mechanically is being increasingly substituted by the use of technical adhesive materials, which require release carriers. Reducing weight for fuel efficiency is also a key focus for all transportation industry segments. Substituting metals in airplanes or vehicles with much lighter and equally strong composite materials is a solid ongoing trend, which drives demand for high performance silicone coated release liners used in the production processes or in the application of such reinforcement materials.



### Operational efficiency

The EBITDA margin (adj) of 13.3 (9.0) per cent for 2016 reached the range of the target of 12–13 per cent at the end of 2016. Profitability improvement actions, lower variable costs and higher volumes compensated for higher fixed costs.

Both fixed and variable cost management are key tools for reaching the business area financial targets. Operational efficiency of the production units is in constant focus, through planning and continuous progress in the key metrics of efficiency, productivity, quality and cost performance. During the last few years significant actions were implemented to streamline the organization and improve processes of the business area's manufacturing platform. This involved the execution of various restructuring programs, including the one carried out in the Turin mill in Italy in 2016. The program was coupled with optimizing of process flows and investment in new automation, notably in the packaging and shipping areas.

The business area has also taken a structured approach to product and process engineering, in order to maximize control over the relations occurring in between raw material components, process parameters and product characteristics, with the ultimate aim of optimizing the cost performance ratio.

To achieve the best results, Munksjö also partners with its key suppliers, leveraging on their specific fields of competence for an efficient use of resources or advances in raw material performance.

### Acti-V® Industrial

These technical super-calendered release papers are produced at La Gère mill in France. Munksjö's customers coat them with a thin silicone layer on each side, to release highly tacky materials. A growing industrial application for such silicone coated liners is the production of resin impregnated fiber composites reinforcements, increasingly used in aeronautics for their strength and light weight. Acti-V® Industrial has to meet highly specified requirements for quality, consistency and performance.



## Munksjö proves compostability of silicone coated release liner

Third party analysis commissioned by Munksjö in 2016 revealed that the typical silicone coated paper carrier of self-adhesive labels meets biodegradability and compostability requirements of EN 14046:2003 and EN 13432 standards. Paper is made from fully renewable natural resources, is recyclable and biodegradable in a short time. The study intended to assess the impact of coating a silicone layer on the paper surface – an operation typically performed by Munksjö's customers – on biodegradability and compostability of the material. Release papers are coated with a layer of silicone to serve as release carriers of self-adhesive labels through printing, cutting and application to a wide range of products.

Those tests prove that silicone coated release papers remain both

biodegradable and compostable, like the paper substrate they are based on. Recycling always represents a preferred end-of-life option, and surveys report that paper recycling rates in Europe are the highest among various materials, even in the specific field of release liners. Additionally, thanks to biodegradability, the environmental impact of residual paper release liner waste, eventually not recycled at the end of its life-cycle, will be lower than that of materials based on non-renewable resources.

The study was performed by Ecol Studio, an environmental analyses laboratory accredited by Italy's National Accreditation Body Accredia, in compliance with ISO 17025:2005 standards and EN 45000 European norms.

# Industrial Applications: High technical competence in niche markets

SHARE OF NET SALES 2016

# 15%

EBITDA MARGIN (ADJ)

# 18.6%

GOAL 15-16%

DELIVERY VOLUMES, TONNES

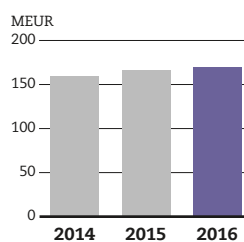
 **87,200** TONNES

EMPLOYEES

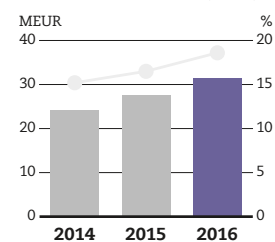
 **588**



## Net sales



## EBITDA and margin (adj.\*)



## Key figures

MEUR	2016	2015	2014
Net sales	169.6	166.6	159.2
EBITDA (adj.*)	31.5	27.5	24.2
EBITDA margin, % (adj.*)	18.6	16.5	15.2
Operating result (adj.*)	23.9	19.6	16.7
Operating margin, % (adj.*)	14.1	11.8	10.5
Delivery volumes, tonnes	87,200	85,100	84,000
Employees, FTE	588	574	556

\* Adjusted for items affecting comparability (IAC)

Industrial Applications represent a wide variety of high tech specialty papers with customers in various niche segments of the specialty paper market. Within abrasive backings, electrotechnical paper and fine art paper Munksjö holds leading positions. The customers aim at high quality and cost efficient production processes, where Munksjö's products form a small but often critical part. Manufacturers of abrasive materials, the wood working industry and transformer manufacturers represent a majority of the business area's customers.

### Profitable and sustainable growth

During 2016, the delivery volumes were higher. The business area reported net sales of EUR 169.6 (166.6) million with an EBITDA (adj) of EUR 31.5 (27.5) million, corresponding to an EBITDA margin (adj) of 18.6 (16.5) per cent.

The business area consists of five quite different business units, but one common denominator that affects all the businesses is the megatrend of demography. It drives the manufacturing of durable goods, increased power distribution as well as overall activities in the woodworking industry – all areas that Munksjö addresses through its product offerings in Industrial Applications.

In terms of geographies, Munksjö has a strong foothold in Europe, where its major strengths include the long-term customer relationships and its strong distributor channels.

### Products and solutions

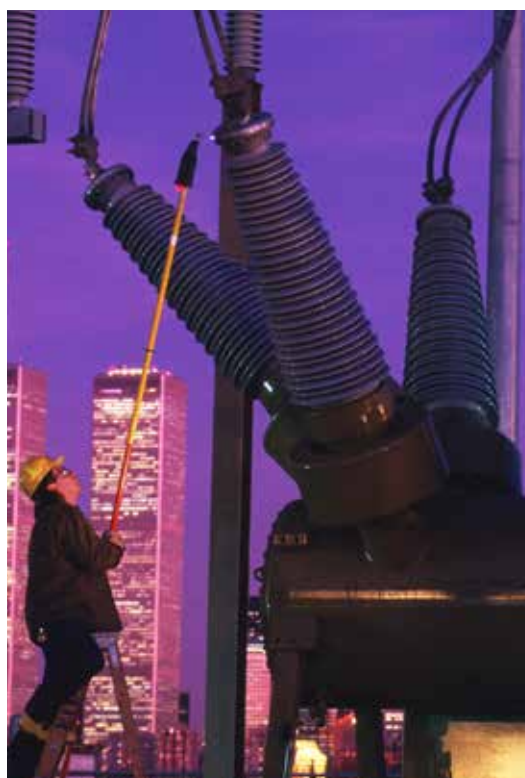
Industrial Applications creates customer value by offering customized solutions through high technical competence combined with focus on innovation, quality and consistency in small niche markets. The close iteration between Munksjö and its customers is divided into commercial and technical customer support. There is a close dialogue between the conventional sales team, the key account managers and the agents on the one hand, and the more technically driven customer support which discuss the technical advantages of Munksjö's products on the other hand. This close twofold relationship enables Munksjö to develop and deliver differentiated, customized and

innovative business-to-business solutions within Industrial Applications.

In **abrasive backings**, major customer groups include manufacturers of abrasive backings for industrial and private use (DIY). Customers buy large rolls of specialty paper which is then coated with various resins and an abrasive material, depending on the final application. Abrasive backings are then cured, flexed and cut in specified sizes. Manufacturers sell the ready to use material to, for example, the automotive and the wood working industry, where the abrasive backings are used in the final stages of a production process,

or when adding the finishing touch to car bodies, furniture and floors. Cloth is a substitute to paper backings depending on application. Paper has a potential to gain market share going forward as strong backings are being developed.

In **electrotechnical paper**, used for insulation purposes, Munksjö addresses the market of electricity distribution such as transformer and cable manufacturers. The direct customer access allows for both close customer relationships and customized solutions. Munksjö's craftsmanship is highly valued by the manufacturers, who use Munksjö's specialty paper to insulate



### Electrotechnical paper

Electrotechnical paper serves as insulation of transformers and high voltage power cables. A transformer is the gear-box of the electric power supply system. Prepared in the right way the paper is given the characteristics and ability to prevent power loss. The paper must be completely free of chemicals and charged ions. To meet the rigid requirement of total insulation, some 150–200 mm layer of paper is wired on the conductor.

transformers or cables. The customer buys the specialty papers, crepe or smooth, in large rolls directly to the transformer plant, where the electro-technical paper is wrapped around the end products, be it transformers or cables – high quality and technically advanced products which will end up in the networks of power distributors. The market is driven by power network upgrades and by projects to increase the access to energy in emerging markets. Substitutes include plastics as a substitute to paper insulation in cables.

**Spantex™** is a niche business in specialty paper, which so far has had limited direct competition. The cost efficient foil products attract manufacturers in the woodworking industry. The manufacturers, who buy Spantex on rolls, use it in their production process, when the specialty paper is glued or pressed onto the surface material, and after being cut, delivered to volume manufacturers of furniture, flooring and kitchen worktops. While there are few local competitors, substitutes such as craftpaper offer some competition.

**Thin paper** is used by steel, aluminum and glass manufacturers as interleaving papers, separating the different layers of materials from each other. It is also used in the stainless steel cold rolling process. The thin paper is bought in large rolls and is used at the end of the production process, when large quantities of sensitive materials are gathered in e.g. piles. Within the digital textile printing industry, the thin paper is used as a protection paper in order to ensure optimal transfer of the ink onto the textile during the sublimation process and also protect the belt of the calender against ink. The market for thin papers is competitive and differentiation in terms of customer service and paper characteristics are essential.

**Fine art paper** has a stable customer audience of quality aware artists and art publishers. The end users are addressed directly through a distributor network. The high profile products which include a wide assortment of watercolor, oil and drawing papers are manufactured at the Arches paper mill, France, on a slowly rotating cylinder mold, which gives it a hand-made look and feel. The

Arches® paper is considered one of the world's best water colour papers and has a very strong market position.

**Innovation**

In terms of innovation, the activities are mainly focused on how to secure the quality of the different highly technical production processes and how to broaden the application areas and improve the products in general terms. A large share of the innovation work is done in dialogue with the customers on for example important technical parameters. Especially in electrotechnical papers the customized solutions require both innovation and high level of technical competence.

The business area is also steadily increasing its innovation capacity by being more proactive in terms of smart solutions regarding how to improve the customers' production processes or how to improve the characteristics of the material to increase quality and reduce the customers' total cost of ownership. In terms of specific products, the work around improving the age durability or life cycle of the electrotechnical paper, or to strengthen the abrasive paper to address a broader market and



**Abrasive backings**

Abrasive backings are used as base paper for sanding applications, from grinding to super finishing operations. Backings must have special characteristics like smoothness, stability, wet strength, to be coated with various types of bonding and grits. The base paper is sometimes impregnated with latex, and these grades are mainly used in the automotive industry; from removal of raw materials in engine parts to finishing steps like polishing of chrome. Munksjö is the only paper backing provider having a complete backing range to cover all market needs.

more application areas, are just two examples of proactive innovation work within the business area.

**Quality and sustainability**

When addressing the customer groups within the business area Industrial Applications, quality is a prerequisite. All products that the business area offers have to be of highest standard and a high quality production process is the enabler of that. In many cases it is actually binary: thin paper which is used to protect sensitive surfaces has to have clean input materials, such as water, but the environment has to be clean as well. A low quality paper, with dirt particles which affect the surface, can easily destroy not only one layer of glass but a whole batch of glass and by that also value. The unbleached craft pulp used for electrotechnical paper is a specialty high quality pulp with high purity, to fill the requirement of minimal electrical conductivity. Thus quality in material and processes is of essence.



While customer demand for certain key performance indicators from a sustainability perspective is still rather low, several of the business areas products offer value creation through sustainable characteristics. Electrotechnical paper is a central part of a sustainable energy supply, while the thin paper that the glass producers use as interleaving paper is in some cases reused several times, thereby reducing production footprint. In abrasive backings new environmentally friendly materials are over time replacing old impregnating agents and material mix considerations to reduce waste are ongoing and part of business development. Munksjö is the only provider of formol free paper for the abrasive industry and can also provide FSC® mix-credit as an option.

#### Operational efficiency

The EBITDA margin (adj) for 2016 of 18.6 (16.5) per cent was above the target of 15–16 per cent. Higher volumes, lower variable costs and profitability improve-

ment actions compensated for higher fixed costs.

For the Industrial Applications an important focus area in terms of operational efficiency is related to the production process and the ability to use the production capacity to its fullest. In

addition to full production capacity, optimizing the utilization by using the full width of the machine is also a significant contributor to potential efficiency improvements.

Munksjö's production capacity also includes certain converting machines.



## ARCHES®

#### Fine Art paper

ARCHES® papers are used for fine arts (watercolour, oil, painting, drawing), art publishing, printing and writing. Mould made, using specific fibres, mainly cotton, it is favoured by artists and printers worldwide.



## New abrasive backings line to be introduced

The production of for example a car, an air plane or a windmill includes sanding of parts of the final product. Munksjö's abrasive backings are used as base paper for sandpaper.

To secure the leading position within abrasive backings and meet increased customer demand, a decision to invest EUR 14 million at the Arches facility in France was made in 2016. One of the paper machines will be rebuilt to increase the paper width, giving the right base paper characteristics, allowing for new product applications.

"Munksjö is a world-leading supplier of abrasive backings. The market is growing and so is the demand from our industrial customers that require applications with the highest strength, dura-

bility and endurance. Together with our highly competent and skilled manufacturers and crafts men, this rebuild ensures that we continue to be a market leader in this segment and confirms our commitment to continue to support our customers' growth." says Dan Adrianzon, President Industrial Applications.

Through the investment Munksjö will update its impregnation and coating processes, since the prolongation of the machine enables latex impregnation and coating on line. The rebuild will be finalised at the end of 2017.

# Graphics and Packaging: High performing and innovative products

SHARE OF NET SALES 2016

15%

EBITDA MARGIN (ADJ)

4.4%

GOAL 9-10%

DELIVERY VOLUMES, TONNES

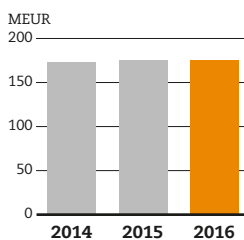
 131,100 TONNES

EMPLOYEES

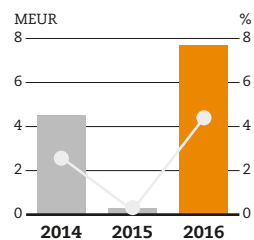
 416



## Net sales



## EBITDA and margin (adj.)\*



## Key figures

MEUR	2016	2015	2014
Net sales	175.6	175.7	172.8
EBITDA (adj.*)	7.7	0.3	4.5
EBITDA margin, % (adj.*)	4.4	0.2	2.6
Operating result (adj.*)	-2.6	-7.9	-1.9
Operating margin, % (adj.*)	-1.5	-4.5	-1.1
Delivery volumes, tonnes	131,100	127,200	136,100
Employees, FTE	416	428	432

\* Adjusted for items affecting comparability (IAC)



Graphics and Packaging is one of Munksjö's most diversified business areas, covering specialty papers used as material in flexible packaging, labels, graphic and process applications. The customers demand highly advanced and often customized solutions with strong performance either as input materials in the manufacturing process or as a brand differentiator. Customers are converters addressing the food and beverage industries with flexible packaging solutions or specialty labels, as well as converters focused on graphic or industrial market segments.

### Profitable and sustainable growth

During 2016, the delivery volumes increased. The business area reported net sales of EUR 175.6 (175.7) million with an EBITDA (adj) of EUR 7.7 (0.3) million, corresponding to an EBITDA margin (adj) of 4.4 (0.2) per cent.

Munksjö manufactures calendered, super-calendered, treated and untreated papers at the Rottersac mill and technically advanced single and double one-side coated papers, at Stenay plant. Both sites are located in France.

A large part of net sales originates from converters of flexible packaging used in the food industry, while another part originates from metallizers serving the beverage industry with metallized labels. Munksjö also serves the graphic and industrial markets with highly technically-advanced solutions such as repositionable notes, envelop windows

and process papers for offset plates or furniture laminates producers.

Brand owners need solutions that combine shelf-appeal, functionality and sustainability. Munksjö works closely with converters to develop paper-based solutions to meet brand owners' and end-users' demand as well as regulatory requirements. When addressing the food industry, the market is highly regulated as the flexible packaging will be in direct contact with food, and all parts of the value chain have to take local, regional and country specific regulations into consideration.

### Sustainable products and solutions

#### Flexible packaging papers

The specialty papers are delivered in rolls to the converters of flexible packaging, where the papers are printed, laminated, coated or sheeted depending on the application. The flexible packaging

market is highly fragmented and competitive. Munksjö has chosen to address niche converters specialized in growth areas such as baking papers or dry pet food packages, where quality and sustainability are important parameters. Customers also appreciate knowhow and deep collaboration, while driving manufacturing efficiency. Thus, the technically advanced products also need to have strong processing properties.

On the flexible packaging market, plastic film is the most used material, but paper is an attractive alternative to film as it is more sustainable and offer technical and marketing competitive advantages. Europe is Munksjö's major market, but the operations are expanding to the US market. The pet food segment is an example of how a close collaboration with converters and brand owners has supported Munksjö in its endeavor to enter this market.



### Greaseproof paper for intact labels

Premium vegetable oil is a fine food product that consumers choose carefully. An appealing shelf presence and a premium label visually preserved day after day are key to support brands' differentiation.

Munksjö has developed a specialty greaseproof label paper that delivers high grease resistance and outstanding gloss to minimize potential oil spots and ensure intact superior brand image until the last oil drop.

### Paper-based labelling solutions

In the beverage industry, Munksjö delivers added-value papers to metallizers and producers of specialty self-adhesive labels. Metallizers manufacture metallized paper for labels and flexible packaging and require high performance paper solutions as important input material in the production process. In the beverage industry, converters using metallized labels mainly focus on the beer, wine & spirit and water markets. Some customers require label papers for one-way bottles, others for returnable bottles. The latter has higher quality requirements to enable a trouble-free wash-off process to remove the label from the bottle while avoiding pollution of the washing bath. Outside Europe, the wash-off requirements are not always needed as bottles are used only once. In the labelling industry, some want wet-glue applications while others chose self-adhesive applications. From a regional market perspective, the European and US beer markets are mature, with limited organic growth while emerging markets are driving up the overall market growth.

Depending on the end-use applications, label converters require very specific properties such as greaseproof



barriers for premium vegetable oil labels while converters in the wine & spirit market need labels with superior gloss. Whether used for metallized or white labels, Munksjö has developed a range of specific paper solutions adapted for all demanding requirements of these groups of converters. Strong collaboration with partners in the value chain is another key added value provided by Munksjö to deliver customized solutions. From a market perspective, the use of pressure sensitive labels is growing against wet-glue labels.

### Transparent paper for sustainable envelope window

Many large companies are using window envelopes for high volume mailing. To help them drive a sustainable corporate image, Munksjö offers a transparent paper enabling production of an all-paper envelope. Exclusively made from wood-based natural fibers issued from responsibly managed forests, Cristal Evolution™ comes from renewable resources, is recyclable and biodegradable.



### A NEW GRADE FOR LIGHTER BAKING PAPER

# Make baking more sustainable

In 2016, Munksjö extended its Aderpack™ range of single-use baking papers with a 35 g/m<sup>2</sup> low basis weight paper for cooking and baking. This exceptionally light paper grade enables a lower environment footprint while maintaining high release performance and temperature resistance. As it is a single-use baking paper, it improves hygiene with no risk of allergenic food residue migration.

Professional bakers and individuals use baking paper for its convenient, sustainable and hygienic aspects. Munksjö's ambition is to offer, through product development, cost-effective

and sustainable alternatives in line with these evolving market expectations.

Aderpack™ is made from natural fibers and mainly used for baking pastry or pizza as well as steam cooking.

Aderpack™ meets the strictest safety requirements for direct food contact and baking conditions such as FDA and BfR XXXVI.II regulations.

“ The development of light baking paper meets the demanding market requirements of sustainable and consumer safe products with no compromise on performance.

Roland Le Cardiec, President Graphics and Packaging.

### Base papers for graphics and industrial applications

Leading insurance, telecommunications and banking companies are using window envelopes for high-volume mailing. Some envelope producers use Munksjö's high performance super-calandered transparent papers for envelope windows – a sustainable alternative to plastic film. The European envelope market is currently stable after a significant decrease caused by the digitalization of communications. The company also has specialty papers for coloured repositionable notes, tailored value-added papers developed for demanding manufacturing process and other industrial applications.

Out of the four defined megatrends of digitalization, globalization, sustainable society and demography, the last one sticks out, due to Munksjö's strong exposure to converters close to the food and beverage industries. Food is a basic need, and eating habits are changing and becoming increasingly mobile. Converters are increasingly sensitive in developing their business in a more sustainable way.

### Innovation

The company's ambition is to improve demand for Munksjö's specialty paper through new products and solutions with strong competitive edges in terms of quality and technical parameters. The ambition is that they also have the potential to redirect the demand from plastics to specialty paper solutions. Product development is also closely related to quality improvements, evolution of the entire value-chain demand and adjusting to new regulations or recommendations. Munksjö is using its innovation capacity to develop solutions that can efficiently compete against plastic film.

Munksjö has also developed a base paper for vegetable oil labels. The strong expertise in label paper allows the Company to combine technical features such as a grease proof barrier with nice visual aspects in order to meet market requirements.

For Munksjö's customers, the manufacturing process has to be efficient and should limit process waste. Converters

are also looking for the right balance between quality performance and a basis weight as low as possible to reduce costs, waste and energy expenditures. Munksjö puts a lot of efforts into developing low grammage paper products which can adhere to these requirements.

### Quality

The quality of a package affects bottom line for the brand owner and sustainability is an increasingly important parameter. A badly performing food package which spoils the product, will increase waste, and shorten shelf-life, while a good performing package lowers cost and improves profitability through waste reduction. Therefore Munksjö has a close dialogue with brand owners as well as with the converters to optimize the products.

Converters addressing the pet food industry demand parameters such as strong grease resistance, and papers that can persist the constraints during printing, filling, transporting and storing in very tough conditions. Munksjö's offering includes a paper branded Gervalux that has high grease barrier and excellent printability and crack-fold resistance, and is used for the outer ply of the pet food bag, while Alipack, an uncoated treated paper, offers a high grease barrier for the inner ply of the bag.

Converters of metallized labels require technical solutions that are smooth to process, offer high labelling speed and that have good wash-off times for returnable bottle labels, thus qualities that enable high performance during printing, labeling and washing. Munksjö strives to meet the different requirements all along the different supply chains, and offering consistent solutions is key. Due to intense competition in the customer chain, the customers require high quality services and also flexible processes, but above all a consistent product. Munksjö's ambition is to offer cost-effective and sustainable alternatives aligned with these expectations.

### Operational efficiency

The EBITDA margin (adj) for 2016 of 4.4 (0.2) per cent did not reach the target of 9–10 per cent. The program to improve



### Material for extreme conditions

When petfood bags are filled with pellets on high-speed bag forming lines the packaging material has to withstand extreme constraints. Munksjö's paper for petfood bags are developed to defy not only the heat and grease of the pellets but most importantly the high filling speeds and variable weights of the automatic bag forming and filling lines.

profitability progressed according to plan in all areas except in one-sided coated papers, where competition remained challenging.

To improve operational efficiency, Munksjö is specializing and focusing on certain initiatives. Over time this implies fewer products and grades to reduce complexity, while developing products and services that are innovative and at the forefront of developments. The ambition is to reduce waste and cost and drive initiatives based on sustainable product platforms. The ambition is also to optimize mill capacity and reduce energy costs. During 2016 the company invested in a new storage center in Rottersac to facilitate logistics, reduce carbon dioxide emissions and improve quality control.

# Sustainable value for all our stakeholders

## Highlights of the year

Share of certified pulp of total usage in production

42%

Conducted field audits

14

Signed Supplier Code of Conduct contracts

70%

CO<sub>2</sub> emissions per ton of product

-2.4%

Decrease in lost time accidents

12%



Sustainability is a part of how Munksjö does its business, combining profitability with social and environmental responsibility. As a leader in innovative and sustainable specialty paper solutions, we create value for our stakeholders by conducting our business in an efficient and ethical manner.

As part of a resource intensive industry, Munksjö has a long tradition of working on the environmental impact of its products. Our technical expertise and experience using renewable, wood fibers means that Munksjö offers products with less energy, water and waste. However, in response to global shifts and trends, we have challenged ourselves to expand the way of thinking about sustainability to include social and economic factors. In order to be a responsible member of the supply chain, Munksjö seeks ways to improve its performance by engaging with customers, employees, suppliers, and other stakeholders.

### Stakeholder dialogue

Munksjö's decisions affect each stakeholder group differently so it is important to engage with each one accordingly. Various tools are utilised – meetings, surveys, and audits – to best understand the needs of each group.

In 2016, Munksjö conducted customer and employee engagement surveys which included questions on the current sustainability performance. Customers scored Munksjö 8.5 (7.9 in 2013/14) on a scale out of 10. We implemented a new supplier code of conduct and have initiated desk and field audits to develop long term cooperation with our suppliers. In addition, Munksjö

continued to participate in Forestry Stewardship Council (FSC®) meetings and working groups to contribute to sustainable forest management and trade of forest products.

Although Munksjö maintains open dialogues with its stakeholders, we recognize that there are opportunities for us to continue developing our discussions to better serve our stakeholders.

### Direction

In 2016, Munksjö developed a new sustainability policy that uses global frameworks as a reference. Munksjö adheres to the principles of the UN Global Compact and aims to align with the UN Sustainable Development Goals (UN SDGs). In addition, we identified four mega-

trends – demography, globalization, digitalization and sustainable society – affecting Munksjö and global sustainable development. As a result, Munksjö utilizes three interconnected perspectives to guide its strategy: social responsibility, environmental stewardship and economic resilience.

### Strategy

To reach its target within each perspective Munksjö applies a three phase approach.

Efficiency and compliance is the foundation of our approach. Munksjö must continue to comply with current and future legislation in each country it operates in. Our first steps have been to harmonize our management systems –

ISO, OHSAS, and FSC® – to continuously and systematically improve our performance. Using less energy, water and raw material will reduce production costs in the long term.

The next step is to create added value for the company through sustainability. Strong employee development will ensure that we retain and develop talented individuals who will move our company forward. In addition, increasing the offering of sustainable products, services and solutions will help us strengthen our position as a sustainable company and expand into new, growing markets.

Finally, our goal is to be an active and responsible member of our local and global communities. Munksjö strives to create a corporate culture in which sustainability is fully integrated into every decision.

### Munksjö stakeholder dialogue

	HOW?	WHAT?
<b>CUSTOMERS</b> 2,000	<ul style="list-style-type: none"> <li>→ Customer survey</li> <li>→ Immediate feedback</li> </ul>	<ul style="list-style-type: none"> <li>→ Product and service performance</li> <li>→ Quality in relationship</li> <li>→ Sustainability</li> </ul>
<b>SHAREHOLDERS</b> 10,000	<ul style="list-style-type: none"> <li>→ General meetings</li> <li>→ Private investor events</li> <li>→ Investor events</li> <li>→ Roadshows</li> </ul>	<ul style="list-style-type: none"> <li>→ Value creation</li> <li>→ Governance</li> <li>→ Compliance</li> <li>→ Transparency</li> </ul>
<b>CENTRAL SUPPLIERS</b> 350	<ul style="list-style-type: none"> <li>→ Meetings and questionnaires</li> <li>→ Certification forest</li> <li>→ Owners</li> </ul>	<ul style="list-style-type: none"> <li>→ Standards</li> <li>→ Working conditions</li> <li>→ Transparency</li> <li>→ Policies</li> </ul>
<b>ANALYSTS</b> 6	<ul style="list-style-type: none"> <li>→ General meetings</li> <li>→ Immediate feedback</li> <li>→ Investor events</li> <li>→ Capital markets day</li> <li>→ Immediate feedback</li> </ul>	<ul style="list-style-type: none"> <li>→ Value creation</li> <li>→ Transparency</li> <li>→ Compliance</li> </ul>
<b>SOCIETY/ COMMUNITIES</b>	<ul style="list-style-type: none"> <li>→ Local representatives</li> <li>→ Regional developments</li> <li>→ Swedish forest association</li> </ul>	<ul style="list-style-type: none"> <li>→ Standards</li> <li>→ Emissions</li> <li>→ Certifications</li> <li>→ Jobs</li> </ul>
<b>EMPLOYEES</b> 2,900	<ul style="list-style-type: none"> <li>→ Employee engagement survey</li> <li>→ Performance and development review</li> </ul>	<ul style="list-style-type: none"> <li>→ Leadership</li> <li>→ Engagement, development</li> <li>→ Careers</li> <li>→ Health and safety</li> </ul>

### Governance

The principles of the sustainability policy are already integrated throughout established Munksjö policies such as the Code of Conduct and the anti-bribery policy. The policy, however, will also provide an overview and context to guide our decision making processes in these areas.

Directed by the Senior Vice President Sustainability, Munksjö will set clear targets, follow up and report publicly on sustainability efforts with particular emphasis on evaluating the potential risks of our products and operations.

The SVP Sustainability oversees all sustainability efforts and reports to the Management Team every quarter. The environmental network in the production units monitors performance on a mill level and reports to the SVP Sustainability each quarter.



For Munksjö's GRI index, please see [www.munksjo.com/sustainability](http://www.munksjo.com/sustainability)

# Munksjö's environmental stewardship

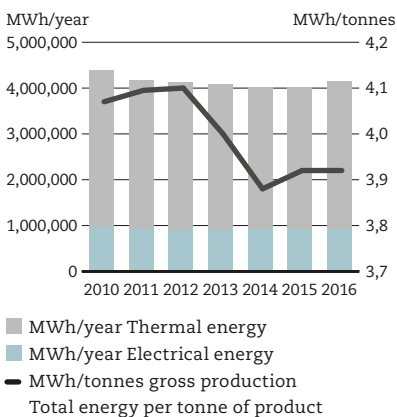
The main focus of Munksjö's environmental program is to be resource efficient and provide products that are fit for purpose. There are three main stages of operations involved in the environmental program: supply of raw materials, production process and product performance.



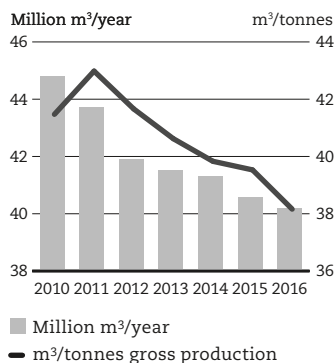
Munksjö's environmental impact goes beyond the property boundaries of its production units. Employees are trained to identify environmental risks and opportunities during all stages of operation. The research and design phase is aimed to improve resource efficiency and performance in customer's processes and products. Munksjö is developing tools and criteria to further enhance the product's sustainability performance. During the procurement of raw materials, the procurement team assesses suppliers using basic sustainability criteria. Technical experts in the mills monitor daily activity to maximize efficiency during the production and transportation of materials. These processes are used to reassure customers that our products contribute to the responsible supply chain of their products.

## Environmental key figures\*

### Energy consumption



### Process water



### Discharge to water – COD



## Supply of raw materials

Munksjö has centralized procurement of key raw materials, equipment and services. In 2016, Munksjö began implementing the Supplier Code of Conduct (SCOC) to systematically engage with our raw material suppliers. This includes the purchase of wood, pulp, chemicals and energy. The Supplier Code of Conduct requires that suppliers meet basic sustainability criteria such as human rights, legal compliance, responsible business and environmental performance. It also ensures that Munksjö has the right to audit operations for compliance and, in case of non-compliance, demand corrective action. 70 per cent of Munksjö's suppliers signed the code in 2016. An additional 22 per cent have either signed it with conditions or have demonstrated that they align with our principles. As part of the Supplier Code of Conduct, Munksjö began integrating sustainability into the auditing process in 2016. Munksjö is on track to meet its target of conducting desk audits for all suppliers and field audits for 5 per cent of suppliers by 2017.

The Supplier Code of Conduct is an opportunity to build long term relationships and cooperation with our suppliers. The aim is to purchase from like-minded companies and to be prepared to help the suppliers reach their goals.

### Forestry

Munksjö's wood and pulp sourcing practices promote sustainable forest management. Munksjö purchases a large share of its wood through the sourcing organisation Sydved, jointly

owned with Stora Enso. Through Sydved, Munksjö promotes responsible forest management services and certification. The other share of wood is bought directly from small land owners and other wood users. Focus is on local wood harvested near the pulp mills.

Munksjö has 15 facilities of which 12 are production sites. 11 of these 12 are certified according to FSC®, which means that they are able to offer FSC® certified products to the market. In addition, half of Munksjö's production units are also certified according to PEFC™. As a large purchaser of pulp, Munksjö is able to secure significant volumes of certified wood materials. In 2016, the share of FSC® certified pulp was 42 per cent and all pulp must at least meet FSC® Controlled Wood standards. In response to customer demand and market trends, Munksjö is looking to increase its share of FSC® certified wood to 60 per cent by 2017.

In 2016, Munksjö further developed its due diligence system for legality to address the requirements of the US Lacey Act and the Australian Illegal Logging Prohibition Act.

### Chemicals and binders

Munksjö buys a wide variety of specialty chemicals, from latex and pigments to wet strength agents and clays. Titanium dioxide (TiO<sub>2</sub>) is a critical component of the papers since it is used to create opacity. Munksjö continuously works to ensure a safe and sustainable supply of chemicals that are in accordance with the REACH guidelines.

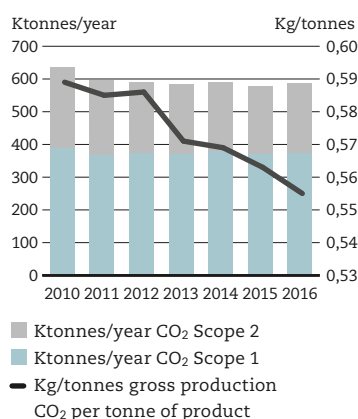


## Securing responsible sourcing

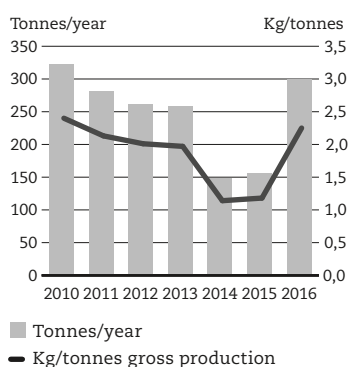
Munksjö carried out an assessment of Metsä Forest's operations in Podoporozhye, Russia, to evaluate the legality of the timber harvest and their traceability systems.

The assessment consisted of visiting several logging sites, document verification and interviews with responsible staff. The evaluations are carried out to ensure that the pulp purchased meets Munksjö's sustainability requirements.

### CO<sub>2</sub> Emissions



### Waste to landfill



## Production process

At Munksjö we constantly work to improve our environmental performance, seeking new ways to improve resource efficiency, reduce costs, and lower emissions. Each production unit uses internationally recognised management systems such as ISO, FSC®, and PEFC™. All units operate under management systems certified according to ISO 9001:2008 (quality) and ISO 14001:2008–2009 (environment). Half the units are certified according to ISO 50001:2011 (energy). In addition, the Rottersac site in France is certified according to ISO 22000:2005 for food safety and the Stenay site in France is in the process of becoming certified.

In 2016, Munksjö developed a new set of environmental key performance indicators (KPI) to harmonize these sustainability efforts. The new KPIs will ensure that data is accurate and relevant so that Munksjö can set realistic targets and goals in the future.

### Energy and emissions

To combat climate change, Munksjö's target is to reduce its CO<sub>2</sub> emissions by 2 per cent every year. There are two strategies to achieve this target: increasing energy efficiency and using cleaner energy.

In 2016, a third of Munksjö's production units developed energy savings plans to reduce the Group's energy consumption by 1.5 per cent each year. The production units initiated several projects that replaced or upgraded infrastructure to insulate and consume less

energy. The projects have delivered EUR 2 million in savings.

Munksjö uses a variety of energy sources generated by natural gas, oil, coal, biofuels and hydropower. Both Scope 1 and Scope 2 sources are used to calculate Munksjö's CO<sub>2</sub> emissions; 76 per cent of energy used is internally generated and 24 per cent of energy is purchased from external sources. 37 per cent of Munksjö's energy comes from renewable energy sources such as biofuels and hydropower. Although renewable energy is not always feasible, Munksjö is looking to switch to fuels

with lower emission rates. For example, in 2015 the Stenay site in France switched to a new type of coal for its boiler and reduced its sulfur emissions by 50 per cent.

### Water

The main vehicle in the production process is water; at the beginning of the paper making process, suspension consists of only 1–4 per cent fibers in order to shape the properties of the paper for the intended purpose. Several of Munksjö's production units developed water savings plans to reduce the



## Improved logistics reduces carbon foot print

In 2016 Munksjö inaugurated a new 9,200 m<sup>2</sup> storage center at its specialty paper mill in Rottersac, France. The new center replaces external storage and will allow Rottersac to ease logistic flows, reduce carbon foot print and improve quality control of packaging. The reduction of CO<sub>2</sub> emissions due to less transports is estimated to be close to 3,500 tonnes.



## Sustainable products

It is through thorough knowledge of customer needs that Munksjö is able to deliver products that are fit for purpose. Poor product performance means that we've wasted the resources invested to produce the product, and likely more resources further down the supply chain. For this reason, we see our high quality products as being sustainable when they serve the purpose that they were designed for.

### Innovation

As an innovative and specialty paper company, Munksjö seeks to improve the environmental performance of its products. Although Research and Development has examined the environmental impact during development in the past, Munksjö is developing new, systematic ways to evaluate the value chain of each product in the future. We want to evaluate the impact of our product from procurement to end of life. We also want to improve existing product performance. This includes finding new ways to reduce the amount of materials needed, to improve production efficiency and to develop better end products.

In 2016, third party studies showed that Munksjö's silicone coated glassine papers are both recyclable and biodegradable. The development of the new, lightweight cost effective and sustainable single-use baking paper Aderpack™, uses fewer resources while still maintaining high quality and performance. The Munksjö Gerbier HDS sachets, described to the right, is another example of an innovative, lightweight product.

In 2016, Munksjö started a new student program that engages students to focus on sustainability during the development of new products.



Group's water consumption by 1.5 per cent each year <sup>1)</sup>. This year Munksjö surpassed its target and reduced water consumption by 3.5 per cent per ton of product. However, since water is a critical component of paper quality, the production units must work to reduce water consumption while maintaining high quality standards.

Water emissions of COD and TSS are also closely monitored. COD emissions have decreased by nearly 25 per cent since 2010. In 2016 Munksjö decided to invest in a new water treatment plant at the Tolosa site, Spain that will reduce their COD and BOD emissions by roughly 60 per cent.

### Waste

Munksjö continues to reuse or sell production waste. Many of Munksjö's mills have successfully created no waste sent to landfills. Furthermore, Munksjö has reduced its waste to landfill by 44 per cent since 2010.



## Contributing to sustainable products

Munksjö offers packaging paper for pouches or sachets for products such as sugar, coffee, powdered medicine and dehydrated soup. Munksjö's specialty paper Gerbier HDS 35 g/m<sup>2</sup> offers the lowest basis weight on the one-side coated paper market for such applications. The lower weight reduces the environmental impact while maintaining high performance.

<sup>1)</sup> Some production units did not submit energy or water savings plans since there were no feasible or cost effective projects that could increase their energy efficiency.

# Creating value to and through people

Munksjö recognizes that the success of our business depends on the employees and the communities we operate in. We are dedicated to act ethically and responsibly, to ensure an attractive and safe working place and to constantly develop our employee relations.

## Social responsibility

### Respecting human rights and business ethics

Munksjö respects fundamental human rights and expects the same from its suppliers. All employees are expected to act according to the group Code of Conduct, encompassing core business ethics such as anti-bribery, the promotion of fair competition and the encouragement of ethical and legal behavior. In 2016, all relevant employees had to take and pass e-learning training in competition and anti-bribery law. In addition, legal audits were made by group lawyers in six units in order to assess their compliance with group policies and practices. These audits will continue in other units in 2017. In 2016, Munksjö also implemented a Supplier Code of Conduct to ensure that its suppliers embraced the same standards of human rights, business ethics, and legal compliance as Munksjö does.

Violations can be reported anonymously to a dedicated and confidential mailbox.

### Partnering with local communities

Munksjö's mills and operations are often located in small, rural communities where Munksjö is one of the major employers. As such, Munksjö has a responsibility to create safe and inclusive work environments. In turn, the local community plays an important role for Munksjö's future success and ability to attract and retain the right people. Our equal dependency on one another has led to close relationships. How this is done differs from site to site and can involve raising the awareness



By a donation to Hand in Hand, Munksjö contributes to education and training of women in entrepreneurship, encouraging them to start businesses of their own.

among children of job opportunities within our industry, as well as developing educational programs to ensure the right competence among future employees.

Munksjö also engages on a broader level. Through a donation to Hand in Hand, Munksjö supports a village in the

state of Odisha, India. The purpose with the project is to fight poverty by creating work for women, abolishing child labour, investing in health care, raising IT knowledge and increasing environmental awareness in the village.



## Health & Safety

### A zero accident target

At Munksjö we are convinced that occupational accidents can be prevented, and actively strives for a safe work environment, free from work related absenteeism. The target is zero lost time accidents for our employees as well as for sub-contractors and visitors.

To achieve our zero accident target, a culture of preventive safety is needed. In 2016, Munksjö launched a new suite of measures and leading indicators. An important part of these measures is safety training and workshops. The goal is that every employee at every site should have a minimum of eight hours of safety training per year. In 2016 we reached 12 hours per employee, surpassing the target by 4 hours.

Behaviour based safety (BBS) training shall be undertaken by employees every third year, starting within the first 12 months of employment, with the purpose to increase safety awareness. Research and previous experience indicate that a vast majority of the accidents are due to unsafe behaviours. In 2016 we continued to train everyone in the group, and reached the sub target that every employee should be exposed to a BBS interaction once a year.

The preventive work environment must permeate all parts of Munksjö's value chain. Contractors are obliged to perform a minimum of one hour of local safety training prior to maintenance projects. Admittance cards must be renewed through training every 12 months.

Another leading indicator for preventive safety is near misses reporting. The new structured reporting procedure may prevent accidents by monitoring, measuring and communicating the root cause of the near miss accident. In 2016, Munksjö increased near miss reporting with 42 per cent.

## Encouraging safety through Munksjö Awards

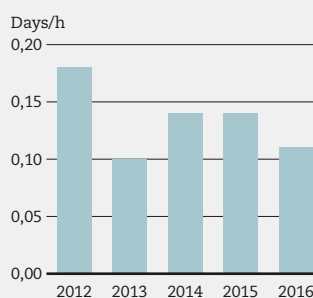
Every year Munksjö acknowledges mills for good safety performance and practices. In 2016 three safety prizes were awarded at the annual safety network meeting:

- ① Highest number of working days without a lost time accident (LTA) was awarded to Jacarei mill, Brazil, that reached 4 years without an LTA. They excel by fighting complacency, having a consistent safety management system, and continually improving despite already good performance.
- ② Largest decline of accident frequency rate (AFR) was awarded to Billingsfors mill, Sweden, who managed to reduce the AFR by 60 per cent.
- ③ Best practice of safety training was awarded to Turin mill, Italy. This mill has a clear, established process for all parties who are affected by their operations.

Leading indicators	2016	2015
Near misses, reported	4,311	3,040
BBS interactions per employee	1.5	1.0
Safety training, hours per employee	12	8

### Lagging indicators

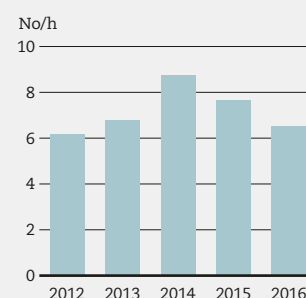
#### Accident severity rate<sup>1)</sup>



Accident severity rate in 2016 decreased to 0.11 (0.14) compared with last year.

<sup>1)</sup> (Number of days of absenteeism due to accidents / Total hours worked in the company during the actual period) \* 1,000.

#### Accident frequency rate<sup>2)</sup>



The accident frequency rate decreased in 2016 to 6.5 (7.6) compared with last year.

<sup>2)</sup> (Number of accidents resulting in at least one day of absence from work / Total hours worked in the company during the actual period) \* 1,000,000.

An important part of health and safety is to promote a healthy work environment where no employee should have to experience prolonged or recurring stress. In 2016 the employee engagement survey examined this issue, and the results will form the basis for sustained work in this area.

### International standards

In the mills, Munksjö's minimum requirement for the occupational health and safety management systems is the international standard OHSAS 18001. In 2016, OHSAS 18001:2007 was implemented in the mills in Stenay in France and in Jönköping in Sweden. This means that all 12 production sites are now certified.

### Governance

Every mill has a health and safety manager with the responsibility to comply with local laws, implemented safety management system as well as Munksjö's policies and guidelines. One of these per business area also has the role of safety network coordinator. The Group Vice President Health and Safety conducts safety audits, drives coordination, monitoring, follow-up and information about goals and achievements in the Group, and also organizes safety and cross audit meetings once per mill and year. All safety managers meet once a year at a network meeting. At the 2016 meeting, good practices within training and workshops about how to improve safe working conditions were in focus.



## Billingsfors: A changed culture providing higher safety

Munksjö, which has an established and systematic health and safety policy, noted that there were major differences in safety performance between the mills. As a result, Munksjö decided to initiate a radical change because health and safety at work is a matter of corporate culture. At the mill in Billingsfors in Sweden the management team, safety organization, unionized safety manager and employees were all engaged in creating a safety culture that developed new procedures and local training for all employees, contractors and office workers. The result of the cultural change has been remarkable – the accident rate has decreased by 60 per cent. In 2016, Billingsfors was awarded a Munksjö Award for their excellent performance.

## Employee relations

Our success depends upon having motivated, high-performing individuals with a drive to constantly improve and deliver the best value for our stakeholders. In 2016 strategic human resource initiatives were implemented, focusing on three main areas: culture, people and leadership.

### Building a common culture

One prioritized activity has been to develop new company values as a platform for building the new Munksjö culture. The value work has involved employees all across the company. The broad involvement ensures that the new values reflect the strengths in our company's long local history but also focus on what is important to further develop Munksjö to be able to continue on its successful journey. The values will be rolled out in 2017.

During the fall Munksjö performed its first common employee engagement survey with an impressive 87 per cent response rate. Development areas are identified on group level, in all business units as well as in each and every working team. All employees are involved in identifying and implementing improvements.

### Developing our people

A focus for 2016 has been to build the foundation for strategic development of our people. New group processes within performance management, succession planning and remuneration have been developed. The performance development review process ties together employee ambition, business targets and individual development plans. The new succession planning process focuses not only on management positions but also on other critical roles in the organization and is used to define the Munksjö talent pool. Within the remuneration area, focus has been on harmonization and launching a new long term incentive program. A tender process for a human resource IT solution was initiated in 2016 to further empower Munksjö within this area.

### Attracting the next generation

In 2016 Munksjö piloted a student program in Sweden to increase the knowledge of Munksjö among technical students. In 2017 the plan is to launch an international trainee program.

### Strengthening our leaders

As a part of the company value work, common leadership expectations have been developed in 2016. These expectations will be rolled out together with the values and integrated in the performance development review process for managers and leaders. A Munksjö core leadership training program, based on the leadership expectations, is being developed.

### Involving the union representatives

Munksjö recognizes the fundamental right of employees to decide on whether to be represented by recognized unions of their choice, and provides the right for the employees and their trade unions to engage in collective bargaining.

Union representatives in Munksjö play an important role for the group management as well as for local management teams. Munksjö Works Council, with union representatives from all European mills, meets twice a year with management to discuss actual and prioritized questions. In 2016, one of the meetings had a special focus on health and safety together with the Munksjö safety network, and there has also been an extra meeting with a workshop to discuss the results of the employee engagement survey.

### The importance of diversity

One prerequisite to keep the position as a world leading supplier and to be considered as an attractive employer is that all employees feel welcome, fairly treated and have the same development opportunities regardless of gender, age, ethnicity, background and experiences. Munksjö's corporate culture is based on a non-discriminatory environment where competence and responsibility

are highlighted and seen as a major contributor to the company's positive development.

### The year in numbers

At the end of the year Munksjö had 2,913 (2,900) employees of which 2,755 (2,774) were full-time employees. The average age is 45 years with an average term of employment of 17 years. Staff turnover is approximately 4.4 per cent. Absence due to illness was 3.7 (3.3) per cent in 2016.

#### Share of women and men, %

	Key		
	Total	Board	Management
Men	83	57	64
Women	17	43	36

#### Age distribution, %

	Key		
	Total	Board	Management
-29	11	0	0
30-49	50	29	27
50-	39	71	73

## Munksjö engages students to shape the products of tomorrow

During the fall, twelve students were invited to attend a three-module student program. The program allows the students to get a deep insight in the paper production process – following the process from forest to end product – and in how Munksjö works with innovation. The theme of the program is sustainable innovation.

The aim of the program is to create an awareness of the specialty paper industry and Munksjö as an employer, but also to learn from the next generation of employees. Throughout the program the students are invited to discuss Munksjö specific challenges and opportunities related to sustainability and give their view on the future applications of Munksjö's products. The program is finalized with a presentation where the students share their ideas and insights with some of the Munksjö Group's management team.



# Munksjö for investors

Munksjö has an on-going and active dialogue with representatives of the capital market. The disclosure to and communication with the capital market aims to ensure an increased understanding of Munksjö's business operations through transparency and clear messages. Munksjö targets to maintain a long-term relationship with its owners and potential investors.

## Market value at the end of 2016\*

EUR 802 MILLION

\* Adjusted with the shares held by Munksjö

## Share development on Nasdaq Helsinki since listing in 2013

+166%

## Share development on Nasdaq Stockholm since listing in 2014

+98%

## Shareholder value

With further improved cash flow generation and further increased earnings per share, Munksjö continued to create shareholder value during 2016. The strong balance sheet continued to support the company's strategic growth ambitions and the first major strategic growth plan since the listing in 2013, the planned merger with Ahlstrom Corporation, was announced in November 2016.

## Investor relations activities

In 2016, Munksjö continued the dialogue with investors and shareholders through attending investor seminars, arranging and attending road shows, one-on-one meetings and site visits for institutional investors and by attending events arranged for private investors. Munksjö has hosted a Capital Markets Day (CMD) every year since the listing in order to develop the dialogue with shareholders, equity analysts and

investors. In 2016 the event was postponed due to the planned combination with Ahlstrom Corporation and the next CMD will be arranged by the combined company.

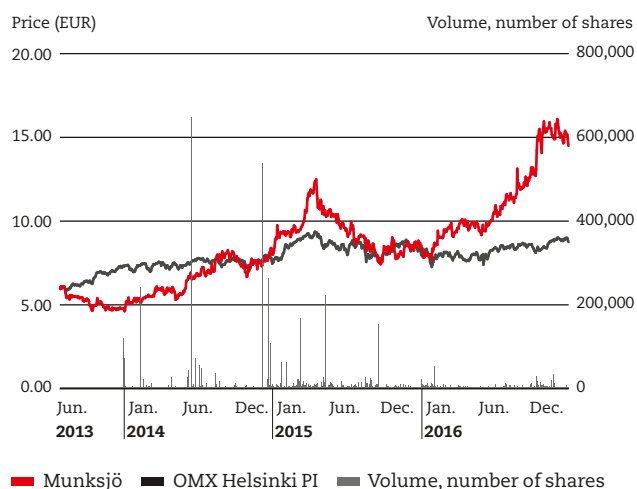
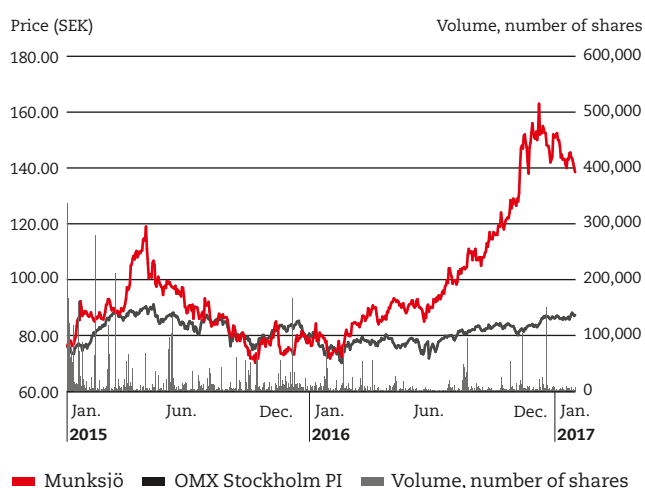
The Investor Relations function (IR), which is part of the Communications function, works in close cooperation with the functions for Strategic development, Finance and Treasury. Communication with representatives of the debt market is primarily carried out by the Treasury function, but the Investor Relations function is also involved on a regular basis.

## Information on trading venues

Munksjö's share is traded in the Mid Cap segments of Nasdaq Helsinki and Nasdaq Stockholm. Munksjö's share is also traded on alternative exchanges, such as Bats Chi-X. Further trading information is available in the Board of Director's report.

## Share development 2015–2016

	Nasdaq Helsinki		Nasdaq Stockholm	
	2016	2015	2016	2015
Share price at the end of the period, EUR/SEK	15.80	8.60	151.00	84.25
Change from previous year	83.7	-3.9%	79.2	-1.5%
Volume-weighted average share price, EUR/SEK	11.39	9.18	107.63	87.18
Highest share price in the period, EUR/SEK	15.95	12.49	163.00	119.00
Lowest share price in the period, EUR/SEK	7.67	7.42	71.75	70.25
Trading days	253	251	252	251
Trading volume	6,871,859	15,721,775	2,132,958	4,078,078
Average daily trading volume	27,161	62,637	8,464	16,247

**Share development, Nasdaq Helsinki****Share development, Nasdaq Stockholm****Dividend payout history**

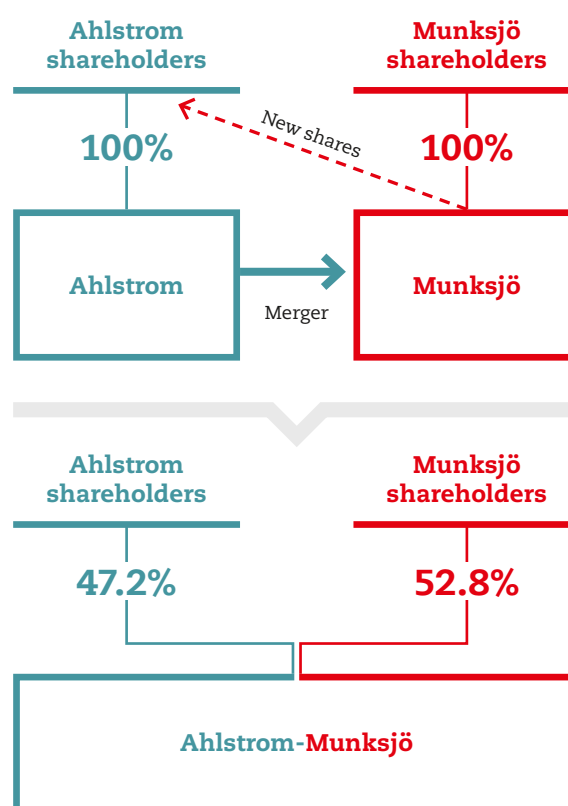
	2017	2016	2015	2014
Return of equity per share	0.45*	0.30	0.25	0.10
Effective dividend yield**, %	2.8	3.5	2.8	1.9

\* Approved by EGM on 11 January 2017. Return of equity distributed before the combination is completed in lieu of the ordinary annual distribution.

\*\* All dividend calculations are based on return of equity.

**Shareholding in the combined company**

Ahlstrom's shareholders will as merger consideration receive 0.9738 new shares in Munksjö to be issued for each share in Ahlstrom. Munksjö's shareholders will keep their shares. This will correspond to an ownership in the combined company of approximately 47.2% and approximately 52.8% for Ahlstrom and Munksjö shareholders respectively

**Top owners in the combined company\***

Owner	% of shares and votes
Ahlström Capital <sup>1)</sup>	14.0
Virala group of companies <sup>2)</sup>	12.6
Ilmarinen Mutual Pension Insurance Company	4.7
Varma Mutual Pension Insurance Company	2.4
OP Mutual Funds	1.8
<b>Top 5 shareholders</b>	<b>35.5</b>
Other shareholders	64.5
<b>Total</b>	<b>100.0</b>

\* Source: Euroclear Finland and Euroclear Sweden as per 30 November 2016.

<sup>1)</sup> Through AC Invest Five B.V. and AC Invest Six B.V.

<sup>2)</sup> Through Vimpu Intressenter AB and Viknum AB. Includes also Alexander Ehrmrooth holdings through Belgrano Inversiones Oy, although not a part of the Virala group of companies.

# Proposed combination of Munksjö and Ahlstrom

On 7 November 2016 the Boards of Directors of Munksjö Oyj and Ahlstrom Corporation announced the combination of the two companies through a merger.

On 11 January 2017 the combination was approved by the Extraordinary General Meetings of Munksjö and Ahlstrom. After approval from relevant competition authorities, the combination is expected to be completed in the beginning of the second quarter of 2017.

## Transaction overview

The proposed combination will be executed through a statutory absorption merger whereby Ahlstrom will be merged into Munksjö.

Ahlstrom's shareholders will receive as merger consideration 0.9738 new shares in Munksjö for each share in Ahlstrom owned by them, corresponding to an ownership in the combined company following the completion of the combination of approximately 52.8% for Munksjö shareholders and approximately 47.2% for Ahlstrom shareholders.

Ahlstrom and Munksjö propose to distribute funds in the total amount of approximately EUR 23 million each to their respective shareholders before the combination is completed. The combined entity has obtained underwritten financing for the merger from Nordea and SEB.

## The combined company



The combined company will become a global leader in sustainable and innovative fiber-based solutions with preliminary combined annual net sales of approximately EUR 2.2 billion and EBITDA of EUR 249 million for the twelve months ended 30 September 2016, and approximately 6,200 employees.

The combined company will have 41 production and converting facilities in 14 countries and will have leading global positions in its main product areas:

**Decor:** Surface cover for wood-based panels, used in the production of furniture, flooring and other interior and exterior architectural panels.

**Filtration and Performance:** Products used for automotive applications (oil,

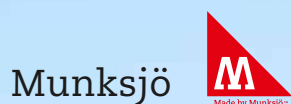
fuel and air filters), gas turbines and indoor air quality filters. Advanced filter applications for, among others, laboratory use and life science applications.

**Industrial Solutions:** Release liners and other products used for, among others, labelling, specialty tapes, abrasive backings, electrotechnical insulation and other industrial applications.

**Specialties:** Specialty products used for, among others, building and wind applications, medical care, hygiene and food packaging.

Financial targets for the combined company will include an EBITDA margin above 14% over a business cycle, net gearing below 100%, as well as a stable and annually increasing dividend.





Net sales 2015*	EUR 1.1 billion
No. of employees	2,900
No. of production and converting sites	15
No. of countries	7



Ahlstrom **AHLSTROM**

Net sales 2015*	EUR 1.1 billion
No. of employees	3,300
No. of production and converting sites	26
No. of countries	12



## Munksjö + Ahlstrom

Preliminary combined net sales approximately

EUR 2.2 billion

No. of production and converting sites

41

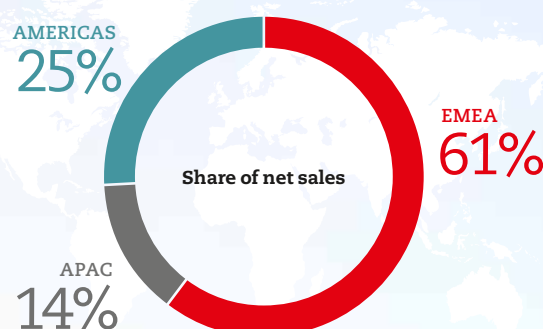
No. of employees

6,200

No. of countries

14

- ▶ A global leader in sustainable and innovative fiber-based solutions.
- ▶ Leading market positions in several niches.
- ▶ Creates a leading global supplier of sustainable and innovative fiber-based solutions.
- ▶ Strong and well-established platform with multiple growth opportunities.
- ▶ Significant synergies through coordination of operations.
- ▶ Benefits of scale in the capital markets.



### Jan Åström, President and CEO of Munksjö:

“ Munksjö and Ahlstrom are two solid and profitable companies with strong cash flows that already today have attractive positions within their respective businesses. Together we will form an even stronger growth platform supported by the cost synergies identified but also by the added top line opportunities. The offerings and market presences are complementary, enabling us to offer our customers a broader range of solutions with a truly global reach. Our collective quality leadership, know-how and innovation capacity will add further value to all customers. About 90 per cent of the combined company’s products are made from renewable fibers, which will be increasingly important for our sustainability ambitions and footprint going forward.

## Rationale for the combination

The combined company will be better positioned to serve customers and will have a strengthened position in the value chain through increased size.

Through the combination, a strong and well-established platform will be created with multiple growth opportunities through a broadened customer base, a widened geographical footprint and expanded product and service offerings. Together, the companies will be able to serve a broad range of end-market segments with complementary product and service offerings (for example, filtration and abrasives to the auto-

motive industry as well as food and beverage packaging and release liners to the food and beverage industry), which creates potential for innovation within new customer-focused solutions.

The two companies have complementary geographical footprints, as Munksjö has strong market positions in Europe and South America and Ahlstrom has strong market positions in Europe, North America and Asia, which opens up new geographical growth opportunities through coordination of the product portfolios and distribution and logistics networks. The combined

company will have a more diversified revenue and earnings base through this wider geographic footprint and broader product offering and is expected to have a strong financial position and cash flow to support the combined company's strategic growth ambitions.

The increased size and strengthened capital base also gives potential for increased financing options and lower cost of debt. Furthermore, the combination offers employees enhanced career opportunities, supporting the combined company's ability to attract and retain top talent.

## Synergies

The combination is expected to create significant value for the stakeholders in the combined company through synergies resulting from the coordination of the operations of the two companies. Short to mid-term, the annual cost synergies are estimated to be approximately EUR 35 million.

The majority of the planned cost synergies are expected to be achieved through organisational streamlining, mainly within general, administrative and sales expenses (SG&A) as well as through a focusing of central administration and a combination of administration for closely located sales offices and mills. The remaining planned cost synergies are mainly expected to be reached through coordination of purchasing and production.

The annual cost synergies are expected to be gradually realised over two years following completion of the combination. A more pronounced impact on the combined company's profitability is expected from the fourth quarter of 2017 and the cost synergies are expected to be fully realised as from the second quarter of 2019. Integration costs of approximately EUR 30 million are expected to have nonrecurring cash flow impacts from the third quarter of 2017 to the second quarter of 2018, with the majority of nonrecurring costs impacting the second and third quarters of 2017. Munksjö and Ahlstrom will

inform, consult and negotiate with relevant employee organisations regarding the social, economic and legal consequences of the proposed combination in accordance with the applicable legal requirements.

The combined company will continue to evaluate additional revenue and cost synergies beyond the current plan through leveraging the combined R&D platform, cross selling through the combined customer base and further coordination of production, sales and procurement.



After a very successful integration of our acquired businesses during the past years, the combination with Ahlstrom is a natural step in the execution of our growth strategy.

Peter Seligson, Chairman of the Board, Munksjö



## Background to the combination

The combination is expected to create significant value for the stakeholders in the combined company through stronger global growth opportunities and improved operational efficiency. The combined company's growth ambitions will be supported by a strong balance sheet and strong cash flow generation.



More information about the merger, please see [munksjo.com](http://munksjo.com).



**Made by Munksjö –  
Intelligent paper technology**

Munksjö is a world-leading manufacturer of advanced paper products developed with intelligent paper technology. Munksjö offers and develops customer-specific innovative design and functionality in areas ranging from flooring, kitchens and furnishings to release papers, consumer-friendly packaging and energy transmission. The transition to a sustainable society is a natural driving force for Munksjö's growth as the products can replace non-renewable materials. This is what "Made by Munksjö" stands for.

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