

TRADE FAIR SPECIAL ISSUE



LEND YOUR BUSINESS WINGS!



Ahlstrom-Munksjö is synonymous with expertise and reliability when it comes to backings for coated abrasives. As our slogan «Imagine fiber» suggests, we are constantly exploring the potential offered by fiber to make products that count among the best performing on the market. Driven by a true passion for innovation, our group has a reputation for always striving to propose new ideas to its customers and supporting them in their determination to stand out. This approach is part of DNA and has given rise to some solid technological breakthroughs. For example, thanks to the investment in our Machine 6, our papers have seen the scope of their possibilities expand with a varied palette of colours and some very light grammages (from 25 to 39 gsm). As you will be able to see during the International Hardware Fair in Cologne, Ahlstrom-Munksjö is continuing to put its energy and efforts into rolling out all kinds of bold new solutions. You will also see the launch of our first backings specially made for bonded abrasives. Plus a brand new collection of colours for heavyweight papers that offers unprecedented possibilities will be spreading its wings for the first time. We are not short on ideas and you can count on us to use them to further two ambitions: to help you boost your business and to contribute to a great future for the abrasives market.

Nikita Mulard
Vice-President of
the Abrasive Business

AHLSTROM-MUNKSJÖ & THE SEAM INITIATIVE : STRONG COMMITMENTS FOR THE LONG TERM



As a responsible company, Ahlstrom-Munksjö has joined the new SEAM label program, which was launched by FEPA on 21 January last. The aim is to support firms in the coated abrasive industry that wish to commit to greater sustainability.

In line with its longstanding commitment to the protection of the environment and the health of its workforce, Ahlstrom-Munksjö contributed to the pre-financing of the scheme to set up the **SEAM** (Sustainable European Abrasive Manufacturers) label. This label lays down the **environmental, social and economic standards for European abrasives manufacturers**, enabling them to highlight their commitment with consumers. As well as complying with these standards, the group, which is already committed to a process of continuous improvement, has set itself **four main objectives in terms of future developments**:

1 To improve water use. The Arches mill's aim is to produce all year round **without exceeding the water consumption limits set for periods of drought**. A measure that is both friendly to the environment and reassuring to customers in terms of continual availability of our products! An in-depth study will also be carried out, to analyse the types of water and the mill's needs for each stage of the process and for the different papers. Objective: **to increase the proportion of recycled water from 40% today to 60% in 2022 and to aim for 80% by 2024.**

2 To upgrade the management system, i.e. our certifications: **ISO 14001** (2015 version) and **ISO 50001** (new 2018 version), to guarantee continued and constant progress.



3 To reduce the consumption of compressed air. The number of meters will be increased and concrete actions will be taken to raise the awareness of both production and maintenance staff. That should enable us to **reduce the electricity consumed** to produce compressed air.

4 To optimise the use of the cogeneration plant. This plant is already used to produce steam, but the Arches mill is looking into the possibility of using it to **cover its hot water needs**. This could replace thermal energy (gas) for certain applications (e.g. heating).

Beyond just its own production, Ahlstrom-Munksjö is convinced that the approach initiated with the SEAM scheme will contribute to positive synergies throughout the value chain in order to develop more sustainable abrasives. A programme with a future!

TAKE PART IN AN INITIATIVE PACKED WITH COLOUR AND BURSTING WITH NEW IDEAS!



On the occasion of the International Hardware Fair, the trade fair that your partner will be attending in Cologne from 1 to 3 March, Ahlstrom-Munksjö invites you to an exceptional event

on Monday 2 March at 4.45 pm.
on its stand (D-031 - Hall 10.2)

Don't miss an exclusive opportunity to:

➤ **meet many of the players in the coated and bonded abrasives market:** co-suppliers, abrasives manufacturers, machinery manufacturers, printers, mesh manufacturers, etc.

➤ **discover new and innovative solutions** for bonded and coated abrasives

➤ **enjoy a relaxing and friendly cocktail party.**

Make sure you are there: your partner Ahlstrom-Munksjö has some top-flight surprises in store for you!



AHLSTROM-MUNKSJÖ PRESENTS THE BE SOLUTION THE NEW BUTTERFLY COLLECTION



Following on from the first World of Colors collection, which introduced heavyweight papers to the world of colour, Ahlstrom-Munksjö continues this revolution with a new bi-colour collection that opens up the field of customisation solutions even wider and makes them even more accessible.



The launch of the World of Colors collection was one of the events that marked 2019 in the abrasives world. As part of its The Be Solution concept dedicated to innovation in terms of design - customisation - security, Ahlstrom-Munksjö offered an initial series of **five mass-dyed colours** for heavyweight papers: **black, yellow, purple, red and green**. Inspired by the natural colour of some of the most unique places on the planet, they can be used to differentiate innovative products, improve the visibility of a print, structure an offer by distinguishing types of application or grit sizes, improve the homogeneous quality aspect of abrasives whilst reducing the traces left by wear, and more. These original plain colours come in **three different tones** allowing optimum adaptation to every project. Naturally, any other shades required can be reproduced on request.



A NEW COLLECTION...

The positive reception given to that first World of Colors collection showed that abrasives manufacturers clearly grasped and appreciated its potential. Along with these more than favourable reactions, a new demand was expressed and identified as particularly promising. Some abrasive manufacturers have expressed the wish to **benefit from the differentiating advantages of colour to resolve certain technical problems such as marbling effects whilst keeping their usual backing color, so as not to disorient what can often**

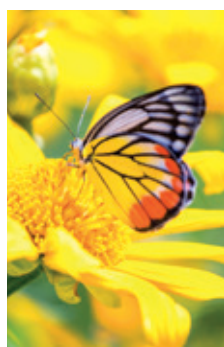
be a conservative end market. To meet this demand, Ahlstrom-Munksjö's R&D department has put together a brand new World of Colors collection named Butterfly. Instead of being mass-dyed, the colour is now applied to the paper in the form of **coating**, which provides **new opportunities for customisation** whilst also offering **economic advantages**.

... INSPIRED BY BUTTERFLIES

The Butterfly collection is inspired by **biomimicry**, a discipline that consists of studying nature to imitate its processes and designs. Nature is constantly adapting and has, of necessity, developed a wealth of imaginative features that can provide us with ideas for our own imaginative solutions. This applies particularly to butterflies, whose body and wings are adorned with an infinite variety of single colours or combinations of colours. Although **decorative**, these colours are mainly there to fulfil **specific functions**. Ahlstrom-Munksjö has developed an offer that, like the symbolic image of the butterfly, provides an opportunity to **bring something new to an abrasive offering**.

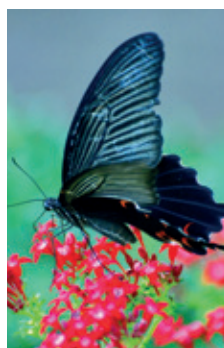
3 WAYS TO STAND OUT THANKS TO THE BI-COLOUR SOLUTION

1 Mimicry



Some butterflies can change their colour(s) to blend in with their environment: leaves, tree bark, etc. This allows them to go unnoticed throughout the day. This **camouflage technique** can be adapted to the future make-coat side of abrasive papers thanks to the Butterfly collection's **ULTRA Brick coating**. As it is the same colour as phenolic resin, it is invisible behind the latter, but **masks any marbling effects**. This coating helps to solve the problems posed by the finer grits, whilst maintaining the appearance of the original product.

2 Protection



To protect themselves from attack, butterflies have splashes of unusual colours on their bodies that have the advantage of frightening away their predators. In the same vein, the Butterfly collection's **ULTRA coating** can be **applied to the back of the backing to generate surprise** on the abrasives market, this with a more economic offer requiring smaller commitments in terms of volume than for a mass-dyed product. Protection can also come from using an antistatic black Ultra Coating of the abrasive paper, as it can provide some of the best **conductivity available on the market for better protection and an even longer service life**.

3 Recognition



Butterflies are a perfect illustration of the power of colour, as it is also what enables all the specimens of the same species to recognise each other. Mass-dyed papers, coatings, combinations: with the new, enhanced World of Colors collection, abrasives manufacturers now have a **unique palette of technical solutions to stamp their identity on their products and really stand out from the crowd!**

YOUR CUSTOM COLOR!



How can you give your abrasive papers a 100% specific colour? All you have to do is send us the Pantone number or an example of it. **Our colorists have the expertise needed to reproduce it for your custom product!**



The Butterfly collection is an ideal complement to mass-dyed backings, which offer undeniable advantages in terms of facilitating identification of a brand and even fighting against counterfeiting by integrating security fibres. To take full advantage of all the possibilities colour can offer, don't hesitate to contact our teams with your ideas!

SPECIAL OFFER BLACK B

DEMAND THE EFFECTIVENESS OF THE BLACK B ANTISTATIC BLACK COATING!



Black B is a ready-to-use backing that offers **the best antistatic pre-coating available on the market**. Guaranteeing high performance ($10^5 \Omega$) and long-lasting use, it is totally insensitive to climatic conditions and in particular the heat produced by sanding or atmospheric variations. **Now is the time to try it out: to tie in with the launch of the Butterfly collection, your Ahlstrom-Munksjö contact has a special offer for you that is valid for any project initiated in 2020!**

TOOLS AND TECHNIQUES FOR CREATING UNIQUE ABRASIVES

As experts in fibers, Ahlstrom-Munksjö have unequalled resources when it comes to developing quality, high-performance, distinctive abrasive backings. Mathieu Dubois, CTS expert at Arches, presents them for us.



As an employee at Arches since 2006, and after 7 years as a CTS expert, Mathieu Dubois is familiar with all the factory's machinery, in particular **Machine 6**. Previously used exclusively to produce one of the group's other specialities, this machine was reconfigured in 2018 so that

it could also produce latex papers along with **Machine 8**, which makes among other the **Latex papers**. «*With these two exceptional machines under the same roof, we can guarantee our customers total security of supply, with the same high level of quality that is standard for us*», says an enthusiastic Mathieu Dubois. «*Being able to rely on these two complementary machines has enabled us to gain both production capacity and flexibility. PM8 and PM6 enable us to develop similar products and give us the agility to meet demand from customers in optimum times.*

BACKINGS THAT RELY ON CUTTING EDGE TECHNOLOGIES

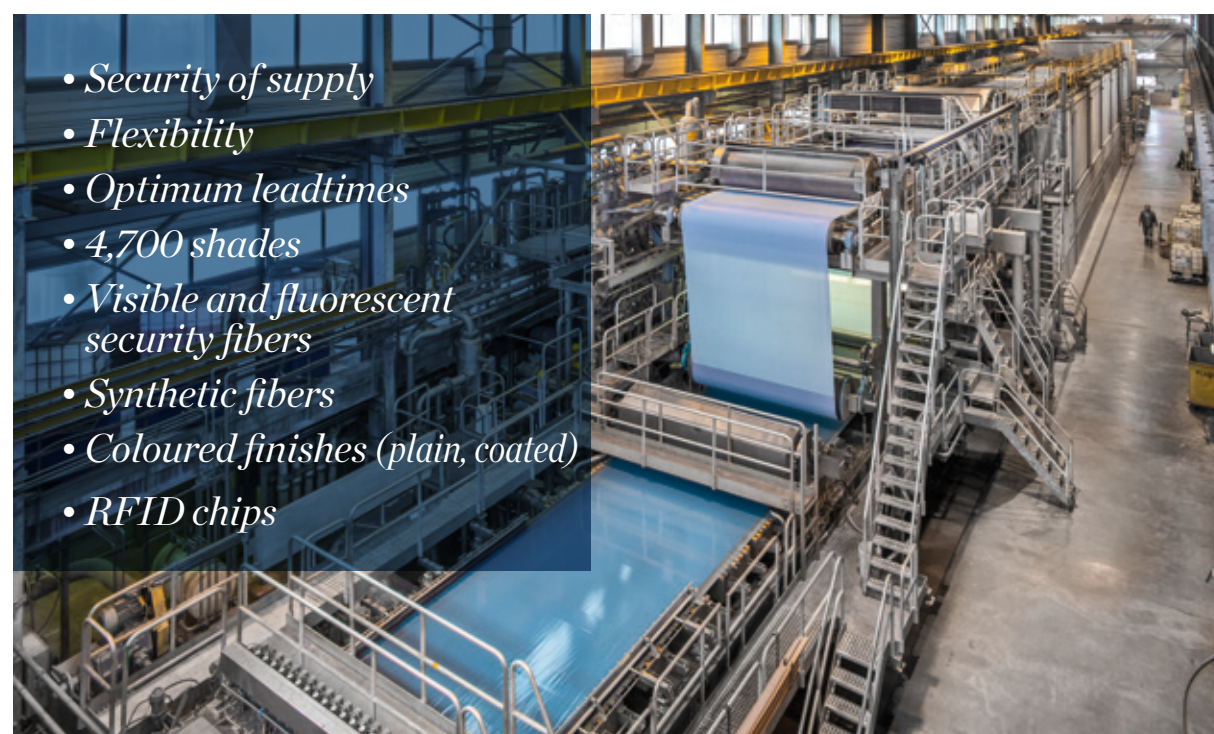
Ahlstrom-Munksjö is pushing back the limits of fiber thanks to technical expertise that enables it to give its backings specific properties... starting with colour. «*At Arches, we have a database of 4,700 shades that we can reproduce with the highest fidelity, production run after production run*», explains Mathieu Dubois. «*And our colourists are capable of recreating any colour you can imagine*». To combat counterfeiting, Ahlstrom-Munksjö can also «*integrate into the formulation of the backings coloured fibers visible to the naked eye that prove the authenticity of the products, or fluorescent fibers visible with a UV*

lamp for internal traceability. These fibers can be made exclusive to a given customer. Synthetic fibers, whose rate of inclusion is adjustable, can also be added to improve dimensional stability and tear strength.»

OPTIMISED PROPERTIES DEPENDING ON REQUIREMENTS

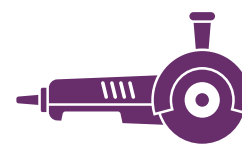
But that is not the only way we can provide the market with unique products. In fact, **flexibility and wet strength** are among other properties of the papers that can be modulated using innovative processes. «*Anything is possible thanks to our cooperation with two research*

centres that are the only ones of their kind in the world, situated in Apprieu and Pont-Évêque. Their equipment and skills in the field of the chemistry and physics of fibers and paper are impressive. It is thanks to them that we have been able to develop our coloured finishes, such as the new World of Colors collection. And even integrate RFID chips into the reels to optimise inventory management, traceability and identification. In addition, our R&D department is able to customise the formulation of the backings according to the type of resin as well as the surface coating of the papers and composites.» A special range dedicated to bonded abrasives is also in development and prototypes are already available and testable, among other innovations!

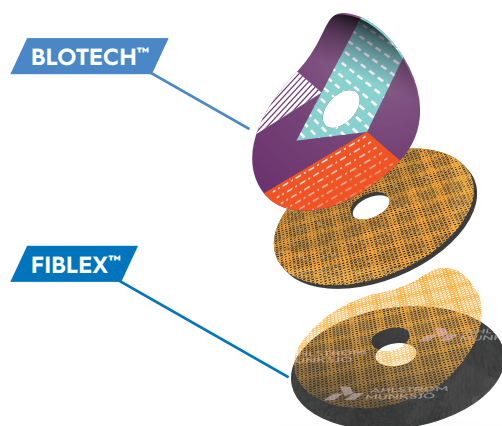


- Security of supply
- Flexibility
- Optimum leadtimes
- 4,700 shades
- Visible and fluorescent security fibers
- Synthetic fibers
- Coloured finishes (plain, coated)
- RFID chips

INNOVATION FOR BETTER BONDED ABRASIVE BACKINGS



Ahlstrom-Munksjö has set itself a new challenge: to create backings for bonded abrasives with the same level of quality as its backings for coated abrasives. The latest news from Estelle Seibert, marketing manager.



«*Ahlstrom-Munksjö quality applied to bonded abrasives: this is what manufacturers of cutting and grinding discs told us they hoped for in 2015. Always ready to listen to what the market is telling us, we decided to take advantage of synergies between our different skills and the capacities of our Machine 6 to give them what they wanted!*» And so Ahlstrom-Munksjö is now able to offer **two types of backings that make the most of the unlimited potential offered by fibers.**

FIBLEX™

Layered onto the fiberglass mesh that will reinforce cutting disks, these backings help manufacturers to avoid clogging up their machines. Black non-woven, paper and crepe paper prototypes are already available in **grammages of 25 - 30 and 39 gsm respectively**. Each type of backing offers different advantages according to the type of disc to be produced. Other grammages are possible on request.

The **paper backing** is «*both flexible and water-repellent so that the abrasive mixture does not go through the paper and clog up the automatic machinery. Its surface quality, its low thickness, its stability and the good resistance of the black colour to heat also ensure that discs of all sizes have an excellent finish after curing.*» Even more stable, the **non-woven backing** is characterised by «*increased flexibility and malleability that enable it to return to a perfectly flat state*». The **crepe paper backing** offers a compromise between the two other solutions, offering «*optimum flexibility, elongation and barrier qualities*».

BLOTECH™

These paper backings are designed for the technical labels containing all the regulatory markings, also known as «*blotters*». «*If stability of colour and surface are key to perfect rendering of the printing after curing and heat-induced cross-linking of the abrasive coating, the formulation of the backing also has to be suited to the inks used and the printing process.* To achieve that, we can make all the necessary adjustments with each printer». The spectrum of possibilities remains open: «*imagining colours other than black, yellow for example, adding security fibers for traceability purposes, etc.* It is even possible to create crepe paper labels for cup-shaped discs.»

Don't hesitate to ask us for samples of the existing prototypes and to let us know your needs in terms of bonded abrasives: together we can create innovative, high-performance and differentiating solutions!

SURVEY: MORE THAN SATISFACTORY RESULTS!

Customer satisfaction is essential for Ahlstrom-Munksjö. To ensure we provide you with ever better support, we conduct regular surveys: here are the results of the most recent one...

- ▶ **75.5%** of respondents consider our sense of innovation very good to excellent.
- ▶ For **85.7%** of them, the innovations developed meet expectations of the market.
- ▶ **97.7%** of them evaluate our compliance with specifications as very good or excellent.
- ▶ **100%** of interviewees would spontaneously recommend Ahlstrom-Munksjö

Many thanks for your confidence and encouraging remarks!

Consistent quality

Product expertise

Speed of response from customer service and technical departments

Diverse product range



Innovation

Customer-orientated approach

Customer support

A 3-PRONGED APPROACH TO DEVELOPING YOUR BUSINESS

Expertise, innovation, reliability, responsiveness and proactivity: the Ahlstrom-Munksjö qualities that customers appreciate. How can we continue to move forward together? Tony Lesire, Sales and Marketing Manager of the Abrasives divisions makes some proposals.



«A key player capable of changing the game on the market», Ahlstrom-Munksjö is positioned as a «preferred partner that makes value added its primary concern.» To help its customers to develop, a 3-pronged approach has been identified:

1 Differentiate yourself on the market

«To stand out from the crowd, our customers can rely on our wide and regularly enhanced product offering, and on the breadth of our skills and technologies which we can use to customise formulations, colours, etc.» (read more on page 3)

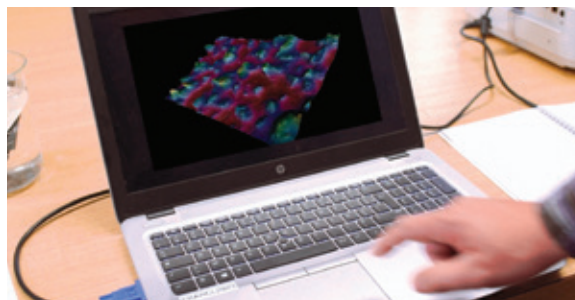
2 Adopt an eco-responsible approach

«Durability is an important commitment at Ahlstrom-Munksjö. Elimination of formaldehyde, development of in-house latex rather than pre-impregnated papers, involvement in the new SEAM scheme (read more on page 1)... we keep taking actions and will continue to do more and more on this front.»

3 Aim for more efficient manufacturing processes

«Thanks to our expertise and the measuring and analysis equipment available at our research centres, we are able to carry out **precise audits of manufacturing processes**. This means we can give our customers advice on how to **optimise a production method**. Even when a method has been in operation for years, there can still be areas that can be improved: our external perspective can identify them!»

There are also solutions to ensure **production consistency**: «How can a manufacturer with production sites in several countries be sure that the product coming off the production line in every factory is identical? The slightest difference in the process can impact on quality. To overcome this problem, we can adapt our backings to each production site.» Likewise, the



regularity of the differentiating features is also guaranteed. «If a customer wishes to use a colour to differentiate its range, that colour will be identical on all its regardless of the paper machine used, the basis weights or the furnish.» More widely, Ahlstrom-Munksjö has established itself as a reference partner offering **technical support for all projects**: «Whatever the target market, our expertise in fibers and abrasives means we are able to work with customers to find the ideal backing, be it paper, a non-woven or a composite.»

CODE OF ETHICS: VALUES FIXED IN OUR DNA

- ▶ **Respect for confidentiality**
- ▶ **Consistent quality and compliance with specifications**
- ▶ **Total commitment to serving our customers, in terms of both time and resources**

A GROWING MARKET FOR NEW GENERATION ABRASIVES: LET'S MEET THE CHALLENGES TOGETHER!

«If you want to go fast, go alone; but if you want to go far, go together» goes the saying and in keeping with that idea, Tony Lesire is convinced that «we can innovate with our customers to meet the needs of growing markets while taking advantage of better visibility. And we can even come together in a **joint development agreement** to design the abrasives of the future by sharing our skills and pooling our R&D capacities.» Interested? Don't hesitate to contact us.



The key to optimum support? «We bring a 360° vision of the process and the related issues and that enables us to develop a perfectly adapted response. Confidentiality is guaranteed, as is stipulated in our code of ethics.» **Would you like to open up new perspectives for your business and guarantee your future success? Let's work hand in hand to achieve it!**

THE VISION

Editorial director: Estelle Seibert
Editorial committee: Estelle Seibert, Tony Lesire, Nikita Mulard, Francis Poirot, Paul Costenoble, Mathieu Dubois, Yannick Habert
Photo credits: Fotolia, Istockphoto, Adobe Stock, Ahlstrom-Munksjö, Shutterstock, Yvon Meyer, Bastien Massot, Manequin
Design and editorial work, graph: www.2s3v.com

SALES OFFICE AND PAPER MILL AHLSTROM-MUNKSJÖ ARCHES SAS
48, route de Remiremont - F-88380 - Arches - FRANCE
Tel.: + 33 3 29 32 81 57

contact.abrasives@ahlstrom-munksjo.com 
<https://www.ahlstrom-munksjo.com/products/abrasive-backing>



SEAM
www.seam.earth