

Trends & Innovation news dedicated to abrasive producers [by Ahlstrom-Munksjö]

## WHEN CREATIVITY MEETS HIGH TECH

### OPPORTUNITY

**Discover E2P and  
a new gallery of  
possibilities**

### NEW DESIGN

**How about dusting off  
your antistatic range?**

### COFFEE TALKS

**The first Coffee Talk  
is on schedule**



# E2P PRINTING WORKSHOP: make your abrasive papers even more unique!

Created in 1956 in the heart of the Arches plant (France), E2P (European Printed Products) is specialized in coatings and high-quality gravure printing of decorative papers or other base materials for the Furniture, Fitting and Flooring industries. The printing facility is hyper-complementary to the abrasive online coating capacity. For our abrasive customers it means opportunities to stand out from the crowd thanks to multiple finishing possibilities.



## Flexibility to cover every possibility

The offline lab and industrial machinery and the E2P expert team give the agility to test out technical coatings before applying them on a large scale online.

« Would you like to try out a new surface and get a prototype? That's something we can do for you, with a minimum quantity of two industrial rolls. »

In addition, the printing unit is a potential for innovation allowing to add visual effects combining decors/patterns in various colors...

## Decors of the future available now

As a trend setter, E2P keeps its ear close to the ground to offer Decors that will be the next big thing, in its range book.

E2P's unique in-house lab is another facility that can help give you a head start by creating designs, colors, testing coating and printing technical feasibility, and - why not? - your innovative new coating.

So why not make use of them on the abrasives market too? Whether it's to add a **graphic note**, **express a sustainability trend** or **highlight an end application** such as wood, with this approach, you can steal a march on your competitors.

## OUR APPLICATIONS

### TECHNICAL COATINGS

- » Release
- » Tracing
- » Security components

### PRINTED PATTERNS & DESIGNS

- » **Decorative papers:** HP and LP Laminate industry
- » **Plastics:** furniture and flooring applications
- » **Packaging:** printed cardboard for packing applications
- » **Nonwoven:** wallcover applications

## STAND-OUT EFFECTS

- Iridescent
- Flip-flop
- Peacock
- Mother-of-pearl coatings
- Metallic coatings
- Fluo coatings
- Taste & olfactory coatings
- UV inks



Learn more about E2P in the next Coffee Talk See P.5

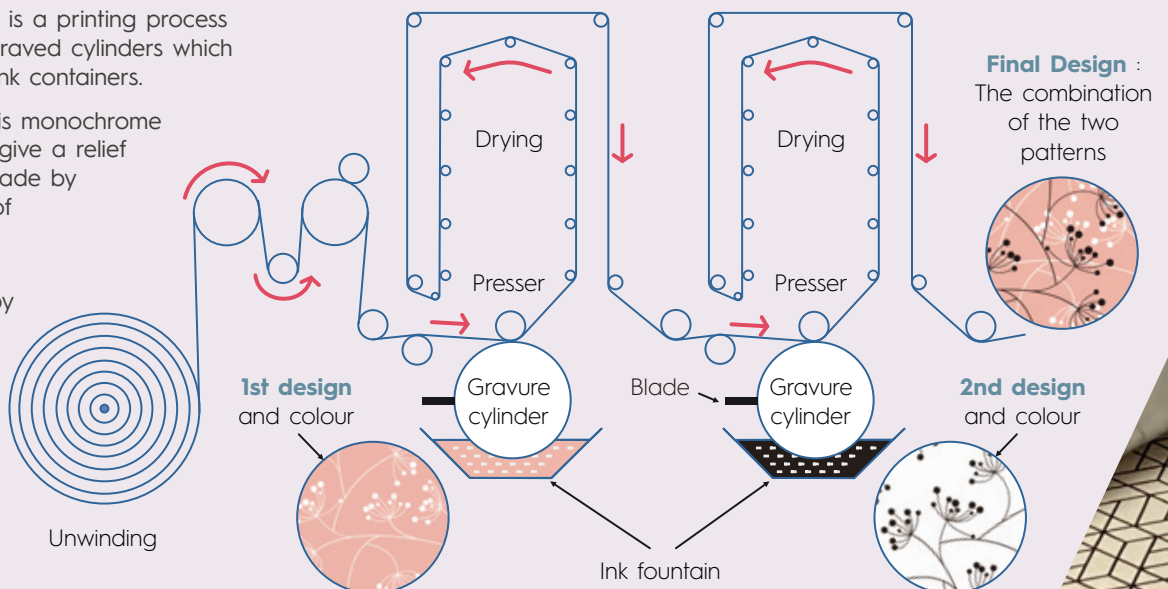
## OUR PRINTING & COATING EQUIPMENT

Rotogravure is a printing process that uses engraved cylinders which pass through ink containers.

» Each cylinder is monochrome (1 color) but can give a relief within the same shade by varying the depth of the engraving on the cylinder

» A pattern is printed by combining up to 4 cylinders.

» You can print on 1 or the 2 sides of the base.



# PRINT YOUR FUTURE SUCCESS NOW!

The Creative Design offer draws on the skills of E2P and enables you to stand out - with style and instructional content! Now is your chance to rediscover the collection, which we are constantly adding to, as you can see on the next page.

## Original printed designs on the abrasive paper backing

Accompany the end-users and stand out by adding one of the three categories of visuals :

- **Graphic** - With the constant growth in DIY and niche markets like skateboard griptape, a new clientele is appearing for whom the visual aspect is as important as product functionality. Give your coated abrasives a trendy, glamorous look.
- **Differentiating** - Until now the visual aspect has barely been exploited by manufacturers, but with an ever greater choice of products on the shelves, better communication in store is now playing a role in the purchasing choices.
- **Instructive** - By using color coding, motifs and pictograms, an instructive pattern can convey messages to facilitate understanding or help to select the product according to the materials to be sanded.

## Flexible and technical answers to printing problems

Pre-printed paper can be a way to:

- Add complex multi-colored printings on the grit and/or back side of the abrasive backing
- Print a solid color on the grit side to reinforce «visual longevity» of the abrasive and in some cases solve appearance issues (blotchiness)

Standard or custom design prints, colors, technical additives such as carbon black for antistatic products... there's a mine of possibilities! By selecting the right grits & resins and adding our creative design, we can find the final touch that says exactly who you are!

### DID YOU KNOW?



The **Be Solution** pack includes solutions to create innovative sandpapers that will reflect your image. Out of The Creative Design Collection, you can also get **security devices** for anti-counterfeiting and genuine quality identification.



## REASONS YOU APPRECIATE THE BE SOLUTION?

- 1 ➤ **Personalize** the finished abrasive product
- 2 ➤ **Create marketing** and sales activity around a brand or event via the abrasive look
- 3 ➤ **Increase the value** of the product offer through marketing and merchandising operations in the DIY market
- 4 ➤ **Protect the brand**, avoid losing sales and spoiled image due to counterfeiting
- 5 ➤ **Gain a foothold** in fashion-oriented markets such as cosmetics

## OUR 4 ESSENTIAL COLLECTIONS

1

Be Timeless

2

Be Revealing

3

Be Easy

4

Be Fashion

# HOW ABOUT DUSTING OFF YOUR ANTISTATIC RANGE?

Created with the aid of a professional designer, two original new patterns will give your abrasive range enhanced antistatic effectiveness and a new look. Why choose a ready-to-use antistatic with a pattern ?

From left to right : The patterns Net, Mesh and Oxygen

**Antistatic backing papers have proved their worth in limiting belt clogging.**

R&D manager Thierry Mayade explains the phenomenon for us. *"Even though a paper backing is flat, the antistatic effect created on one side of the paper forms something like a Faraday cage: the conductive pattern that we have added will protect the whole belt against the electric (over) loads generated by the friction. Thanks to the conductive mesh, the electrostatic charge is dissipated.*

*The belt therefore remains in balance, which avoids dust being attracted to the paper and leaves it free to be extracted more easily. Belts last considerably longer and the work environment is cleaner and safer."*

**BLACK B, which performs particularly well, is the antistatic paper par excellence.** Its surface resistivity of  $10^5 \Omega/\text{sq}$  guarantees high performance.

In its classic version, the solid carbon black coating offers the best density. **However a pattern can replace the layer as long as it is dense enough.** And if a transparent resin is added, a design can be printed on to express the technical nature of your antistatic products to your users without impacting the quality of the antistatic.

Oxygen was originally developed with this in mind. Now we are enhancing the range with two new graphic effects that illustrate the conductive network and meshing on the paper.

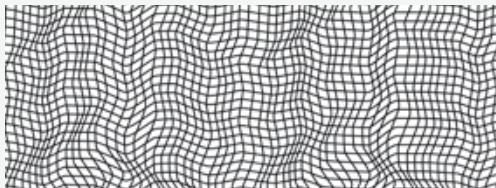
## NEW DESIGNS AS TECHNICAL AS THEY ARE CREATIVE

New creative elements are added to a technical product already renowned for its excellence. Compared to Oxygen, the new **Mesh** and **Net** patterns feature a tighter, denser mesh synonymous with improved effectiveness.



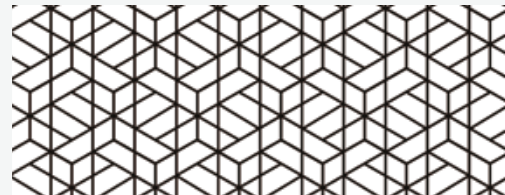
MESH

- With its irregular netting effect, Mesh has an undulating pattern of chevrons of medium amplitude. Coupling technical and design features, these impactful, intriguing graphics will appeal to those who like surprising or unique motifs.



NET

- Net is a regular geometric pattern based on the hexagon inspired by 70s wall coverings. With its repeating, intertwined shapes, it offers a rich decorative structure that is both elegant and contemporary.



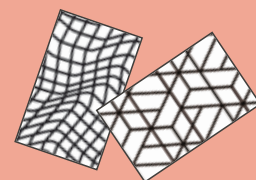
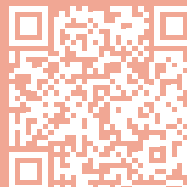
By printing a precise, unusual and attractive pattern, you can give your most effective products an ever greater opportunity to stand out and offer a degree of variety that can't fail to please your customers.

## TAKE ADVANTAGE OF THE EISENWARENMESSE TO PICK UP YOUR FREE SAMPLES!

From **25 to 28 September** next, meet our team at the Dorint Hotel in Cologne (next to the exhibition hall) to talk about your projects and get the samples of our new antistatic designs.

**Make an appointment and reserve your samples right here** »

Discover Mesh & Net



# THE FIRST COFFEE TALKS IS ON SCHEDULE curtains up on unimagined potential!

A promise made, a promise kept: the first Coffee Talk, Ahlstrom-Munksjö's new web event for customers, will be with us just after the summer vacation. This session's theme will reveal the potential of rotogravure, to give you a comprehensive grasp of the concept and an idea of the advantages it can bring to the abrasives sector



Did you enjoy our Coffee Breaks? If you did, you're going to love the *Coffee Talks*... Our marketing manager, Estelle Seibert, will be presenting them once again, addressing a subject that can bring value to the abrasives industry during a series of fascinating, interactive two-stage events: **first an interview with some**

**experts, followed up by a discussion session (The Ask Me Anything session) when you will be able to ask all your questions.** This collective reflection will be a chance to develop new ideas and add value and a touch of innovation to your product range.

**To get the ball rolling, we'll be talking about rotogravure. A great way of bringing together creativity and more technical aspects in our specialty.**

On the menu: a look at how a principle originally associated with decors designed with esthetics can actually bring numerous technical improvements: patterns originated by this process are inspiring our industry to make abrasives more effective, but also to give them an original design and make them more appealing for your customers.

On this topic, we'll have the pleasure of hearing from no less than 3 experts in the field:

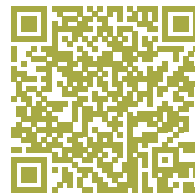
- ▶ **Pierre Barriac**, Head of E2P, our group's rotogravure printing shop;
- ▶ **Rachel Padox**, E2P R&D Manager and CTS;
- ▶ **Didier Galerne**, a trend consultant who has been working with us for 44 years.

We'll be talking with them about **colours, pigments, metallic materials and even antistatic technical coatings.**

Together we'll be learning about the latest design trends and the know-how needed to transpose them into paper production. You'll discover an unsuspected range of applications, even encompassing product traceability and protection.

We'll be there! All we need now is for you to join us!

## WANT TO KNOW ALL ABOUT THE COFFEE TALKS



Scan the QR Code to discover **this new event**. The first interview will be broadcasted mid-September and the related AMA sessions will be taking place on **29 and 30 September**.

To join us, **sign up here:**



Once registered, you'll receive the interview directly in your mailbox.

We'll also guide you through to join in the Big Day to interact with our experts and get your live BONUS reserved to the participants of the AMA session.

## The participants



### ▶ DIDIER GALERNE

**Colors and material designer art director**

*As a designer and artistic director I will be involved to upgrade the abrasive range of products: how the design could make the difference? Due to E2P experience, we will be able to create innovative products in the abrasive sector.*



### ▶ PIERRE BARRIAC

**Head of E2P**

*As Head of E2P, I'm thrilled to explain more about rotogravure, Ahlstrom-Munksjö's technical advantages as well as our teams knowledge, enthusiasm and competencies : key assets to develop tailor-made and innovative products for abrasive customers.*



### ▶ RACHEL PADOX

**R&D Manager-TCS E2P**

*Rotogravure printing allows us to touch a wide range of products. That's why I love working here. We can compete with the other printing technologies and bring good solutions on different substrates and let our creativity express itself.*

# E2P'S GALLERY

## VISUAL PRINTED SOLUTIONS:

Be unique with **stand-out effect**



### Plain colors



One side



Two sides for bicolor aspects



Catchy solutions

### Decors & Patterns in various colors

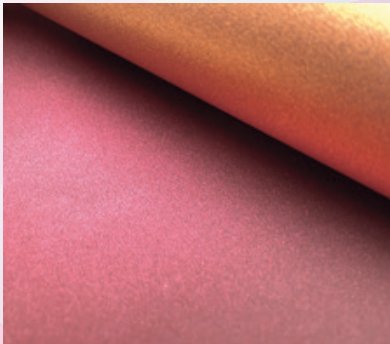


Decors of materials (ie. wood)

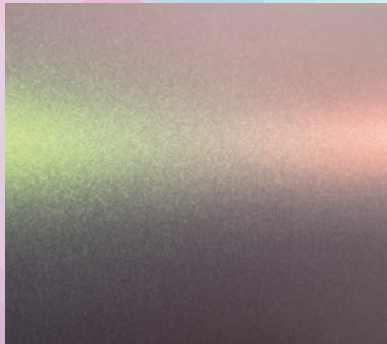


Creative Patterns

### Irresistible Effect



Iridescent effect



Flip-flop effect



Mother-of-pearl coating



Metallic coating

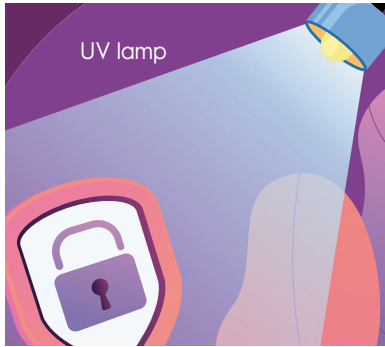


Peacock effect

## TECHNICAL COATING:

Be unique with **technical features**

Play with senses



Secure with UV inks



Add barriers on one or two sides



Create antistatic effects



Create adherence and antislip effects



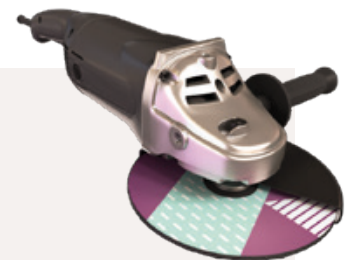
Protect from various adhesive surfaces

And more to discover in the coming Coffee Talk - see page 5.



## APPEAL FOR ABRASIVES

- » Antistatic coatings
- » Plain coloured features for fine grits
- » And Many ideas to try out
  - New barrier generations
  - Metallic pre-coated labels for bonded discs
  - ....



## GOOD TO KNOW ABOUT E2P



- » E2P is able to print on a wide variety of substrates > paper, nonwoven, liner, PVC/PET film
- » Basis weights range > from 35 g/m<sup>2</sup> to 900 g/m<sup>2</sup>
- » Widths > max. 2.19 m
- » Min. quantity > from 10,000 m<sup>2</sup> or 1 Ton
- » 3 industrial machines > large-scale printing
- » 3 lab rotogravure machines > tests and validation before industrialization
- » 1 CAD printer for prototypes > prototypes
- » A whole library of decors > 1100 cylinders already!
- » More than 500 decors created since 1956 > multiplied by the number of colors available!

# ROTOGRAVURE: a high quality result possible thanks to high-tech sanding

Rotogravure printing, as we apply it at E2P, requires regular and meticulous care of engrave cylinders. Discover a highly skilled process you, as an abrasives manufacturer can contribute to, with Thierry CHABRIER, a mould wire & printing cylinder technician-manager at FILA-ARCHES.



**Thierry, can you explain the connection between rotogravure and sanding?**

Rotogravure printing uses cylinders that suffer micro-scratches from wear. Regular maintenance involves very fine sanding and skills that few people know anything about.

**You are part of a unit consisting of what we call «chromistes and «formaires» in French. Can you tell us what these two jobs consist of?**

These are rare and highly specialised skills. The «formaire» mainly makes the bronze watermarks that are added to the wire mesh screens used to make fine art papers. The «chromiste» takes care of cylinders. Their parts are reconditioned, repaired even, to give them back their original engraving, so that the printing is perfect.

**Exactly what are the key steps involved in the cylinder creation and maintenance ?**

The pattern is created and validated by a first prototype produced on an ink jet printer in the E2P lab. The model for the pattern is then sent to the engraver, who reproduces it on a steel core to create the rotogravure cylinder, following the technical recommendations of our cylinder technicians, the «chromistes».

An extensive repair of the cylinder might require 3 weeks' work, but the ordinary maintenance process below takes in average 1 day:

- › **Chrome removal:** the chrome is removed using caustic soda under electrolysis, to expose the copper;
- › **Polishing:** dry sanding gives the copper a clean appearance. To do this, you need very fine abrasives : from P800 to P3000 with a B paper backing weight type, above all with a perfect surface, such as our Finishflex RF, which is coated black on one side. The structure of the abrasive grits is closed, with emery grits. The typical binder is animal glue. The polishing is then finished with polishing compound.

- › **Chrome plating again:** the chrome is added by electrolysis, to extend the cylinder's useful life and give it the hardness needed to ensure a good printing quality

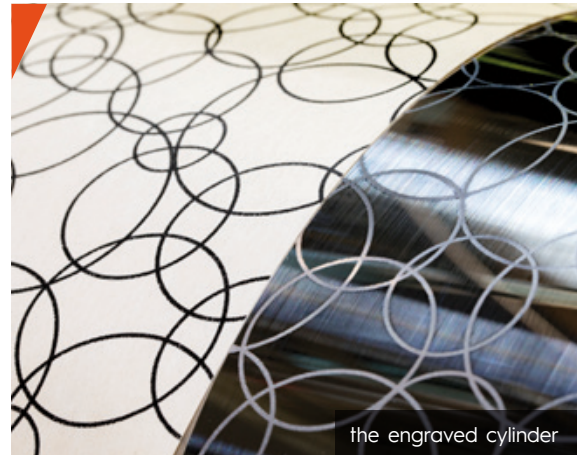
## DID YOU KNOW?

The chrome plating of a cylinder is done after printing 30 to 120 tonnes of paper and its polishing can take in average 4 sheets of abrasive papers. A cylinder can undergo this maintenance process 10 times before being fully engraved again...

**These steps are extremely technical. What can you tell us about the operators?**

These are jobs that demand great attention to detail, patience and about 10 years' experience, to be able to make a proper diagnosis and master the necessary skills for cylinder maintenance. Rotogravure requires perfect quality, otherwise the whole printing process can be affected. You have to know the cylinders, analyse them visually and under the microscope, to work out how to recondition them or whether they need replacing.

**A last word on the quality expected of the abrasives?**



the engraved cylinder

Our speciality requires the abrasive to be very consistent: it's all the more important to have a homogeneous surface for fine grits when you're sanding dry, to avoid scratching the surface; In other words ... to do an exceptionally skilled job properly, you also need to have ultra-high quality consumables!

## THE VISION

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Unsplash, Bastien Massot, Pexels, Freepik.

Design and editorial work, graph : [www.2s3v.com](http://www.2s3v.com)

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