

impressive

ISSUE 2/2016

Heimbach Fit for Atrojet

New production facility inaugurated

Politics Grants Research

Heimbach and the Microbial Fuel Cell

A Breakthrough in Dryer Fabrics

More efficient than ever

Packaging from Carton Board

More than just "Convenient" and "Beautiful"

Laboratory Analysis for your Machine

What used felts tell us

Best practice from practical experience

About single shoe presses, Atrocross & maximum dewatering

Our friend and colleague Paper Pete is on the road again to bring you important news "from everyday life": We invite you to accompany him on his trip to Ruzomberok, the Slovakian City of Paper

Manufacturing and learn more about the enormous potential for dewatering with single shoe presses.

More from Paper Pete see page 09.



Dear Paper Makers,



A warm welcome to the summer issue of impressive!

"Spring is a time of renewal", and in the spirit of this well-known saying we dedicated our latest editorial meeting to the idea of "innovation":

Project "TexKoMBZ" is dedicated to the production of energy that is easy on natural resources with the aid of micro organisms: On the next few pages you will learn about the part that Heimbach plays in this and what benefits this idea could bring to the paper industry.

Not only research but also production at Heimbach is breaking new ground: At our site in Olten in Switzerland we commissioned a **new production facility** for the manufacture of Atrojet press felts. Thanks to this investment we are well-equipped for the future and are able to react flexibly to peaks in orders for this new press felt.

The dryer section as well is developing all the time: From page 6 onwards you can read about our **new generation of dryer fabrics** which are easy to clean having declared war on contamination.

Our colleague Paper Pete continues to report: This time he is on the trail of **single shoe presses** and he will explain what effect the choice and design of machine clothing can have on the productivity of your paper machines.

Anyway, enough of this preamble. I hope you enjoy reading this issue,

Peter Michels

Peter Michels
Managing Director

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New Production Facility for Atrojet

Heimbach Well Equipped for Worldwide Production

Even at the beginning of its' development in 2011, Heimbach product managers were sure: Atrojet has the potential to usher in a new era in press felt technology. This has since been confirmed because after conducting a series of trials in various positions our order books are now well stocked and the focus is now on the need to meet an ever increasing demand. Based on this we proceeded to invest in a production facility at our manufacturing site in Olten, Switzerland.



Strategic product managers Franz Kiefer (left) and Jochen Pirig (right) performing quality control of an Atrojet press felt.



Successful teamwork across sites: Members of staff from Heimbach Switzerland and colleagues from Düren in front of the new production facility.

"We promised paper manufacturers that we would develop a press felt that creates completely new opportunities", Franz Kiefer, strategic product manager at Heimbach, remembers. This has been accomplished, as Atrojet is the first felt worldwide that comprises a **multi-axial non-woven structure**. This technical achievement guarantees fast start-ups, high dewatering and longer lifetimes, which references have now proven.

New Facility Means Reliability

What counts is the accurate and precise construction of the base structure, according to Dieter Telgmann who, as press section development engineer, is also a key member of the Atrojet team: "Heimbach Olten has for a long time been recognised as a **competence centre for multi-axial woven products**. The new production facility fits perfectly with the machinery and organisational structures on site." Since

the first quarter of this year production has been in full swing. This was essential, continues Telgmann, because: "We are pleased to be able to say that just a few months since the introduction of the product **market demand has been very positive.**" With the commissioning of the new facility

Heimbach is now well-positioned to serve peaks in orders of Atrojet quickly and on time: "A seven-figure investment in our customers!" – There is nothing more to add to Franz Kiefer's statement ...



In comparison with conventional bases Atrojet offers a much more homogenous MD yarn structure which forms a much larger contact surface: This leads to a more even transmission of power in the press nip; extremely uniform dewatering and optimal paper CD profiles are the benefits for paper manufacturers.

Heimbach Researching for the Future of Energy On Micro Organisms, Carbon Textiles and Energy Production

On 10 February, Heimbach had the privilege of welcoming a distinguished visitor, as Permanent Parliamentary Secretary Thomas Rachel came to visit the company – with good news in his briefcase: Namely, Heimbach is now an official partner in a research project working towards a “carbon-based microbial fuel cell” (TexKoMBZ) providing a textile carrier module for energy-producing micro organisms.

This sounds more complicated than it is, as **TexKoMBZ** basically refers, in simple terms, to producing energy from bacteria that adhere to a textile carrier module and clean discharged waste water: This process results in energy which can be tapped and utilised. This publicly funded research project has been approved by way of an invitation for tenders by the Federal Ministry of Education and Research entitled “New Products for the Bio Economy”. All in all, the Ministry will support an interdisciplinary research network to the tune of Euro 810,000, of which Heimbach will be granted Euro 35,000.

How does the concept work?

Everybody knows that fossil fuels need to be superseded as soon as possible. The “energy turnaround” is in full swing: Besides wind and water power, solar energy as well as geothermal energy and bio gas, **microbial energy production** is an important component of this challenge for society. The concept of TexKoMBZ works as follows: In contrast to conventional fuel cells **textiles from carbon fabrics** or scrims are set up as the negative pole. Bacteria from sewage are taken up by these cathodes and produce electricity – a “bacterial negative pole” to coin a phrase.

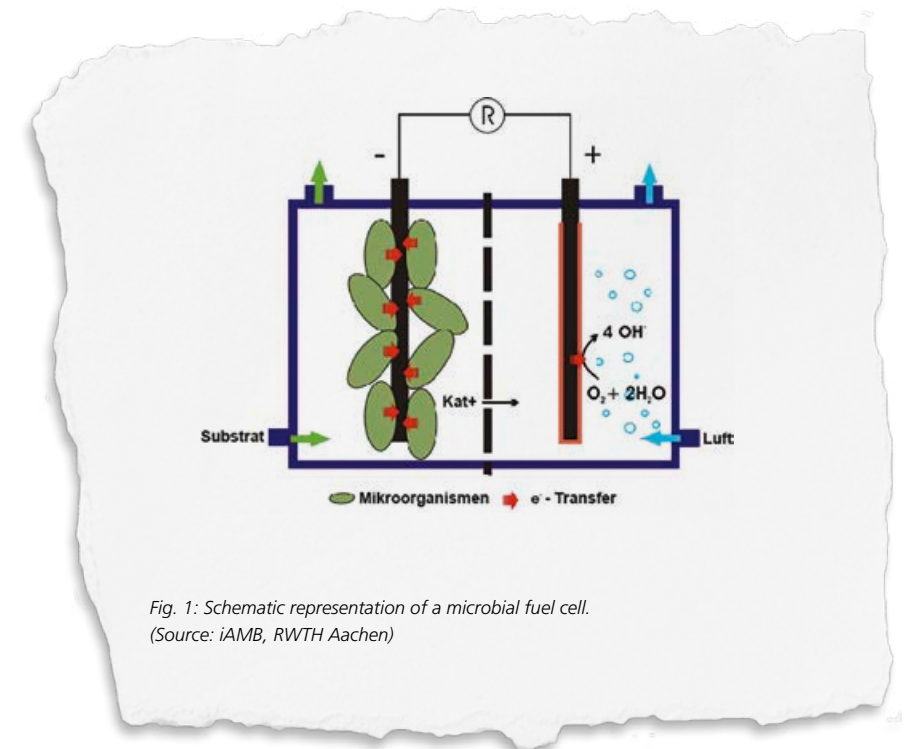


Fig. 1: Schematic representation of a microbial fuel cell.
(Source: iAMB, RWTH Aachen)

In order for the micro organisms to adhere in the best possible way, three-dimensional textiles (rolls, tubes, reels, etc.) made of carbon are fabricated: this high-performance material that is used in many different industries has a surface structure “loved” by bacteria, which is why they adhere to it. And since carbon is an electrical conductor, the energy produced by the micro organisms while cleaning the waste water can be tapped from the battery (see fig. 1).

Germany as a Research and Economic Location

Globalisation means confronting the constant pressure of competition. This is true in particular for our paper industry. Therefore it is good to know that as a research

location Germany is at the forefront where progress is concerned. This certainly applies to TexKoMBZ because the experts from **Heimbach's R+D Department** are responsible for “only” one subtask – that is, the production of three-dimensional carbon carrier modules. The complete microbial fuel cell will only be produced **together with other research institutes and specialist industries**. This is a prime example of the way in which Germany as a research and economic location is driving forward the development of society through co-operation between specialised scientists and technology companies: Because the commitment to produce **energy that conserves precious resources cost-effectively** in order to remain



Permanent Secretary Thomas Rachel (left) presents the approval document to Managing Director Peter Michels. Thomas Rachel has been an MP in the Bundestag (Federal German Parliament) for the constituency of Düren since 1994, and since 2005 he has been Permanent Parliamentary Secretary in the German Ministry of Education and Research.

competitive concerns everybody – not least paper manufacturers.

Benefits for Paper Manufacturers

It is self-evident that the waste water and energy industries are the prime beneficiaries of this new process. However, we in the paper industry will also benefit from it, for ultimately paper-manufacturing companies will have the opportunity, thanks to

TexKoMBZ, **to utilise waste water in a targeted way in order to produce energy.** And since energy costs are known to constitute a major part of the total expenditure in paper production, TexKoMBZ provides an opportunity to reduce the cost of production permanently – while operating in a sustainable and future-oriented way at the same time.

Who is taking part?

The scientists in Heimbach's R+D Department are looking forward to constructive co-operation with the following partners:

- Institute for Textile Technology RWTH Aachen University (ITA) via ITA Augsburg GmbH
- Institute for Applied Microbiology of RWTH Aachen (IAMB)
- Institute of Modelling and High-Performance Computing Niederrein (IMH)
- Institute for Urban Water Management at RWTH Aachen University (ISA)
- Güth & Wolf GmbH and CARBO-TEX GmbH (both carbon textile manufacturers)
- Mainsite Technologies GmbH (Construction)
- UPM Hürth Rhein Papier GmbH (paper manufacturing and waste water treatment)

Interested in learning more?

If you are interested in the method and technology background we recommend the specialist report of RWTH Aachen University: This can be ordered free of charge from Frau Silke Eßer on +49 2421/802-207 or by email to silke.esser@heimbach.com.

Generate a Cleaner Dryer Section

More Efficient Cleaning with a New Dryer Fabric

Heimbach places great value on product development and continuous improvement. Of particular importance is to find not only an effective solution by talking to our customers, but also to ensure that this solution is sustainable. In this article we will explain how our specialists have succeeded in developing a dryer fabric that can be cleaned particularly efficiently.

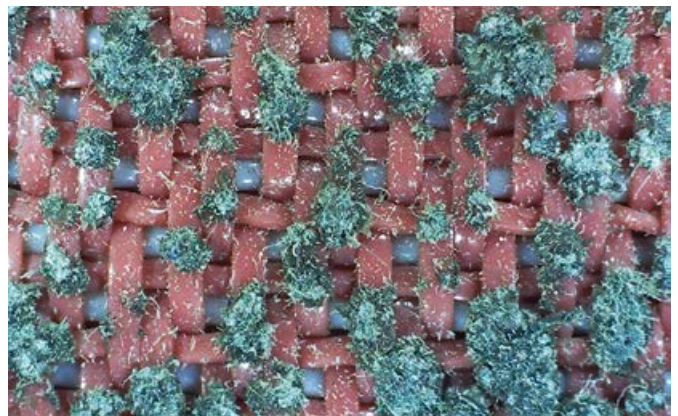
The growing share of board and packaging paper on the world market at the expense of reduced consumption of graphic papers has led to a lowering of the quality of waste paper that is available nowadays. Paper machines and paper machine clothing suffering from contamination due to impurities in the stock is an ever-growing problem. The reason for this is **the decreasing portion of fresh fibre content and increasing contamination due to foreign material and adhesives** in the re-cycled paper. This is particularly noticeable in the dryer section, where deposits occur on both fabrics and rolls. According to Product Manager Yvonne Raschka "As a consequence the contaminated rolls lead to increased wear of the dryer fabric and thus reduce its' lifetime". Peaks in the moisture profile of the sheet pose another problem caused by uneven contamination. In order to balance these out the drying process needs to be intensified, which frequently leads to partial overdrying.

What is needed is a "contamination resistant" dryer fabric

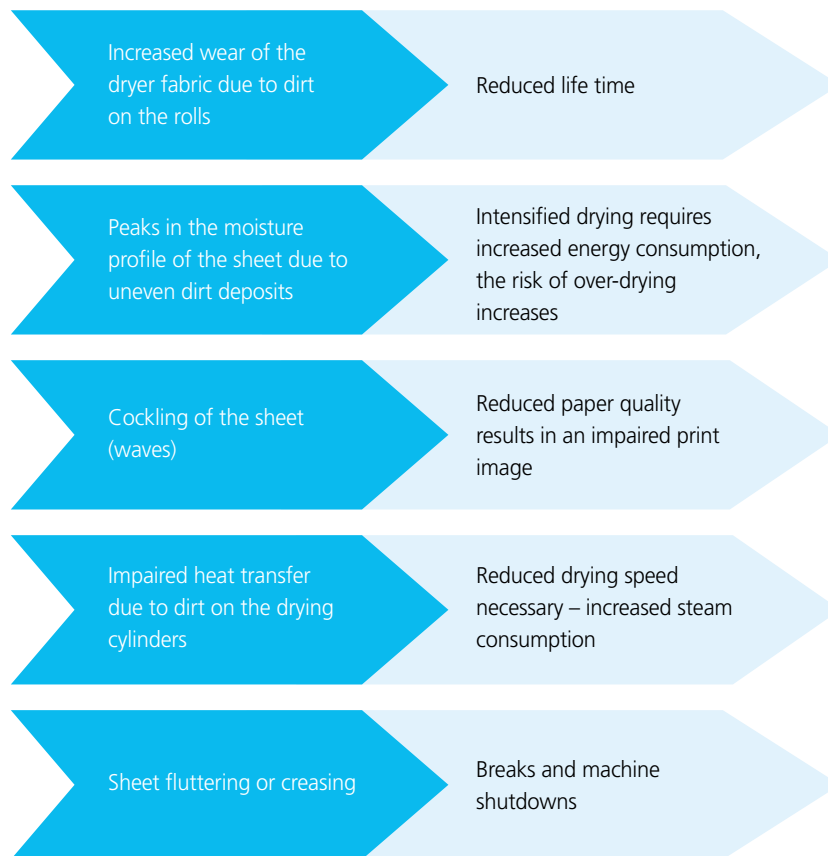
It was this notion of an "ideal dryer fabric" that propelled Heimbach to focus on a new solution and develop **a dryer fabric with high contamination resistance and improved cleanability**. A universal, solution-oriented approach that required detailed investigation. Analysing numerous random samples of used contaminated dryer fabrics revealed that, particularly in the early positions of the dryer section, dirt particles are deposited on the MD yarns on the paper side. It is in these early positions that the degree of contamination of the fabric is most pronounced, due to the large contact area between dryer fabric and sheet generated by the MD yarns, resulting in more dirt being deposited. "This discovery gave us the idea of developing **a design with the least area of attack**, i.e. a reduced contact area" said Yvonne Raschka.



Deposits on the rolls are the result of contaminated dryer fabrics.



Dirt in the dryer fabric tends to be deposited on the MD yarns in the forward positions.



The negative effects of contamination are numerous.

The result should be efficient and sustainable

Yvonne Raschka and her colleagues developed a prototype based on the early findings. "We didn't only want to develop a fabric that was more resistant to contamination, rather a fabric that was also easy to clean and which stayed clean for longer". The Heimbach experts called upon the Heimbach partner Kadant Nordic AB to help test and optimise the design. Heimbach worked with the manufacturer of high-pressure cleaners to clean the new fabric design as well as contaminated fabric samples of various designs under realistic conditions. **The newly developed fabric design gave superior performance from the word go.** "The tests showed that **excellent cleaning results** could be achieved independent of the angle of impact of the water jet" added Yvonne Raschka. Trials on paper machines also revealed reduced dirt deposits with the new design.



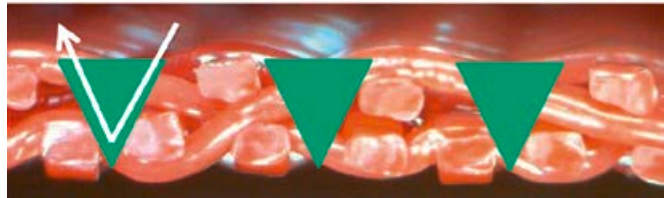
In comparative tests the new fabric design gave superior results when measured against other, conventional fabrics.

Secoplan.V: A clean fabric design

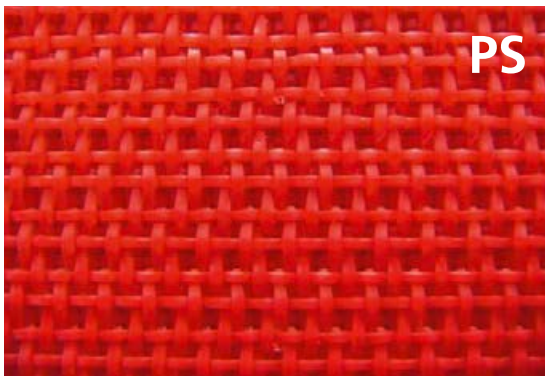
One of the special features of the newly developed dryer fabric Secoplan.V is **the vertical funnel structure** that enables efficient cleaning right into the body of the fabric. Small channels prevent dirt being pressed through the fabric onto the roll. Then there is **the smaller number of contact points** leading to a reduced contact area on the paper side of the dryer fabric that **prevents adhesion of dirt**. The particularly dense roll side helps prevent **particles of dirt** being pressed through the fabric onto the roll, as well as increasing wear resistance – all in all a clean solution.

Efficiency in the dryer section instead of "hot air"

In conclusion it must always be said that the choice of the right kind of fabric design clearly depends on paper grade and the resulting intensity of contamination, on sensitivity to marking, as well as on conditions on the machine. We would be happy to take a look at your dryer section and help you make the right choice.



The funnel structure facilitates efficient cleaning right to the core of the fabric.



A smaller number of contact points as well as a reduced contact area on the paper side prevent adhesion of dirt and make cleaning more efficient. Conversely, the density of yarns on the roll side increases wear resistance.

Solutions for Single Shoe Presses

Efficient Clothing for Future Technology

The pace of globalisation continues to accelerate and an increasingly competitive marketplace forces decision makers to focus on high productivity and efficiency. These factors themselves are of course extremely relevant when investing in a new paper machine. But what use is the most modern machine, if clothing solutions cannot keep the pace with technology? A detailed consideration of clothing makes particular sense in the relatively rare single shoe presses: we asked our practical expert Paper Pete to research current information regarding this revolutionary technology and to present the possibilities that Heimbach clothing can offer for these new dewatering solutions.

Dear paper maker colleagues! Undeniably: single shoe presses (SSP) are still very rare. At present there are just **13 machines worldwide** working with this technology. This is actually surprising, because on the one hand SSP, using the abbreviation, offer a variety of economical options for a wide variety of paper grades. On the other hand, my development colleagues must also have or be ready with **highly efficient clothing solutions** for such machines in order to take the best possible advantage of the potential presented by this technology.

Dewatering with shoe presses

The facts, dear paper makers: While conventional roll presses have a press zone length of 20-50 mm, in shoe presses (SP) this length is much larger at approx. 120-330 mm. Also SP work with surface pressure, while conventional solutions dewater with line pressure: **Dry content > 50 % is easy to implement with SP**. This benefits the entire production process, bearing in mind: if we increase the dry content of the sheet before entering the dryer section by only 1 %, this corresponds to a **production increase of about 5 %** – or respectively less energy consumption for drying.

Efficiency in dewatering

The road to success for the innovative SP began with its' introduction in 1980: in the meantime, **over 1,000 paper machines fitted with SP** can now be found globally (see: Fig. 1). Almost 15 % of the SP currently running came into operation since 2012, which shows how current this subject actually is. Although most SP are used in the production of packaging paper and containerboard, over the years the technique has also become increasingly

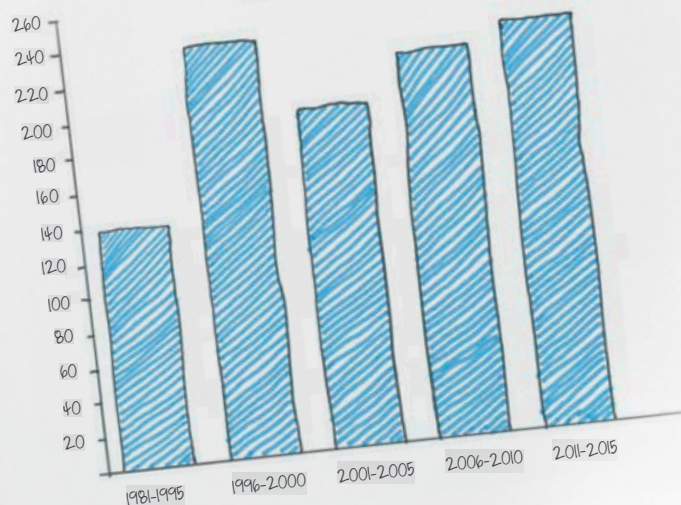


Abb. 1: Development of new shoe press installations.



interesting for **producers** of graphic papers (e.g. newsprint and reprographic paper): it's worth taking a look here at verifiable figures that prove **production costs with SP are up to approx. 40 Euro/tonne lower** (calculated over all grades) than machines running without SP.

Unique technology

In September 2003 our regular customer **Mondi SCP** was the first company in Europe, in Ruzomberok, Slovakia, to start **fine paper production with a single shoe press (SSP)** on PM 18 (for Mondi see info box and Fig. 2). SSP not only present you, dear paper makers, with major challenges: we clothing professionals also need to liaise with, and intensively advise, clients on the (as yet) infrequently-used technology – presenting customized solutions, so that **paper makers exploit the great potential of this innovative technology to its' maximum**. First and foremost the focus is on the two press felts! My colleague Olli Kääpä who has been supervising SP projects with us for many years, always says: **"The entire success of the paper machine depends on the two felts!"**

Decisive felt combination

And Olli Kääpä is far from alone with his opinion. Our development and application engineers also know just how important it is in SSP projects to find the optimal

combination of felts for the customer: The dictum "married couple" has prevailed here internally, which I think is a good description, **forcing us to see the top and bottom felts as a "Couple" with SPP**, when paper makers want to extract the most out of the felts.

My colleagues particularly like it, when I present a project where "married couples" play a key role. It is clear from the outset in our project meetings that everyone is looking forward to finding a way to "square

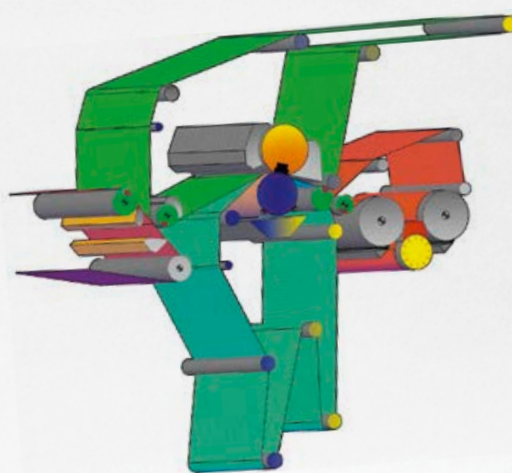


Fig. 2: The MBP Ruzomberok PM 18 single shoe press.

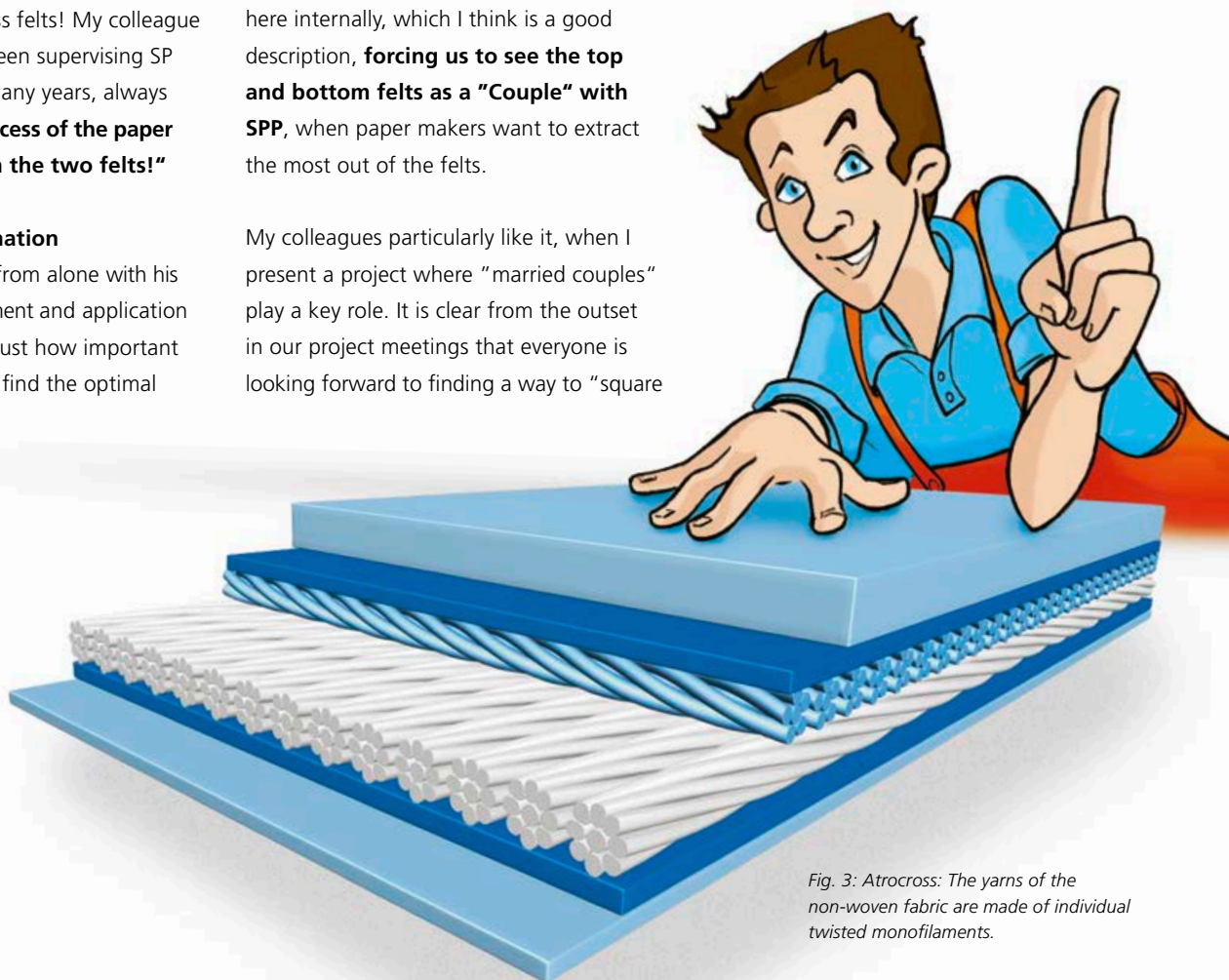


Fig. 3: Atrocross: The yarns of the non-woven fabric are made of individual twisted monofilaments.

the circle", as indeed the felt couple must on the one hand allow **an enormous amount of water** to be discharged in the SSP, whilst at the same time also **produce a very smooth paper quality**. Actually, this contradicts itself as we surely cannot develop felts that are both "open" and "dense"... Or?

Leading from the front

My colleagues considered a **customized solution** right from the very first SSP project with Mondi in Ruzomberok: During 2002/2003 I was not yet on board, but I often hear interesting reports from this time. I can say however, what was on board was a great deal of ambition and spirit of innovation: **a completely new design of felt was developed** using mathematical and physical simulation programs, as well as numerous laboratory tests.

Atrocross milestone

An **Atrocross** married couple was installed on PM 18 (Fig. 3), a press felt design that has been proven to provide extremely fast start-ups and to be a pronounced nip-dewaterer. Continuous developments of non-woven technologies still accompany Mondi Ruzomberok and PM18 today. With the current designs, Mondi's paper makers achieve a **dry content of up to 56 % after the press section!** Excellent moisture profile and **minimal two-sidedness** are observed at the same time. This would

therefore imply a felt that is simultaneously "open" and "dense". Moreover: the two **Atrocross felts** dewater as much as the first, second and third presses of a conventional roll press combined – and with only **a single nip** (Fig. 4).

That's it for today, dear paper makers. And it wasn't long at all with the press power and innovative ideas from my colleagues: do look forward to next time – because I will be reporting on an exciting example of "Best practice from practical experience"...

Regards from Düren

Your Paper Pete

Advantages of single-shoe presses (SSP)

- Lower investment costs (one-time)
- Less space requirement
- Lower operating costs (permanent)
- Reduced downtime through clothing changes
- Lower clothing costs
- Maximum dry content after press

INFOBOX

Mondi/Ruzomberok – long-time world record holders!

Admittedly, our Slovakian colleagues at Mondi Ruzomberok are unfortunately not immortalised in the "Guinness Book of World Records". Nevertheless, they have held a **world speed record** for an impressive four years, on their PM 18 (built 2003) with SSP. Reprographic paper (80g/m²) is produced on the **7.30 metre wide machine** which has achieved a **sensational speed of 1,620 m/min.** – Mind you: this high speed range can be easily maintained, so this was not a one-time event. This makes Mondi's PM 18 one of the fastest and most efficient fine paper machines in the world.

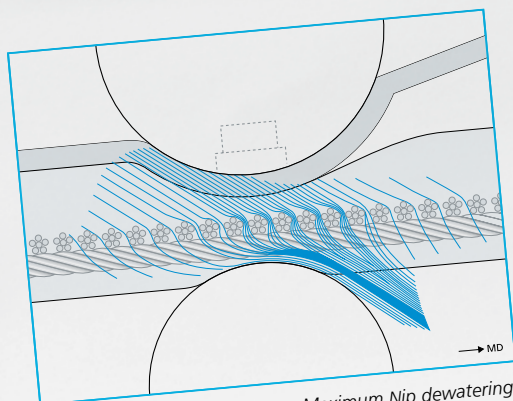


Fig. 4: Atrocross: Maximum Nip dewatering.





Fig. 1: Packaging with acoustic effect: "Ambuja".



Fig. 2: Sliding construction as packaging for eggs.

Source: www.procarton.com

High-Value – Practical – Sustainable Packaging That Inspires

Paper manufacturers know how versatile cardboard is as a packaging material as no other product scores so highly in functionality and sustainability and can at the same time be handled so effectively in terms of logistics. Apart from efficiency of function and transport, cardboard can be used to design beautiful packaging, inspiring consumers in a variety of ways. Therefore, cardboard should not be underestimated in terms of marketing as well. Industry experts of the European Marketing Association "Pro Carton" have once again honoured the best solutions.

A scientifically verified example shows clearly why product packaging is of enormous importance: In Germany alone the sale of **484 million boxes of chocolates resulted in approx. 16.3 billion customer contact points** in total when visual and tactile stimuli are added up. It is obvious that many different packaging designs vie for the attention of consumers. But which ideas were most admired by the jury of experts in 2015? Pro Carton honoured, amongst others, two cosmetic and one egg packages with the **"ECMA Award"**, an award that is presented by the European Carton Makers Association.

Aesthetics, Touch and Acoustics Combined

The jury of experts elected the cosmetics

carton "Ambuja" as "Packaging of the Year" (Fig. 1): "Ambuja" is a brand owned by the Bavarian cosmetics producer Pour Legart and is the name of a skincare line made **from 100 % natural ingredients**. Obviously the packaging needs to score highly in aesthetics in order to appeal to the predominantly feminine target group. But not only the **visual impression** was key for the designers of this high-value product: The **tactile perception** is just as important for consumers who engage with "Ambuja" skincare products. Thus packaging was designed that is pleasant to hold and that opens all the way down as soon as the flip top is pulled open to reveal the actual product. More than this, "Ambuja" offers consumers an **acoustic effect**: The closure is magnetic and users will hear a

clearly audible 'click' that emphasises the high value of the product. Starting with "conventional" board, and ending with highly attractive packaging for a precious product.

Simultaneously Practical and Innovative

The prize for the most innovative folding carton was given to the Spanish food brand Garcia Puente and their novel carton "Free Range Eggs" (Fig. 2). What at first sight is "only" a folding carton in which five commercial chicken eggs have been inserted, proves on closer inspection to be a **truly clever and useful solution**: The free range eggs are inserted into pockets within a sliding construction and are visible to the customer through round "windows" at the top of the carton. The food is thus – thanks to the folding carton – not only safe and firmly placed; the consumer is able to check the product without having to touch it. Further advantages: The carton can be held and carried easily, it is stacked perfectly and the production is straightforward: This carton **can be erected**

mechanically without any problem and without adhesives – many features that made this innovation the jury's favourite.

**100 % Cardboard –
100 % Sustainability**

Inspiring consumers and achieving sustainability at the same time – this was most likely the notion behind an Austrian chemical retailer's approach to the design of a new box for facial tissues of the "Duchesse" brand (Fig. 3). This aim has been accomplished as the result **is remarkable in a variety of ways**: The folding box presents itself "in the round" – already remarkable because traditionally cosmetic tissues have

always been displayed in square packaging. However, it is not just the form, the **appearance also has a lot to offer**: Thus the packaging captivates with an elaborate finish, impressive decoration and a variety of designs for different target groups. And what about the environment? Well, the designers did away completely with the plastic lid commonly used in this product category, which means the whole packaging is **produced from cardboard = 100 percent sustainable**.

20 Years of "ECMA Award"

This year the ECMA will present their award **for the 20th time**: The closing date

for this year's applications was just a short while ago. It remains to be seen which ideas and solutions made of cardboard will win this time. But, no matter who achieves the highest accolades, one thing is certain already: The future will be bright for our industry because **cardboard will remain packaging material number one!**

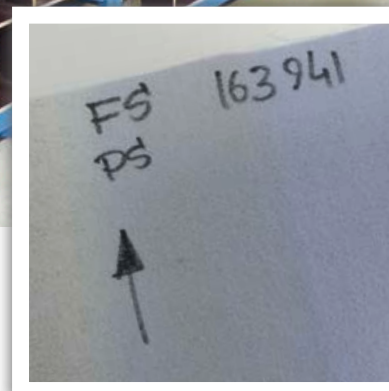


Fig. 3: Round instead of square: cosmetic tissues in high-value carton board.

On our own behalf



Ready for analysis in the laboratory.



Correct labelling, speedy analysis.

Laboratory Analyses of Used Felts Achieving Results Effectively

When you return used felts to Heimbach for analysis in our laboratory, this service will provide you with facts – about the felt and about the condition and efficiency of your paper machine. In order to ensure that this service can be provided as quickly as possible, we would ask you to observe just a few but nevertheless indispensable details before returning any felts to us.

When a thorough felt analysis has been requested, the results should, of course, be published as soon as possible. Normally a full-width sample is sufficient, showing all details of the felt construction that provides the basis for measuring CD profiles, for example. And because we aim to deliver **precise and reliable results** we ask for the following:

- Samples should be approx. 50 cm wide, so that we are able to carry out the inspection properly.
- Each sample should be rolled up in such a way that the paper side front side points outwards. (Depending on product and degree of wear retrospective assessment is only possible in a limited way.)

- In the case of seam felts from the **Heimbach Connect product range** two samples are usually required: One with a width of approx. 40 cm with a **central seam** for checking the remaining tensile strength of the seam loops. Because in doing this the sample is damaged, a **second sample approx. 50 cm wide without seam** is required for the analysis of the CD profiles.
- May we ask that you always label samples at the edge of the front side paper side with **felt number, running direction and FS/PS**.

Many thanks for your consideration!

Mutual Benefits

In the laboratory, our experts are working at the cutting edge of technology: They **can be relied upon to locate anomalies in the returned clothing**, the causes of which may result in a need for optimization. If used felt samples are clearly and fully labelled we can avoid further queries and benefit from shorter analysis times. **Thus both sides contribute to increased service quality!**

What we analyse in the felt sample:

As standard, the felt is inspected in terms of **CD profiles** (air permeability, caliper and weight), **remaining tensile strengths as well as contamination condition and wear**. In addition to this further measuring and other methods for laboratory inspection are available upon request.

Raising Funds for Children, Cancer Patients, and Culture

Team Heimbach Running for Charity



*Fit and extremely colourful:
Team Heimbach UK after the
"Colour Run".*



*On the road for charity:
Part of Team Heimbach
Singapore before the
"Green Corridor Run".*

Whether it's Singapore, Manchester or Düren: Active Heimbach employees everywhere are getting involved and supporting charitable events. What started in March with the "Green Corridor Run" and the "Colour Run" will be followed by the "Peter and Paul Run" and subsequently the "Utilities Run". The focus, in all cases: Running for charity.

Green Corridor for a Metropolis of Millions

In the Asiatic city state of Singapore 5.5 million people live in an area of just 720 km². (For comparison: The city of Hamburg is just a bit larger in area.) It's obvious that especially in such a conurbation, **green spaces for use as recreational areas are of the utmost importance** for its citizens: One of these is the "green corridor", a disused

railway line that used to connect Malaysia and Singapore and that runs right through the countryside. Having been returned to Singapore by Malaysia, many of Singapore's citizens are now engaged in supporting the preservation of this green area – the latest example of which was the "Green Corridor Run" (10.5 km of running track), in which a group of employees from the Heimbach Singapore office also took part.

White Clothing and Bags of Colour

On March 20th the "Colour Run" took place in Wythenshawe Park, Manchester with the slogan "start in white, end up bright".

Ten members of staff from Heimbach UK were among the 2,000 runners tackling a distance of five kilometers. This charity run was held in aid of the local "St. Ann's Hospice" where 400 members of staff and 800 volunteers care for **3,000 patients** suffering from

cancer or other illnesses on a daily basis.

A sum of Euro 16,000 is needed daily to finance their care, an amount that is raised through events such as the "Colour Run", among other things. Why is it called "Colour Run"? Quite simply: Because all participants, dressed in white, are splattered with bags full of dye, which results in a pretty sight indeed and increases the entertainment value enormously. **Team Heimbach raised GBP 1,063** – congratulations!

Heimbach Düren Follows Suit

Following the successes of their colleagues in Singapore and the UK preparations are being made for the "**Peter and Paul Run**" at HQ in Düren. On June 24th a large number of employees will take part in this traditional event and will run in a local arena in order to raise **funds for disadvantaged children**. This run is the first in 2016 in which a team from Heimbach Düren will be involved. In autumn this will be followed on 1 October by the "Utilities Run": For this event, supported by the Düren utilities, we also hope to provide **plenty of runners**, as Heimbach will be donating a certain sum per participant for the benefit of disadvantaged children.

IMPRINT

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Atrojet

A new era of press felts – with perfect felt designs

Atrojet is the unique press felt with a highly flexible, adaptable multiaxial non-woven module:

- Highly flexible and adaptable **yarn structure**
- Tailor-made felt designs – **precise and even**
- Very **fine or coarser** open designs available
- **High dewatering** and even **CD profiles** due to high contact area
- Improved void volume retention and **effective felt cleaning**
- High tensile strength potential **for economic life time**