

impressive

ISSUE 2/2014

Atromaxx – master of efficiency

Ideal press felt, also for
brown papers

Training at Heimbach

Simply the best

Yamabelt – First class shoe press belt

One belt for all positions

Energy management – modern, beneficial, profitable

Conserve resources – increase efficiency!
Nowadays energy management is an
increasingly important key function.
We at Heimbach are also facing the
challenge of having to deal more and

more efficiently with energy. **Certification
according to ISO 50001** is the first
step!

Read more on page 04!

The “Heimbach City” is founded

A variety of products from a unique perspective



Welcome dear reader,

Are you as excited as I am about the World Cup in Brazil this summer? Only a few weeks now until the first match kicks off. And here at Heimbach we will soon have our own kick-off, the latest round of our tipping contest.

The World Cup event is for sure not the only exciting topic around. This issue of impressive includes a whole host of interesting articles.

Read how Heimbach is dealing with **resource conservation and energy efficiency**. We present our new energy management measures and show how to save resources and support the environment through diligence, skill and expertise. In this issue of impressive you will also be given more details about **Atromaxx** – the multi-axial all-rounder for your press section that ensures efficient use of energy and provides extremely long running times for every application. Learn and get an update regarding **Yamabelt**, the shoe press belt with a special multifilament base element, which helps guarantee drainage capacity and dimensional stability.

The subject of training is also highlighted in this issue, because the smart youngster of today is the Heimbach expert of tomorrow. Join with us and applaud the current test results of the Heimbach trainees ...

And have you recently "stumbled" over a striking Heimbach advertisement? Now we can let you know what it's all about – as we present "Heimbach City".

I would also like to take this opportunity to thank you for your interest and your loyalty.

I hope that you have an enjoyable read.

Best regards



Managing Director

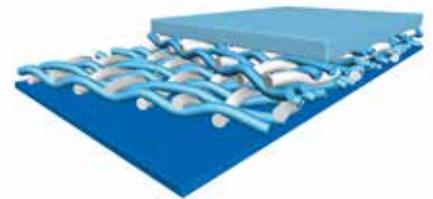
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Join in and win.

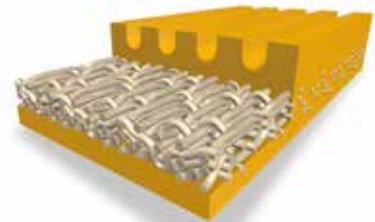
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Heimbach World Cup 2014 Tipping Contest

Join in and win.



Brazil, Spain or perhaps a surprise team? Who will be World Champions in 2014? Which country will be celebrating the title on 13th July this year? Whichever way the World Cup goes one thing is certain; Heimbach is "right in the thick of it – not on the sidelines" with our tried and tested tipping contest.

Alone or in a group

As you know from previous tipping contests, there are two ways to become the tipster world champion: You can either enter your predicted results as a single person or play as a group of colleagues (at least three, maximum five players).

The only condition is that all the tipsters must belong to one organization. If you participate as a group the points gained by all of the individual participants are divided by the number of team members. The result is then recorded as the team score.

Exciting games, attractive prizes.

Spain-Holland, England-Italy or Germany-Portugal; just three of the highlights in the first round. The tournament offers exciting games – Heimbach offers attractive prizes; we award prizes for the 1st, 2nd and 3rd places in both the individual and the group categories.

Prizes in the group category:

- 1. Prize: A gold bar. Each team member will receive a 10g bar of pure gold (999/1000) with a certificate of authenticity.
- 2. Prize: A professional kicker-football table for the team.
- 3. Prize: An original World Cup Champion football jersey for each team member.

Prizes in the individual category:

- 1. Prize: A gold bar, 20g bar of pure gold (999/1000) with a certificate of authenticity.
- 2. Prize: A 12.1 megapixel digital camera with 24x optical zoom and full HD video.

- 3. Prize: An original World Cup Champion football jersey.

See for yourself, it's well worth it!
Log on to

www.heimbach-wm.com

and enter your predictions.* Each tip must be entered into the system no later than the kick-off of each game. Anyone over the age of 18 may participate; however, the prizes will only be presented to tipsters who are also employees in a paper mill. In the event of a tie the winner will be decided by lottery. There is no right of appeal.

By the way: just to make the game even more exciting – you can once again make your predictions in response to specific additional questions!

* Registration opens on 6th May 2014.



Certified to ISO 50001

Energy Management at Heimbach Certified to ISO 50001

“The cheapest kilowatt hour is the one we don’t use”. With these words Axel Schumacher aptly summarizes his guiding principle as “energy manager”. Schumacher has been successfully working for Heimbach in this capacity for almost one and a half years. Under his leadership in recent months Heimbach has introduced, established and continued to develop an energy management system.

Certification as a milestone

When the Heimbach management posted recruitment details for an “energy manager” it was with the goal of becoming **certified to ISO 50001** – which was achieved last year. But what does this standard represent? “DIN EN ISO

50001” is a global energy standard which confirms that the certified company **systematically records the flow of energy and takes measures to improve energy efficiency**. An increase in efficiency can be achieved, for example, through technical measures or strategic organizational management approaches.

Audit in detail

The team led by Axel Schumacher works hard and in great detail to capture all of the energy flows in Heimbach. In simple terms they **question everything related to energy and its consumption**: The energy specialists closely examine work processes and clearly identify any aspects that offer energy savings. The

infrastructure of the entire company is put to the test; how can we equip buildings to be more energy efficient? What machine configuration can be optimized? Can the heating equipment be modernized? Should lighting systems be replaced? The last point alone offers numerous options to improve the level of technology by gradual investment and consequently reduced consumption. A true Sisyphean task that bears fruit, because ISO 50001 certification is a further step towards an environmentally-modern future.

Stagnation is progress

It is no secret that energy costs have increased enormously in the last years, and this presents traditional medium-sized businesses



Certification as a milestone:
Energy Management
certified to ISO 50001

like Heimbach with new challenges. The increase of taxes and duties (for example, the EEG apportionment for the promotion of renewable energies) in particular is one reason why the topic of energy efficiency is viewed with greater importance than ever before.

One notable success is therefore reaching the point of stagnation – stagnation of the absolute energy costs. Thanks to their analysis Axel Schumacher and his colleagues have achieved significant energy savings, enabling the total sum for energy to be kept at earlier levels despite increasing costs. In 2013 this enabled a calculated saving of **2.3 million kilowatt hours of electricity**, which

is the equivalent of 980 tons of CO₂ emissions.

On and on and on

“The savings that we have achieved so far would be sufficient to supply 580 average homes with electricity and 110 with gas”, Schumacher went on to say. But resting on their accomplishments does not come into question. The team surrounding Heimbach’s energy manager keep striving every day to further improve the efficient use of energy. “Being certified to ISO 50001 is a great success. The achievement demonstrates how seriously Heimbach takes the issue of resource conservation. The task now is to keep following the path step by step – because

less is more”. One can only agree with Axel Schumacher’s words. We wish him continued success.

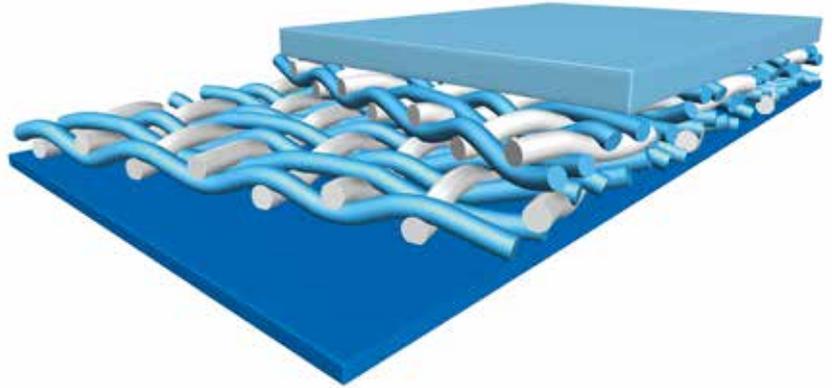


Leading energy management at
Heimbach: Dipl.-Ing. Axel Schumacher.

atromaxx.

The all-rounder for packaging papers

*The Atromaxx press felt family from Heimbach are your guarantee of **efficient energy use** in paper manufacture – no matter which paper grade you produce. The felts have impressive long life times, excellent dewatering characteristics, offer great cost saving potential and are suitable for almost every application. Atromaxx demonstrates a wide variety of design options that is of particular advantage in the manufacture of packaging papers.*



Base weave modules make it possible

Atromaxx felts are modular: Heimbach combines various base weaves consisting of woven and/or knitted monofilament and yarns with fiber batts in various thicknesses, densities and refinements. Each module **is tailored to meet the requirements of the customer**. The base capillarity, void volume, permeability and compressibility of the felt is adjusted depending on the design. The optimum base design guarantees **long and reliable life times** with consistent machine performance and paper quality.

Multi-axial – ingenious!

Atromaxx can be used for manufacture of light paper up to the heaviest grades of cartonboard. The allrounder guarantees an **extremely efficient, constant and steady dewatering throughout the entire life time**. Furnished with a corresponding fibre batt, Atromaxx can be designed either to ensure excellent nip dewatering and provide rapid start-up characteristics or to significantly enhance Uhle box dewatering. The multi-axial structure ensures **particularly even line load distribution** and also guarantees optimum paper properties.

Master of packaging grades

The multi-axial construction of Atromaxx is extremely resistant to compression. This ensures sufficient void volume and an open structure to cope with the large amounts of water when producing brown paper grades. On the paper machine Atromaxx also provides excellent sheet transfer characteristics which results in significantly less sheet breaks. As a result of reduced downtime the **drying cylinders can be operated more efficiently leading to energy and cost savings**.

Efficient dewatering saves energy

Atromaxx is able to increase the nip dewatering to such an extent that it is even possible to **turn off the Uhle box which in turn eliminates the frictional force acting on the felt**. Eventually, this leads to reduced pump and roll drive power consumption and substantial **energy savings**. The increased dewatering effect also ensures higher **dry content and reduced steam consumption**.

Benefits at a glance

- Energy savings through improved dewatering,
- extremely low marking potential due to the homogenous structure,
- faster start-up
- longer and more reliable life times,
- tailor-made base weave modules for each application,
- optimum line load distribution.

Example 1

Paper grade: Fluting, Testliner
(90-220 g/m²)
Width: 3.00 m
Speed: 1,100 m/min
Pick-up: Atromaxx

- Increase in residual strength of 30%,
- longer life time (from 30 to 40 days),
- 3 felts less per year,
- 12 hours less downtime,
- **annual cost savings of over 60,000 euros.**

Example 2

Paper grade: Sack paper
(70-110 g/m²)
Width: 7.50 m
Speed: 950 m/min
3rd press: Atromaxx.CONNECT

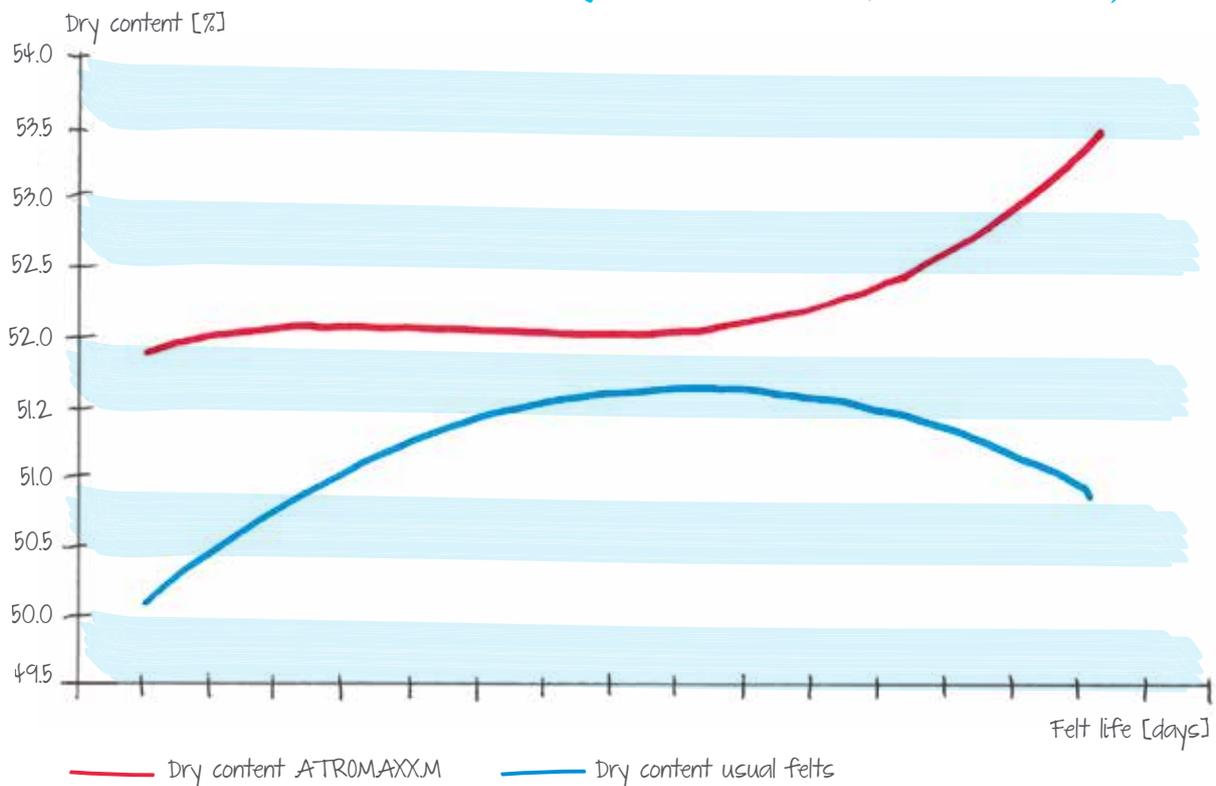
- Reduced steam consumption,
- lowered energy consumption at Uhle boxes due to optimum nip dewatering,
- less sheet breaks (50%),
- **annual cost savings of approx. 1,150,000 euros.**

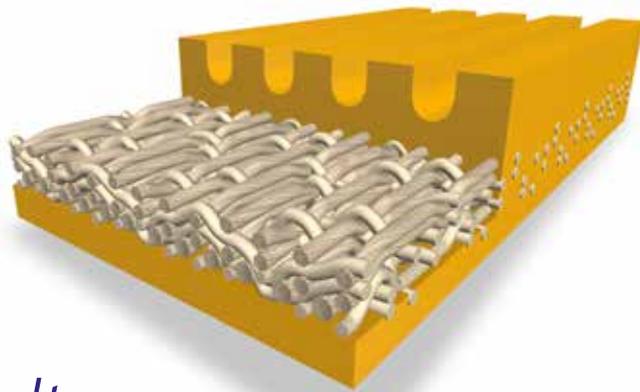
Example 3

Paper grade: Testliner
Width: 8.00 m
Speed: 1,250 m/min
Pick-up: Atromaxx

- Reduced steam consumption,
- lowered energy consumption at Uhle boxes,
- faster start and more reliable life time,
- 30 hours less downtime,
- **annual cost savings of approx. 900,000 euros.**

Dry content after a 3rd press (Shoe Press)





yamabelt.

More performance for your shoe press

*The co-operation between Heimbach and Yamauchi Corporation of Japan for the supply of Yamabelt shoe press belts into the European market already goes back 5 years. The unique belt design achieves **incredibly long life times with constant void volume and dewatering, respectively**. This makes Yamabelt one of the most energy and cost efficient belts for any shoe press.*

“Super 95” – The fuel for long life times

Yamabelt consists of a triple layer multifilament base which is embedded in high end “Super 95” polyurethane. The modern PU material **increases the mechanical resilience** of the shoe press belt. Cracking and land chipping hardly ever occur and the life time is significantly increased (see the info box).

A special coating

The PU coating is applied in a multi-step process: First, only the roll side of the belt is coated, the second step is grinding and finally the PU material is applied on the paper side as well as being ground and grooved. The two different layers act as a **barrier** which prevents cracks from propagating through the belt.

Grooved design for higher energy efficiency

Customized groove designs ensure that Yamabelt is applicable for any shoe press

position. The **higher dry content** significantly reduces steam consumption and related energy demand (see the info box).

The advanced groove technology makes Yamabelt **extremely resistant to groove deformation**. As a result void volume retention is maintained throughout life. This makes it possible to apply more grooves per inch ensuring smooth and uniform performance as well as **longer shoe press belt life time**.

INFO BOX

Machine: Voith Nipco Flex

Paper grade: Coated board
(135-250 g/m²)

Speed: 1,000 m/min

- Life time 329 days,
- 106.6 million nip runs,
- marking-freedom,
- **>100,000 euro annual cost savings (longer life times, less downtime).**

Machine: Voith Duocentri-2 Nipco Flex

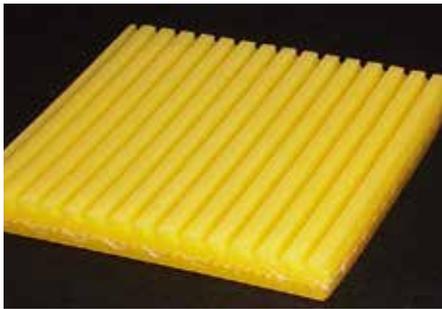
Paper grade: Fluting, Testliner
(80-140 g/m²)

Speed: 1,000 m/min

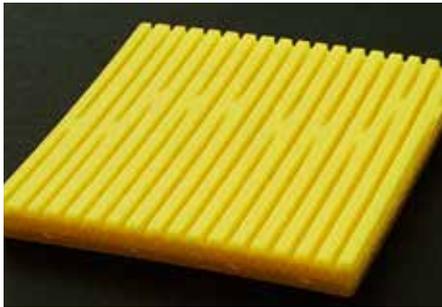
- Longer life times,
- 120 million nip runs,
- reduced steam consumption,
- **approx. 990,000 euro annual cost savings.**

Benefits at a glance

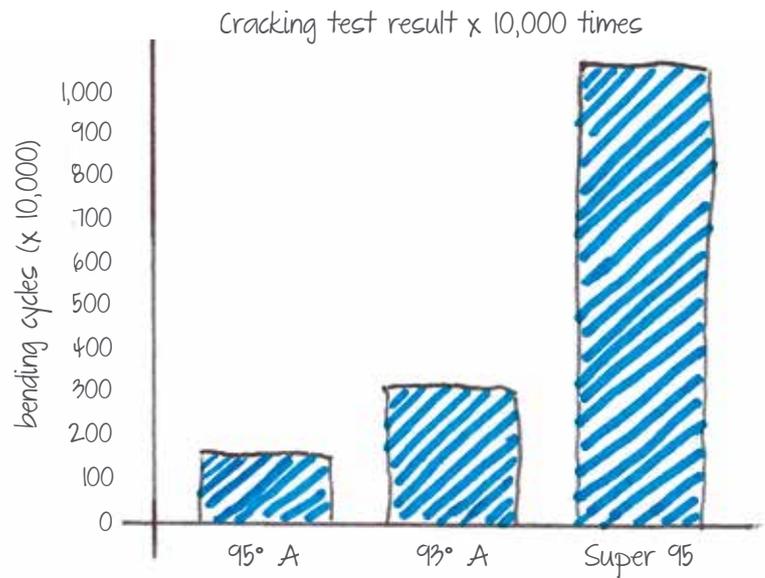
- Higher cracking resistance,
- lower tendency for chipping,
- greater dimensional stability,
- improved dewatering,
- energy savings due to increased dry content.



Continuous groove design



Interrupted groove design



In profile

Jochen Pirig back “home” The new Product Manager Belting is still his old self

From Düren to Singapore and back: This is one way to describe Jochen Pirig's career in a nutshell. Earlier this year he took over the function of **“Strategic Product Manager Belting”** at Heimbach in Düren. After completing his training as a papermaker in Düren, Pirig worked for many years in the profession before studying process engineering for papermaking at the University of Munich. Pirig then acted as “Product Manager Pressing” at Heimbach and from 2006 played a vital role in developing and establishing Heimbach's first Asian sales & service company based in Singapore and developing the Asian market in the position of “Product Manager Pressing, Belting & Drying”. After spending seven years in

Asia he has now returned to headquarters in Düren where he will **manage the full belting product line.**

Belting and tissue in one

In addition to overseeing the continued progression and expansion of our belting offering specifically Webmover and Yamabelt (see adjacent article); Jochen Pirig will also focus his attention intensively on the **“Tissue Initiative”**. This is Heimbach's term for increased activity in the growing market of tissue production. Pirig is leading a team of tissue experts whose job it is to concentrate on the further development of the product range to continue to provide producers of this paper grade with new, innovative and efficient solutions.

Do you have any questions regarding belting or tissue? Jochen Pirig has the answers.



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Heimbach Trainees Excellent Again

Foundation for a successful future

Have you actually ever wondered where Heimbach's leadership in innovation originates from? Exactly, it's our people who make Heimbach your partner for paper machine clothing – and do so day after day! To maintain this service Heimbach trains professional and managerial staff in different areas of the business.

Since 1952 a total of around **1100 young apprentices** have been trained at Heimbach. Currently 28 trainees make up five percent of the total workforce. In the technical/vocational field they are learning the profession of machine and plant operator and are being trained as technicians in textile manufacturing or are in training to become textile product testers. In the commercial sector the young "Heimbachers" are trained to become qualified industrial clerks and IT specialists (system integration or application development).

Elite education as the key to customer success

But training alone is not enough. What counts is the result – as with any product that we deliver. For this reason we are especially proud of the success of our trainees:

A few weeks ago four industrial clerks finished their exams. In addition to two "good" grades there were also two **overall grades of "very good"**. And this is the rule rather than the exception. Results show that since 2010 no trainee has completed their course with a grade less than "good". In recent years Heimbach has had **16 of the regional best** (North Rhine-Westphalia) and **three national best students**.

Practice, practice, practice

That the Heimbach trainees are regularly among the best is certainly due to the type of training they receive: Because our fabric specialists teach the young trainees in

"real" production and "real" management. Compared to some of the more or less anonymous training workshops this offers the young trainees a much more practically relevant experience, creating a **distinctive quality consciousness**. As the "Heimbach juniors" are involved in real customer-oriented projects at an early stage they develop a sense of customer focus right from the beginning and build **pragmatic problem-solving skills** piece by piece. They take these skills with them and serve Heimbach customers as production experts, application specialists, product managers etc. Many employees now in senior positions started their career as a trainee at Heimbach. And almost 30% of all "Heimbachers" currently employed are former trainees.

A dual course of study is the crown

Since 2010 besides the classic form of training Heimbach has been offering young people the chance to complete a **dual course of studies**; in the meantime we employ four students who are striving for a bachelor's degree while being trained in the subjects of industrial management, business informatics and textile management. In this way the in-house theoretical competencies at Heimbach are not neglected as we endeavor to remain your innovative partner for modern, advanced products also in the future.



Our trainees – your future.

Welcome to "Heimbach City"

Heimbach presents the new advertising concept



The Primo district: everything on green.

"Primo", "Atro", "Seco", three districts, one city: "Heimbach City". This city is the general rationale for the unique new Heimbach advertisements that you may have seen appearing in one or another trade journal recently. "Heimbach City" is designed around the sections of a paper machine with each section shown in a different colour: forming section = Primo = green, press section = Atro = blue, drying section = Seco = red.

Tall buildings for high demands

"Heimbach City" consists of high-rise buildings that are composed of numerous Heimbach products. Various elements underline the specific topic: In the Primo district paper stock runs along the road in an orderly manner, whilst prominent in the Atro district is maximum dewatering, which can be achieved with Heimbach press felts. Most important in the Seco

district is efficient drying, therefore desert-like conditions can be seen. Further graphic elements are added to emphasize the topic, such as camels and a heat lamp.

People and products

"Heimbach City" is of course inhabited. People are busy working to ensure that your papermaking process is ideal. Different people can be seen in each district. For example, in an advert for Primoselect forming fabric you are introduced to a "colleague" who will offer you all types of paper. This highlights the flexibility of our Primoselect family, suitable as it is for all applications.

Emotion and differentiation

"From the outset we focused on the following: We wanted to project a personal, likable appearance and bring about a 'eureka moment' from our customers", explains Chris Kershaw, Heimbach Marketing. "We



Best drainage in the Atro district.



Perfect drying in the Seco district.

are delighted with the result and hope that our customers are also pleased with the modern image".

What is your impression of "Heimbach City"? We would appreciate your views.

IMPRINT

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Atromaxx

Multi-axial design – for maximum dewatering

Press felts tailored to your needs:

- Accurate module adjustment for **each application**,
- **reliable and long life times** with consistent machine performance and paper quality,
- faster start-up and **highly efficient dewatering**,
- highest **uniformity** to ensure the lowest marking potential,
- **fewer sheet breaks** and less downtime,
- efficient use of energy due to **higher dry content**.

www.heimbach.com

wherever paper is made

