



Power for your packaging

Increased productivity with
Heimbach clothing

Heimbach – wherever paper is made





Markets change – opportunities appear

Board and packaging papers are the future! This forecast is as clear as it is undisputed. But where markets are changing and opportunities appear is also where competitive pressure increases, which must be met with equally innovative and productive clothing concepts.

A particular challenge

Looking at the factors that determine your competition – and the demands of your customers – it quickly becomes evident that the market is in motion and the demands made on manufacturers of packaging papers are on the rise. This is clear, products must be environmentally friendly and recyclable, but also be in line with the current design trends. Weight must also be reduced whilst maintaining effective protection and security.

And the look must also be continually improved, after all, the packaging is now recognised as an important advertising medium.

Increase productivity

Besides looking for ever more efficient machines and systems, there is today a growing demand for „intelligent“ fabrics. Modern clothing no longer just fulfils a function; it is an efficiency booster – from the headbox to the reel.

In this brochure you will find a tailor-made product range with which you can achieve measurable added value in your production – permanently.

Individual solutions for individual requirements

Rely on **forming fabrics** that will win you over concerning life, drainage and power consumption and are perfectly matched to the requirements of the paper and board industries, offering the real prospect of cost savings and increased efficiency.

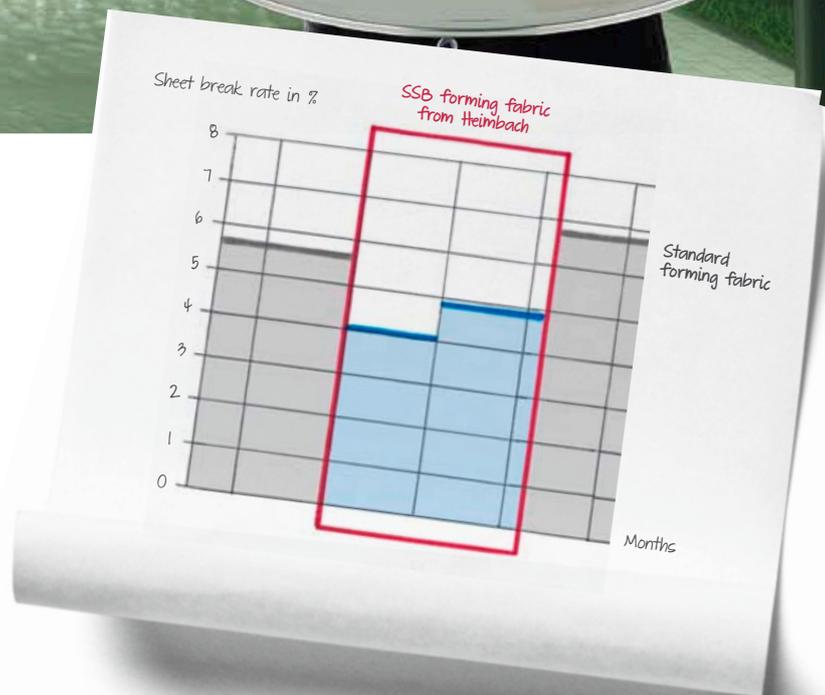
Get to know our range of **press felts**, which are suitable for both light and heavy board grades. Our comprehensive product range offers nip dewatering with a fast start or efficient Uhle box dewatering for slower speeds.

Are you looking for a belt for your shoe press? Then **Yamabelt** with its numerous different groove designs is the perfect solution. And when the sheet needs to be faultlessly transferred to the dryer section, the answer is: **Webmover**.

Last but not least are our clothing solutions for the **dryer section**: Fabrics that are robust, abrasion resistant and that avoid contamination, guaranteeing improved paper quality, extended service life and reduced downtime.



Heimbach SSB forming fabrics provide improved runnability due to lower caliper and clean running which can also lead to reduced breaks.



Your forming section – our packaging specialists

primoplan.HD

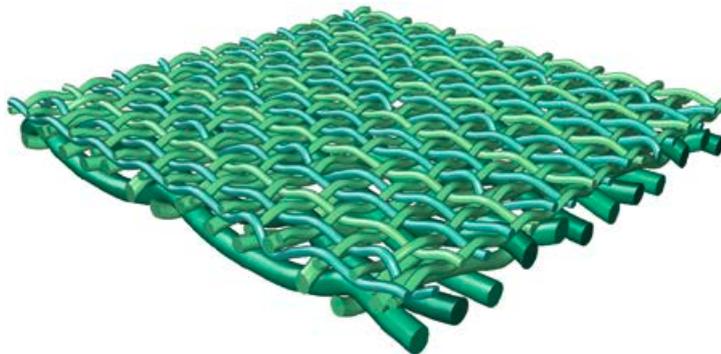
The double layer forming fabric Primoplan.HD with optional extra weft technology is available in 8 or 16 shaft design and like all our fabrics includes Duralon material. Duralon combines the known advantages of conventionally used polyester and polyamide filaments: A low coefficient of friction reduces the power consumption of the driven rolls and subsequently also energy consumption.

primobond.HD *primobond.F* *primobond.SF*

The SSB family Primobond combines high sheet support with maximum drainage and a high wear volume for longer lifetime. The HD version offers specific advantages for the production of packaging papers due to a 2 or 3 shaft weave on the paper side; greater contact area, increased openness and is easy to clean. The other designs F and SF provide similar advantages depending on the paper grade and machine.

primoselect.HD *primoselect.F* *primoselect.SF*

Primoselect is our unique fabric concept and ideal for the production of packaging paper. The patented binding structure of the weave pattern is achieved with only a single binding yarn rather than two paired yarns. The result being that with the same number of contact yarns Primoselect has 33 % fewer yarns on the paper side than conventional fabrics. The very high yarn count on the roll side helps provide longer lifetimes. A finer paper side ensures higher mechanical retention. At the same time the open structure brings a high drainage capacity; the ultra-thin caliper and the lower void volume guarantee optimal runnability. In addition to the highly successful existing SF design, the Primoselect product range has been completed by including HD and F versions.



Set the course for efficient production in the forming section

Meet the challenges of making packaging paper directly at the forming section: You can set the course here to lower the energy consumption of your machine with more efficient drainage and using high-performance materials reduce maintenance costs to a minimum.

Your benefits at a glance	
Energy efficiency	With the Primoselect designs, Heimbach combines a fine-mesh drainage area on the paper side and an openness on the back for unimpeded water flow. The active drainage this produces ensures a high-degree of dryness before the transition into the press section and reduces excess energy consumption. Traditional SSB designs also offer excellent drainage capacity.
Service life	Because of the balance between openness and CD yarn thickness the packaging specialist Primoselect long-floated has maximum wear volume for extended lifetime and a high operating reliability. The longer service life means that you consume less fabrics per year, incur less maintenance effort and therefore less expense for maintenance staff, and also reduce downtime.
Paper quality	The homogeneous contact surface on the paper side of Primobond designs reduces marking and guarantees a very good printability of the final product.



Less steam, more profit!

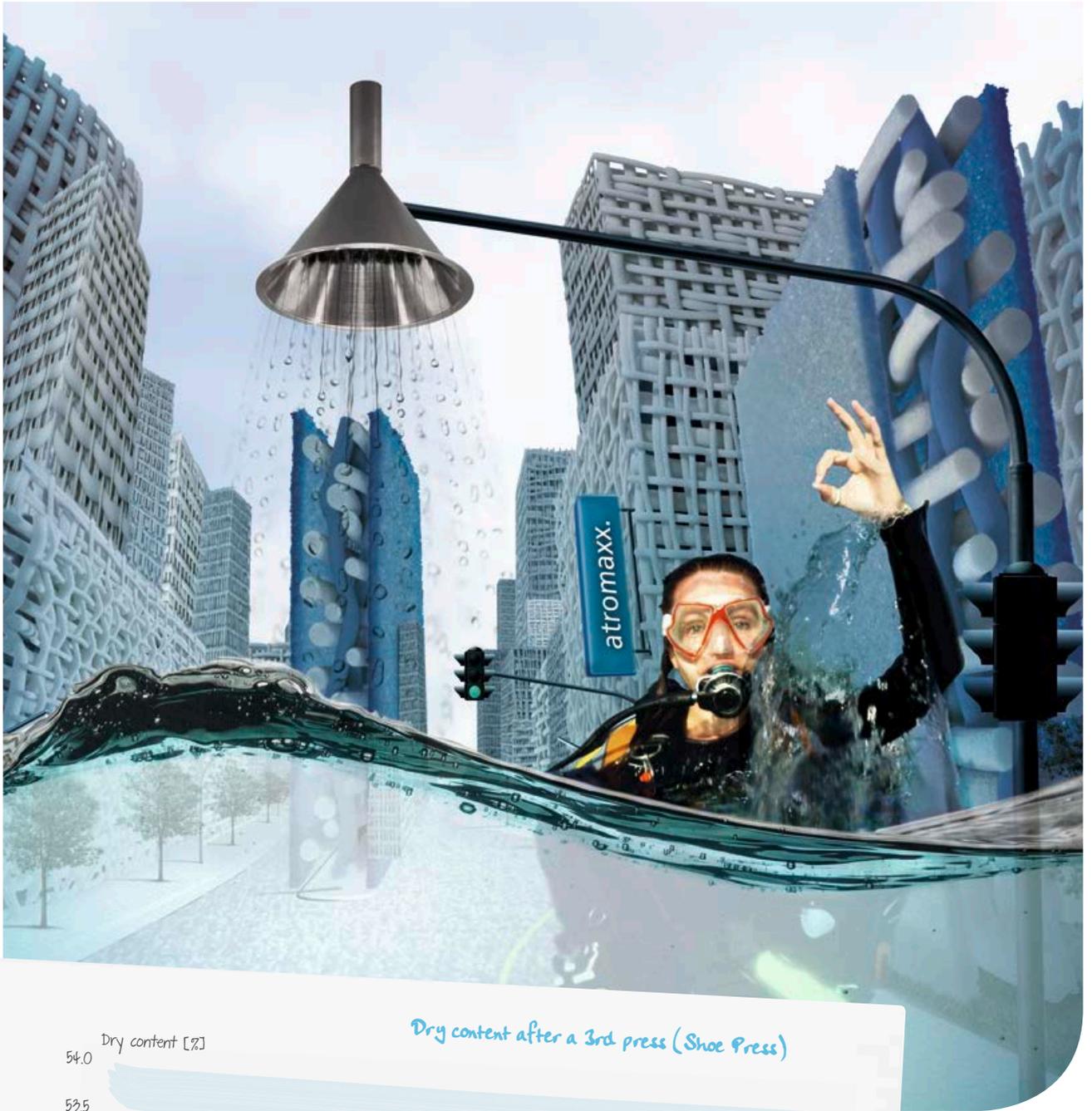
Configuration	Fourdrinier and Mini fourdrinier
Speed	850 m/min
Width	8.00 m
Paper grade	Fluting and white Topliner
Bottom fabric	Primobond.HD <ul style="list-style-type: none"> • 132 days lifetime • 1-1.5 % higher dry content • 37 t less steam consumption per day • Annual cost benefit Euro 576,000

More lifetime – less fabric consumption!

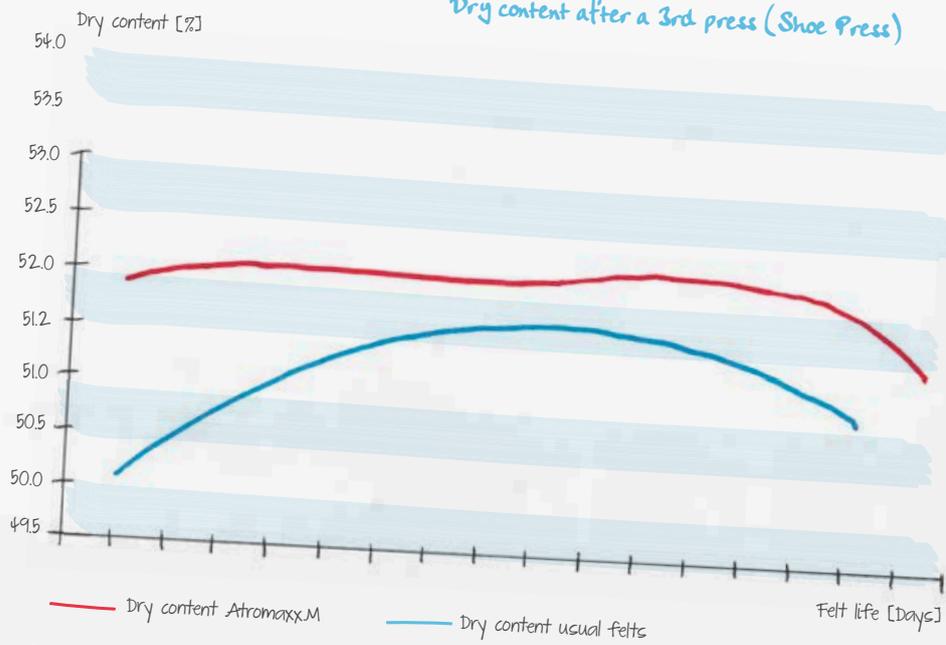
Configuration	Fourdrinier with top gap-former
Speed	1,100 m/min
Width	5.20 m
Paper grade	Card (100-230 g/m ²)
Outer fabric	Primobond.F <ul style="list-style-type: none"> • 97 days lifetime (previously: 70 days) • Clothing savings of 1.5 pieces per year • Less downtime and correspondingly higher production • Annual cost benefit of Euro 68,000

Higher dry content – lower costs!

Configuration	Duoformer CFD
Speed	1,150 m/min
Width	6,00 m
Paper grade	Corrugated medium (70-150 g/m ²)
Bottom fabric	Primoselect.HD <ul style="list-style-type: none"> • +2 % dry content downstream of the couch roll • No water or fibre carry • Low machine direction stretch • Annual cost benefit of 45,000 Euro



Dry content after a 3rd press (Shoe Press)



Your press section – our packaging specialists

atrobond.

atrobond.
CONNECT

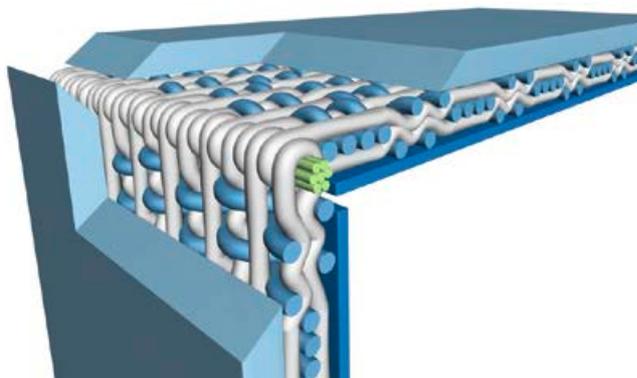
Atrobond consists of two separate conventionally produced base fabrics, a fine upper base weave and a coarser bottom base. The benefits of the two-layer structure: Strike-through from the base weave is prevented even at high press loads over the full felt life and vibration is reduced. The felt structure, designed on the inverted funnel principle, promotes the transport of water from the fine upper base layer into the coarser lower base weave resulting in increased dewatering. Atrobond is also available in a seamed version.

atroplan.

atroplan.
CONNECT

The Atroplan family consisting of one or two layer, conventionally woven press felts, offers a variety of combinations of bases and batt modules. This makes Atroplan an ideal felt for packaging paper production. Atroplan is also available with seam (Atroplan.Connect).

Atroplan.Connect: Proven seamed felt for packaging paper.



atrocross.

atrocross.^F
CONNECT

atronet.

The designs in the Atrocross family have been specially conceived to achieve maximum nip dewatering. The base is composed of non-woven substrate layers positioned flat on top of one another. The density of the felt on installation is virtually identical to its operating density, guaranteeing particularly fast start-up. The construction of these non-woven felts results in an immediate and high rate of water absorption and rapid water flow for extremely high dewatering in the nip. Atrocross is also available with a seam (Atrocross.F Connect).

Atroplan is based on the proven Atrocross concept and has a special compression layer. This press felt is specifically adapted for the production of lightweight packaging papers on high-speed machines.

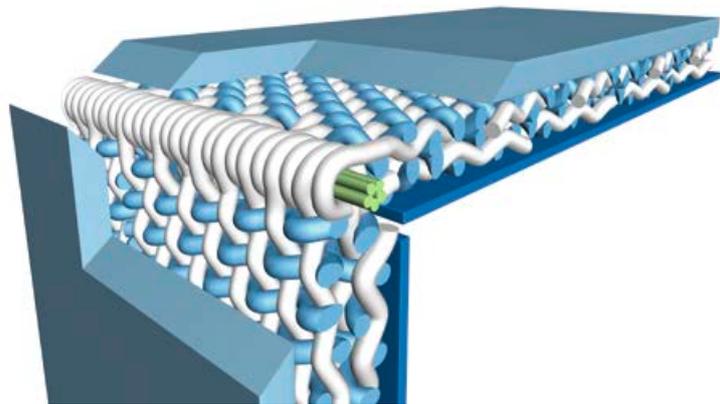
atromaxx.

atromaxx.

CONNECT

Atromaxx press felts combine various base weaves consisting of woven and/or knitted monofilament and twisted yarn with batts in various thicknesses, refinements and densities. This press felt is the universal design for packaging papers and offers the highest performance from nip dewatering to pure Uhle box dewatering. Atromaxx is resistant to compaction and achieves long lifetimes without detriment to machine performance – even with the heaviest grade of cartonboard. The base capillarity changes depending on the design, void volume, permeability and compressibility of the felt. Atromaxx is also available in a seamed felt version. (Atromaxx.Connect).

The Atromaxx press felt family from Heimbach is your guarantee for efficient use of energy in paper production – no matter what the paper grade.



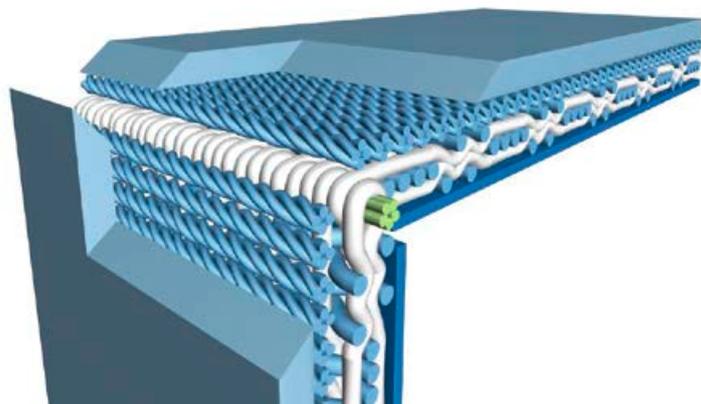
atrolink.

atrolink.

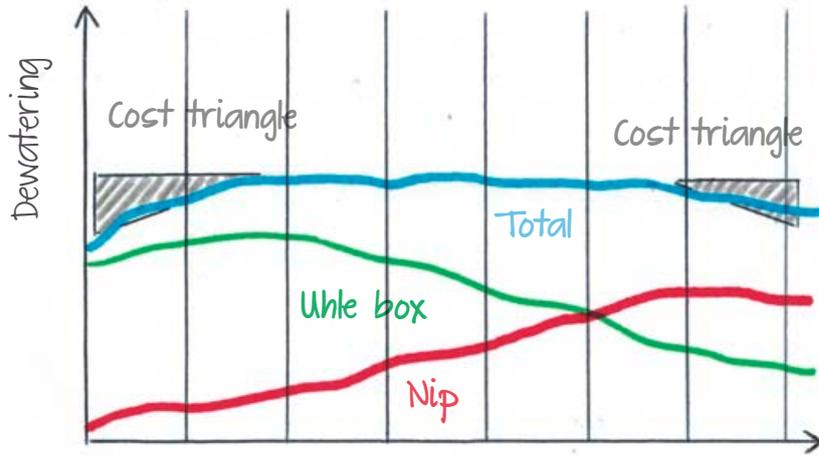
CONNECT

Atrolink connects a non-woven structure with a multi-axial felt structure and combines the benefits of Atrocross and Atromaxx press felts. Atrolink designs have a constantly high pore volume and have an impressive quick start capability. The press felt has an excellent nip dewatering performance, but can still be controlled using a Uhle box if necessary. Atrolink has been proven to provide uniform moisture profiles and low 2 sigma values. Atrolink is also available with seam (Atrolink.Connect).

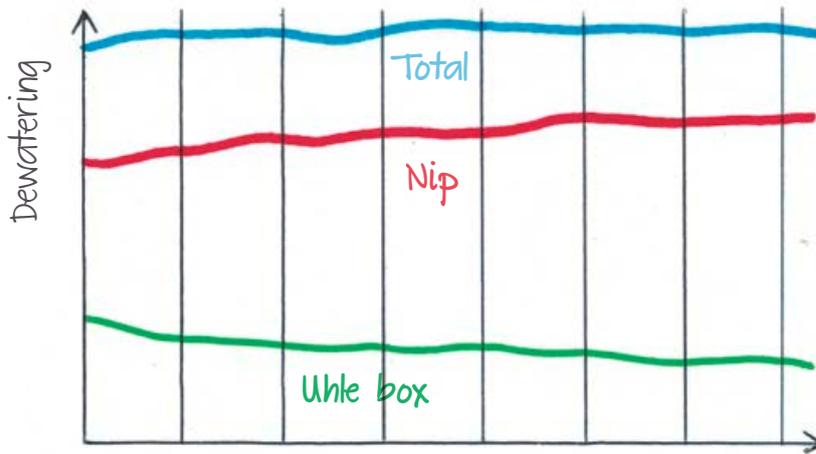
Atrolink Connect provides easy seam closing and maximum dewatering efficiency.



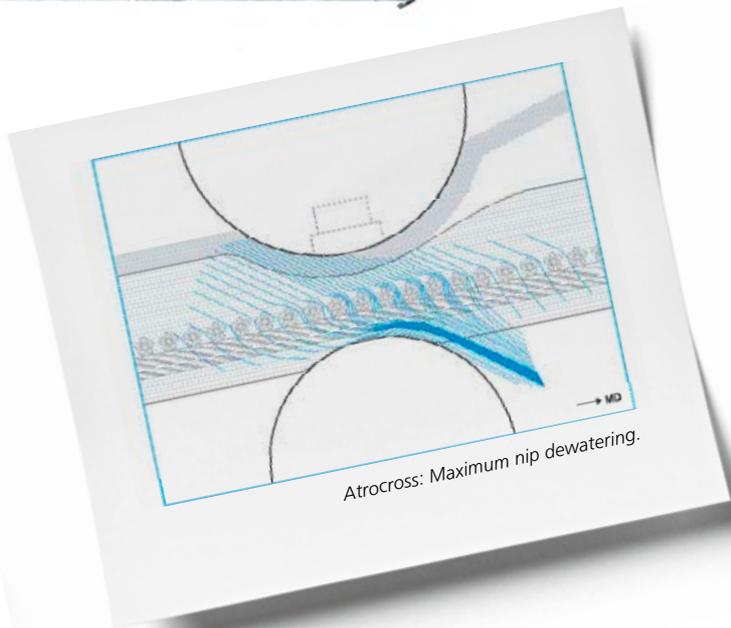
Conventional woven felt



Atrocross/Atromaxx



Thanks to particularly fast start-up times and consistently high dewatering in the nip, Atrocross / Atromaxx press felts require less Uhle box dewatering throughout their lifetime, presenting an opportunity for significant cost reduction.



Saving every kilowatt that we can: the right press felt will get the most out of everything for you

Heimbach press felts are ideal for packaging paper machines with a wide range of paper grades. Take our master of packaging for example; Atromaxx. This all-rounder can provide nip dewatering with quick start for lightweight packaging papers or efficient Uhle box dewatering for slow speeds when producing the heaviest grades of cartonboard.

Your benefits at a glance	
Energy efficiency	Atromaxx press felts make a significant contribution to dewatering in the press section. A multi-axial structure ensures high flow volumes and open drainage channels that can cope with vast amounts of water. With this type of felt it is even possible to eliminate the use of Uhle boxes altogether. This saves energy and reduces felt wear. The higher dry content that can be delivered by Heimbach felts can also lead to lower steam consumption in the dryer section.
Runnability	Atromaxx press felts have high resistance to compaction which further increases overall dewatering potential. This significantly reduces the occurrence of sheet breaks due to the sheet sticking to the felt and reduces downtime and associated costs. The felt also has excellent runnability – even at high speeds.
Paper quality	The multi-axial structure of Atromaxx felts guarantee a very uniform transfer of pressure and therefore optimum paper profiles with low marking tendency.

Maximum dry content!

Configuration	Optipress
Speed	1,300 m/min
Width	9.35 m
Paper grade	Testliner/Fluting (70-135 g/m ²)
Pick-up/2nd press, top and bottom	Atromaxx <ul style="list-style-type: none"> • Faster start-up • Enhanced nip dewatering, therefore less energy consumption for Uhle boxes • Significantly greater dry content • Annual cost benefit of Euro 350,000

Energy-saving felt!

Configuration	Tri-Nip
Speed	950 m/min
Width	7.50 m
Paper grade	Sack paper
3rd press position	Atromaxx.CONNECT <ul style="list-style-type: none"> • Low steam consumption • Reduced energy consumption from Uhle boxes due to maximum nip dewatering • Less sheet breaks (50 %) • Annual cost benefit of approx. 1,150,000 Euro

Cost benefit instead of „hot air“!

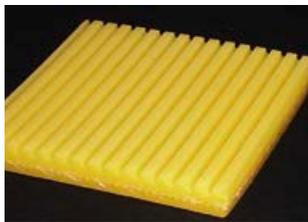
Configuration	Tandem Nipco Flex
Speed	430 m/min
Width	5.08 m
Paper grade	110-275 g/m ² Packaging
2nd press, top and bottom	Atrolink <ul style="list-style-type: none"> • 65 days duration • 1 % higher dry content • More than 4 % less steam consumption • Annual cost benefit of Euro 448,494



Your press section – our belt specialists

yamabelt.

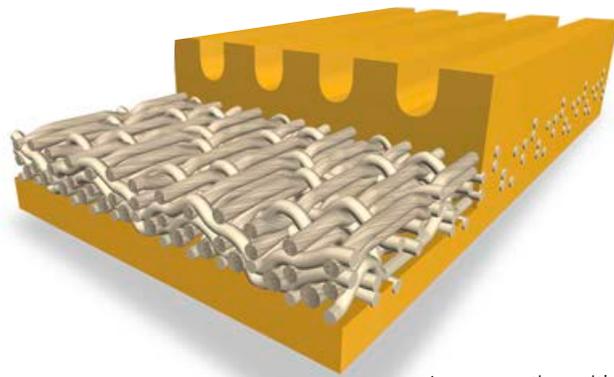
Yamabelt consists of a triple layer multifilament base, completely embedded in highly developed polyurethane (PUR) and is suitable for use in any shoe press position. The belt enhances dewatering and ensures a high dry content. Several different groove designs are available depending on individual requirements.



Continuous groove design



Interrupted groove design



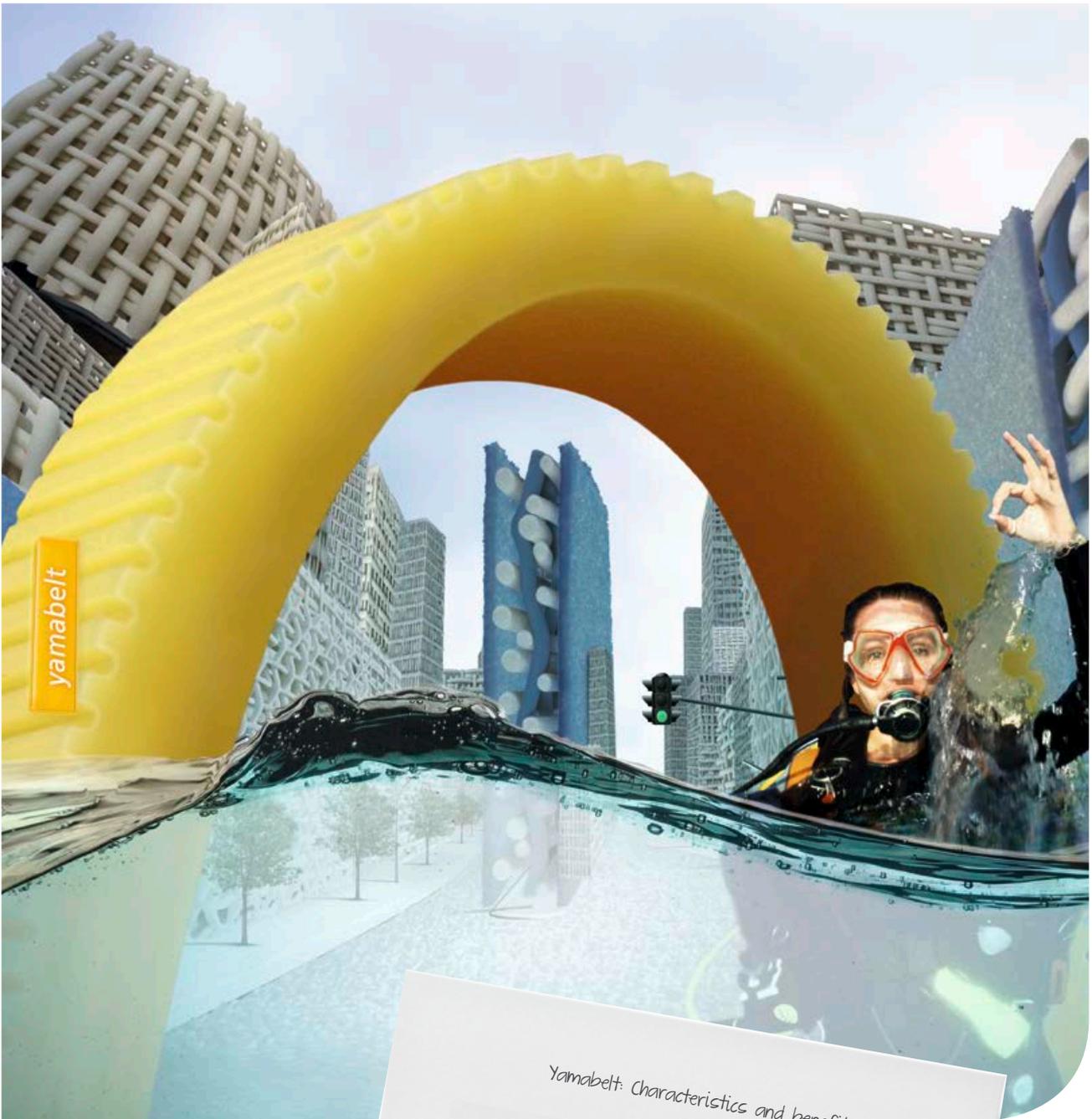
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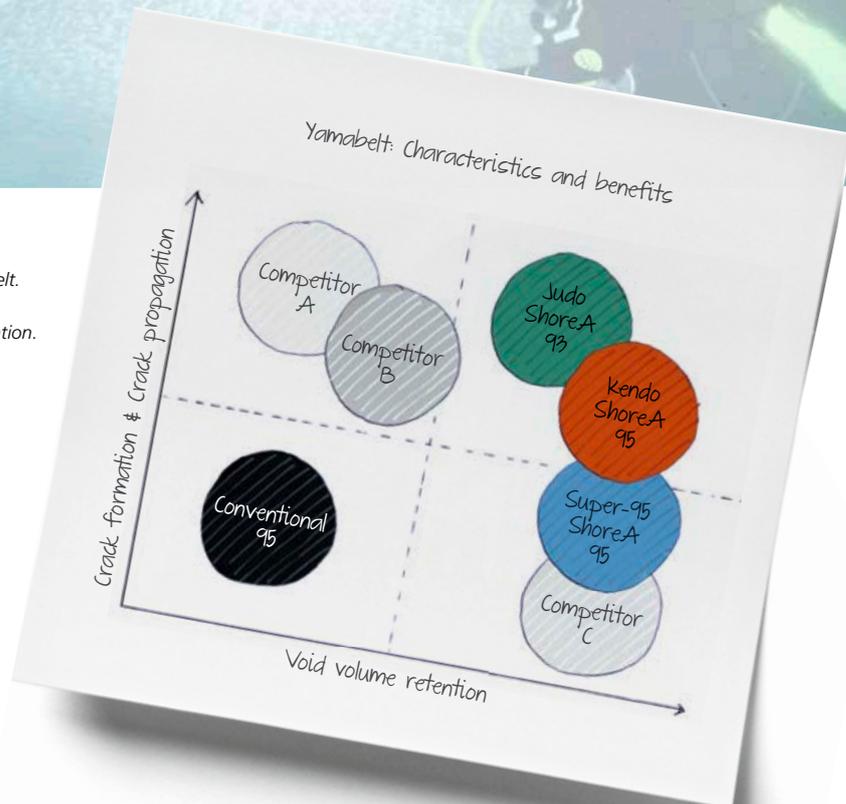
webmover.

The Webmover transfer belt closes open draws and ensures faultless transfer into the dryer section – even at speeds in excess of 2000 m/min. The high-performance polyurethane guarantees extreme abrasion resistance and the grooved roll side ensures smooth water flow.





Several different PUR concepts contribute to the best possible performance of Yamabelt. High resistance to cracking and mechanical wear at the same time as void volume retention.



The correct belt for more packaging performance

With Yamabelt in the shoe press position, you combine long lifetimes with extremely high dewatering capacity, again improving machine efficiency and lowering running costs. Yamabelt has also proved itself when making white top testliner or coated boards.

Your benefits at a glance	
Energy efficiency	The tailor-made groove design from Yamabelt guarantees uniform, high volume dewatering in the shoe press. Higher dry content also further reduces your steam consumption and associated energy demand.
Lifetime	Unique PUR material makes Yamabelt extremely resistant to deformation, cracking and mechanical abrasion. The high number of grooves over a small area result in more even running capacity. This combination leads to longer lifetimes and reduced downtime.
Paper quality	Whilst conventional packaging belt designs are often associated with marking problems, the special grooves used on Yamabelt inhibit marking and enhance paper quality.

Break records and save steam!

Configuration	Duocentri-2 NipcoFlex
Speed	1,000 m/min
Width	6.05 m
Paper grade	Fluting, Testliner (80-140 g/m ²)
Shoe press belt	Yamabelt <ul style="list-style-type: none">• Record lifetime in excess of 120 million nip cycles• Steam consumption reduced by 12,000 t• Annual cost benefit of more than 35,000 Euro

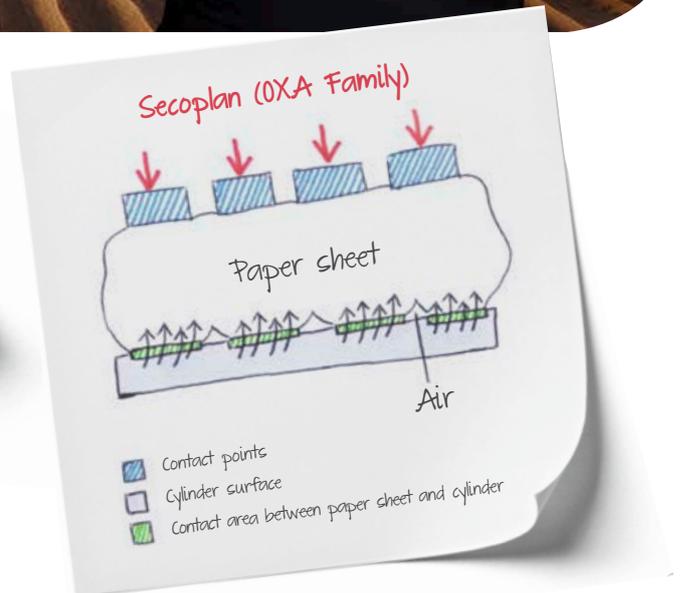
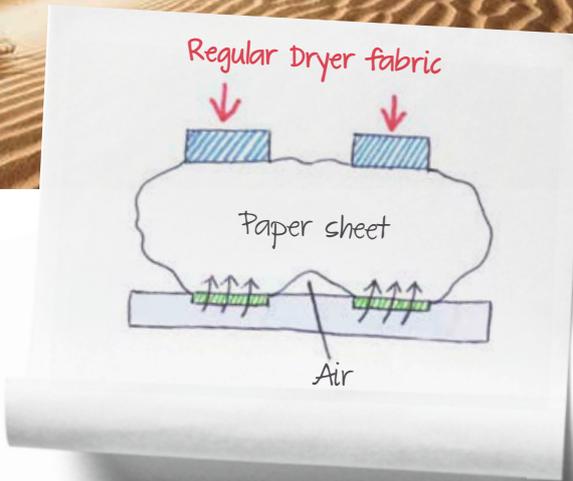
Increased lifetime, more profit!

Configuration	Bi-Nip with shoe press
Speed	1,000 m/min
Width	7.35 m
Paper grade	Coated board
Shoe press belt	Yamabelt <ul style="list-style-type: none">• 329 days lifetime• 106.6 million nip cycles• Non-marking• Annual cost benefit of approx. 100,000 Euro



Lifetime wonder!

Configuration	Tri-Nip with shoe press
Speed	1,150 m/min
Width	6.00 m
Paper grade	White Testliner (120-180 g/m ²)
Transfer belt	Webmover <ul style="list-style-type: none">• 247 days record lifetime (previously 90 days)• Less downtime and lower belt consumption• Annual cost benefit of more than 300,000 Euro



Your dryer section – our packaging specialists

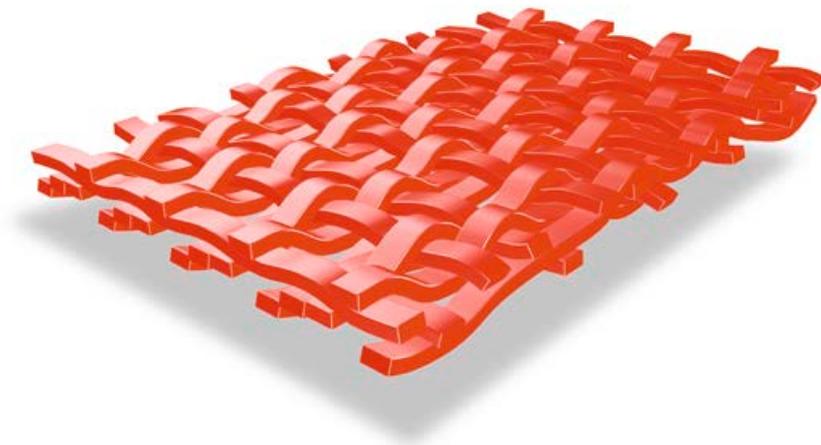
secolink.

Secolink.SF is the thinnest spiral fabric available on the market. Thanks to its flat monofilament spirals it offers a very large contact surface and a fine, homogeneous topography as well as a seam area that is identical to the fabric. It is especially suited to marking-sensitive positions. Secolink.F, also a flat monofilament spiral fabric also providing a large contact surface, has more abrasion resistant spiral material for great wear resistance. The self-cleaning effect of the spiral structure accounts for the permanently open structure of Secolink dryer fabrics, adhesion of dirt is minimized.

secoplan.

Specialist products among the woven Secoplan designs include the OXA(V) family. Like all Secoplan products they use flat MD yarns with cross direction components that are fully integrated into the surface structure. These features combine to provide a very high contact area for optimum heat transfer which in turn leads to reduced steam consumption. Long life potential is another characteristic of OXA(V) designs. Whether through protected yarns in the seam area (Secoplan.X), twister-free seams (Secoplan.O/A) or contamination resistant weave structures (Secoplan.V) there are numerous options to extend life. The wide range of designs to the specific cleaning process of each machine and position.

The optimised contact surface leads to an even heat transfer for uniform evaporation and moisture profile.



The final account – Cashing-up in the dryer section

The dryer section alone accounts for 65 % of the total energy consumption of a paper machine. You know how important it is to pay particular attention to the performance of the clothing used. Heimbach offers two separate product lines to offer packaging producers the maximum choice in applying the most suitable fabrics for each position, with the aim of extracting optimum performance from the board machine.

Your benefits at a glance	
Energy efficiency	Fabrics belonging to the OXA(V) family of Secoplan woven dryer fabrics have tailored evaporation channels to best exploit energy usage. Highly efficient heat transfer between cylinder and sheet reduces steam consumption. The large number of smaller contact points can also reduce drive loads.
Lifetime	Both Secoplan and Secolink product groups contain designs that are highly abrasion resistant. Protected and twister-free seams with high resistance to contamination ensure long life and reduced downtime.
Paper quality	With Heimbach dryer fabrics you have the option to select the finest spirals and meshes available to reduce any tendency for marking to occur. The high stability and uniformity of the cloth can effectively prevent drying marks. Secoplan fabrics, in particular the OXA(V) family also offer optimum contact area, which promotes even moisture profiles and reduced cockling to ensure excellent paper quality.



Lifetime doubled!

Speed	1,500 m/min
Width	8.15 m
Paper grade	Fluting, Testliner (75-110 g/m ²)
5th Slalom	Secoplan.X <ul style="list-style-type: none">• Twice the lifetime• Good cleanability• Less water carry• Very good abrasion resistance

Efficient cleaning!

Speed	750 m/min
Width	5.35 m
Paper grade	Fluting
1st Slalom	Secoplan.V <ul style="list-style-type: none">• Increased lifetime• Good cleanability, significantly reduced water pressure in the cleaner• Reduced long-term dirt adhesion (also without the use of cleaning units)

Professionals for process efficient production: Heimbach TASK

*Even small improvements in the paper machine often release great savings potential.
Our experts of the Heimbach TASK are there to advise on productivity, machine efficiency and
resource conservation.*

Felt conditioning:

Effectively matched felt conditioning will reduce your costs. We will determine the correct pressure during start-up and optimize the saturation of the press felts as well as the Uhle box vacuum. This enables your felt to be gradually tuned to its best possible performance. TASK investigates problem areas such as wet streaks or uneven doctor pressure and traces them back to their root cause.

Optimum operation:

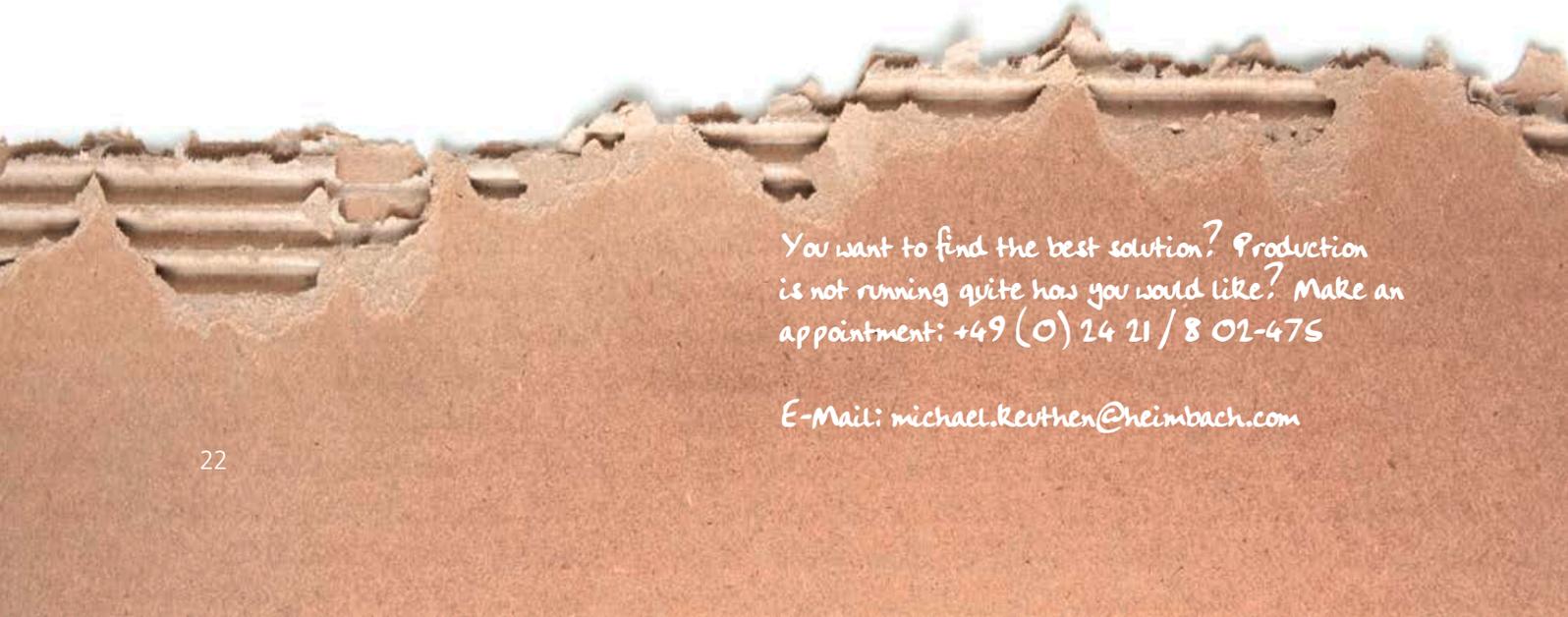
To prevent sheet breaks occurring at the end of the felt service life we shall determine the most cost-effective time to replace our clothing. It is often worthwhile replacing felts slightly early and not run them to the absolute limit. This is because the costs of unplanned downtime as a result of breaks far exceed the annual material costs and cost of replacement.

Mobile measurement laboratory:

The Heimbach TASK team uses the latest high-quality mobile measuring equipment to evaluate the root cause of problems in paper production. This enables the precise location and determination of the cause of vibrations such as e periodic MD mass variations in the sheet. Working together with you, our experts will find a solution to optimize your production.

The logo for Heimbach TASK, featuring the word "task." in a bold, lowercase sans-serif font. A thin orange curved line underlines the letters "a", "s", and "k".

task.

A close-up photograph of the rollers in a paper mill, showing the textured surface of the rollers and the paper being processed.

*You want to find the best solution? Production
is not running quite how you would like? Make an
appointment: +49 (0) 24 21 / 8 01-475*

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