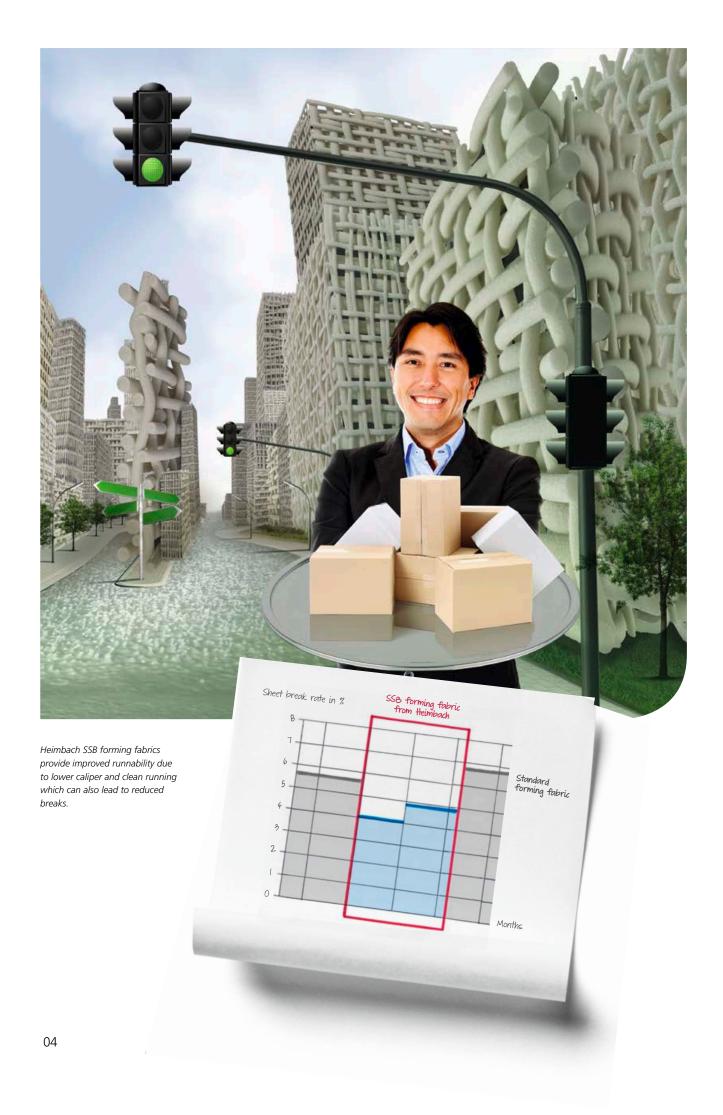


Power for your packaging Increased productivity with Heimbach clothing



Heimbach – wherever paper is made



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.

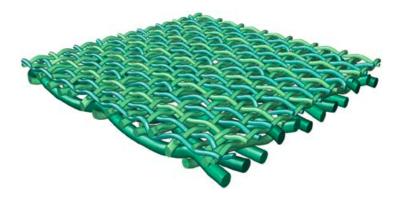


The SSB family Primobond combines high sheet support with maximum drainage and a high wear volume for longer lifetime. The HD version offers specific advantages for the production of packaging papers due to a 2 or 3 shaft weave on the paper side; greater contact area, increased openness and is easy to 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 132 days lifetime 1-1.5 % higher dry content 37 t less steam consumption per day Annual cost benefit Euro 576.000

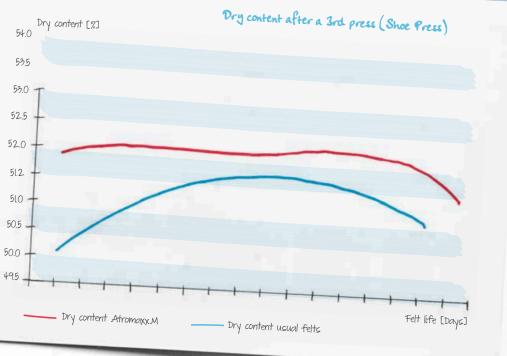
More lifetime – less fabric consumption!

Configuration	Fourdrinier with top gap-former
Speed	1,100 m/min
Width	5.20 m
Paper grade	Card (100-230 g/m²)
Outer fabric	 Primobond.F 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 +2 % dry content downstream of the couch roll No water or fibre carry Low machine direction stretch Annual cost benefit of 45,000 Euro





Your press section – our packaging specialists

atrobond.



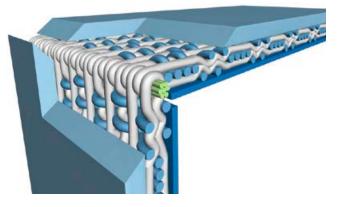
Atrobond consists of two separate conventionally produced base fabrics, a fine upper base weave and a coarser bottom base. The benefits of the two-layer structure: Strike-through from the base weave is prevented even at high press loads over the full felt life and vibration is reduced. The felt structure, 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.



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.



atronet.

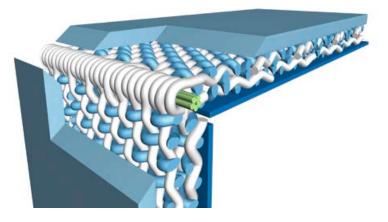
The designs in the Atrocross family have been specially conceived to achieve maximum nip dewatering. The base is composed of non-woven substrate layers positioned flat on top of one another. The density of the felt on installation is virtually identical to its operating density, guaranteeing particularly 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).

Atronet 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.

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).

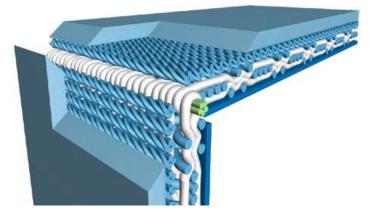
The Atromaxx press felt family from Heimbach is your guarantee for efficient use of energy in paper production – no matter what the paper grade.

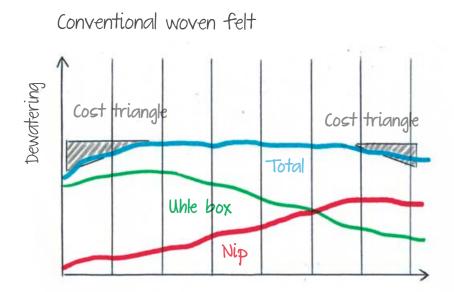


atrolink. atrolink.

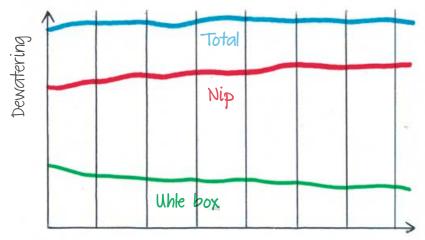
Atrolink connects a non-woven structure with a multiaxial felt structure and combines the benefits of Atrocross and Atromaxx press felts. Atrolink designs have a constantly high pore volume and have an impressive quick start capability. The press felt has an excellent nip dewatering performance, but 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.

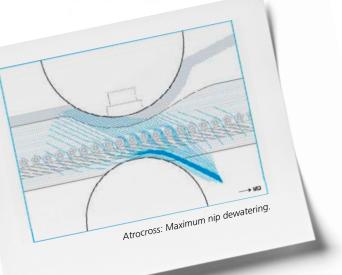




Atrocross/Atromaxx



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 multiaxial 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 Faster start-up Enhanced nip dewatering, therefore less energy consumption for Uhle boxes Significantly greater dry content Annual cost benefit of Euro 350,000

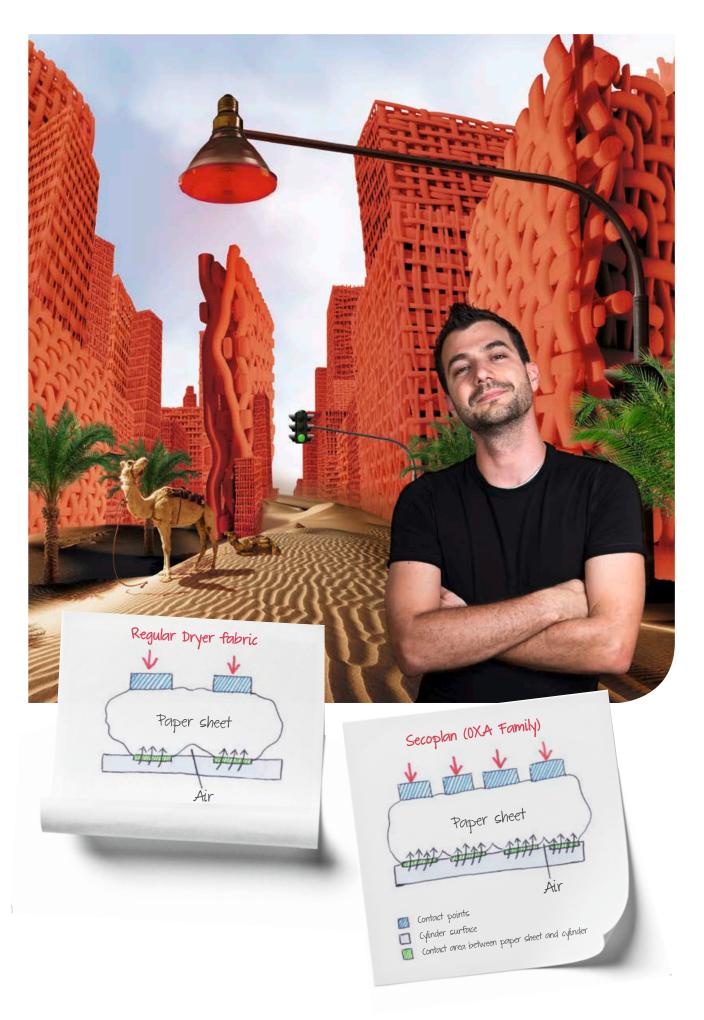
Energy-saving felt!

Configuration	Tri-Nip
Speed	950 m/min
Width	7.50 m
Paper grade	Sack paper
3rd press position	 Atromaxx.CONNECT 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 65 days duration 1 % higher dry content More that 4 % less steam consumption Annual cost benefit of Euro 448,494





Your dryer section – our packaging specialists

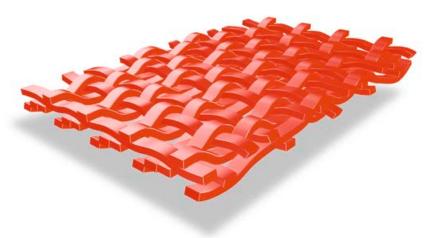
secolink.

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 • 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 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 nor 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.

task.

You want to find the best solution? Production is not running quite how you would like? Make an appointment: +49 (0) 24 21/8 02-475

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