



BLUEBACKER

Maximum efficiency for corrugated board production

Innovative belts for the
double facer section

Expertise

Mesh solutions from the technological leader

GKD: Innovations and cross-sector expertise

GKD is the global technological leader for technical weave and filtration solutions made of metal and synthetic wires and technical fibers – for all industrial applications. With innovative weaving technologies and the latest material simulation methods, we create efficient technical weaves, semi-finished products, components, and filter equipment – optimally matched to the most diverse mechanical process engineering requirements.

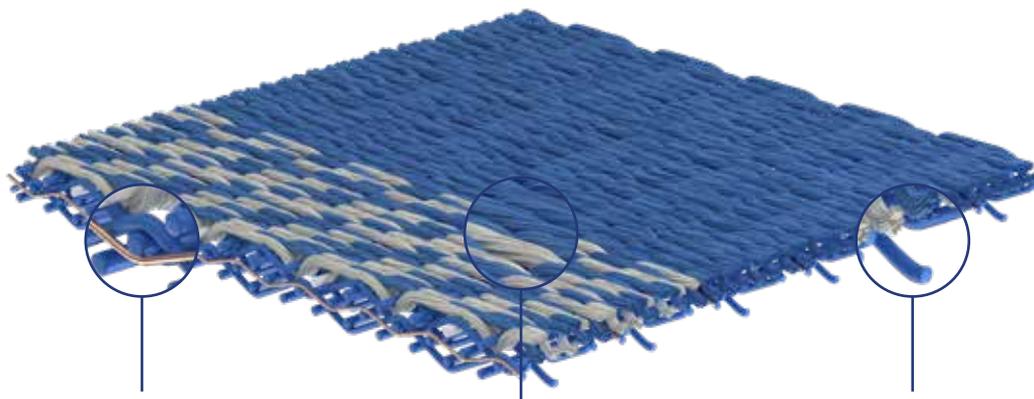
For decades, GKD has been an important partner and exclusive supplier for corrugated board manufacturers, including the global market leader. These producers benefit from tailor-made solutions, hands-on consulting, and worldwide service around the clock. GKD continuously develops new fields of application through manufacturing technology and process expertise. Thanks to our ISO certifications, our customers can also rely on certified quality worldwide. Our corrugator belt is also ATEX-certified for electrostatic dissipation and is thus able to meet the toughest demands.





Revolutionary mesh design

The BLUEBACKER consists of a unique mesh design that is used for more efficient corrugated board production, and is equipped with the proven GKD CONDUCTO® technology. An interwoven conductive bronze wire ensures constant electrostatic dissipation, preventing the corrugated board from adhering while also minimizing the risk of fire.



With CONDUCTO® technology

Constant electrostatic dissipation prevents the corrugated board from adhering



Base layer made of monofilaments

Prevents the risk of belt elongation over the entire service life. Guarantees a high degree of cross stability and requires less assembly work.



Transport/traction layer made of special staple fiber yarn and aramid

Guarantees safe transport and secure grip of the corrugated board. Minimizes abrasion problems, thus providing a long service life with no adhesion problems.



Developed for efficiency

The top belt

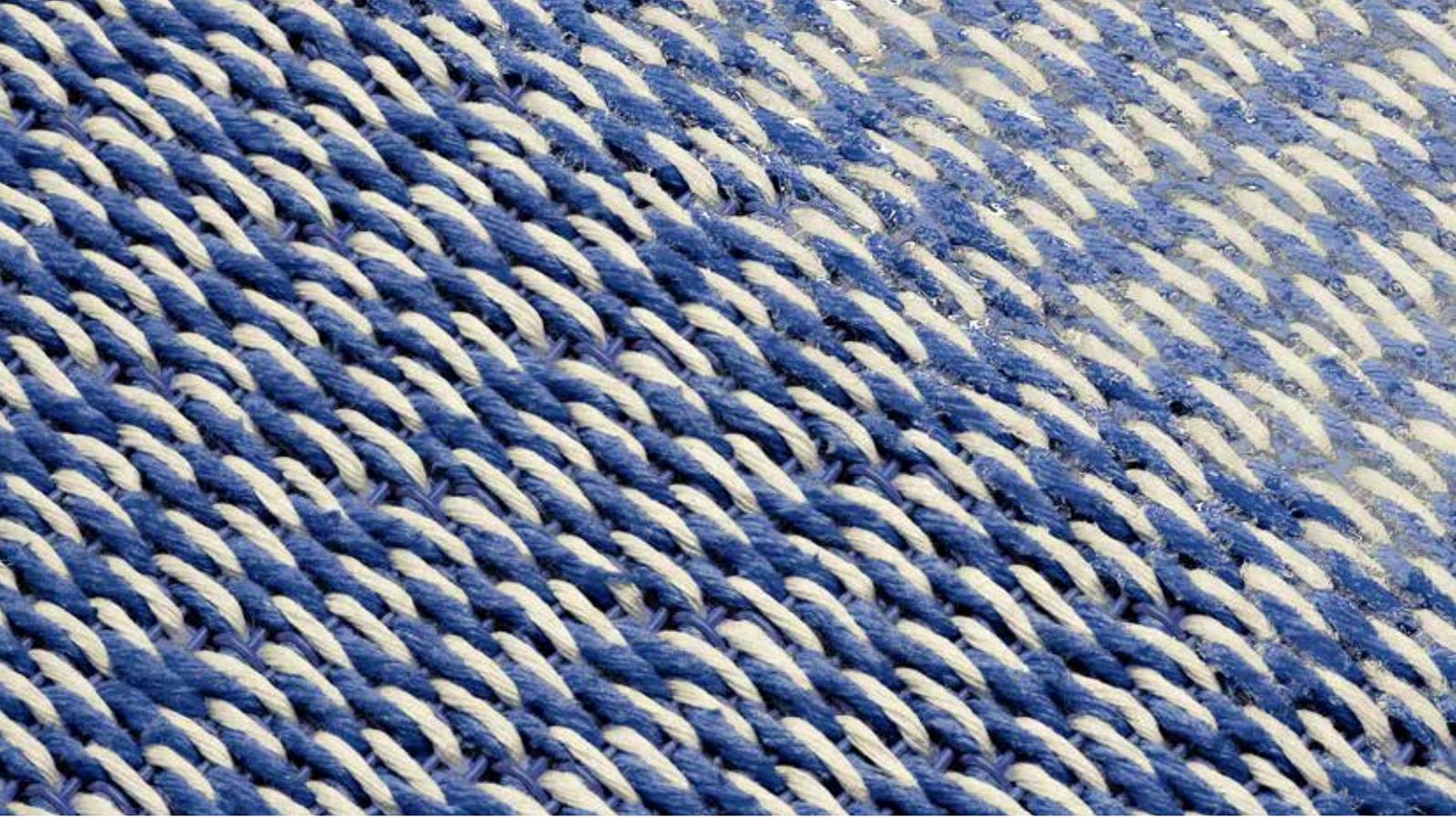
The BLUEBACKER is produced from a unique, multiply mesh. This comprises an interwoven internal bronze wire, a base mesh produced from monofilaments, and a transport/traction level produced from special staple fiber yarn and aramid. The bronze wire ensures constant electrostatic dissipation, preventing the corrugated board from adhering while also minimizing the risk of fire. Due to its secure position in the mesh, the bronze wire cannot fall out.

The base mesh made of monofilaments absorbs forces and loads during the production process. This special mesh design and heat setting guarantee consistent dimensional cross stability that prevents elongation throughout the belt's entire service life. Assembly work to shorten the belt is minimized.

The belt's excellent cross stability enables optimal flatness of the corrugated board.

The special mesh design and heat setting guarantee consistent dimensional cross stability that prevents elongation throughout the belt's entire service life. This ensures that corrugated board is kept flat at all times. The transport/traction level ensures reliable grip of the corrugated board. The edge reinforcement of this mesh level protects the belt from lateral abrasion, even when working with narrow production widths. This prevents adhesion problems, which extends the possible service life of the belt. The special staple fiber yarn generates an ideal balance of moisture absorption and release. Noise emissions are also reduced.

Type	Warp / weft material	Weave type	Thickness	Weight	Air permeability	CFM
3322	Polyester, aramid, bronze / polyester	Double-layer	5.9 mm	3.95 kg/m ²	875 L / m ² / S (200 Pa)	135 (127 Pa)

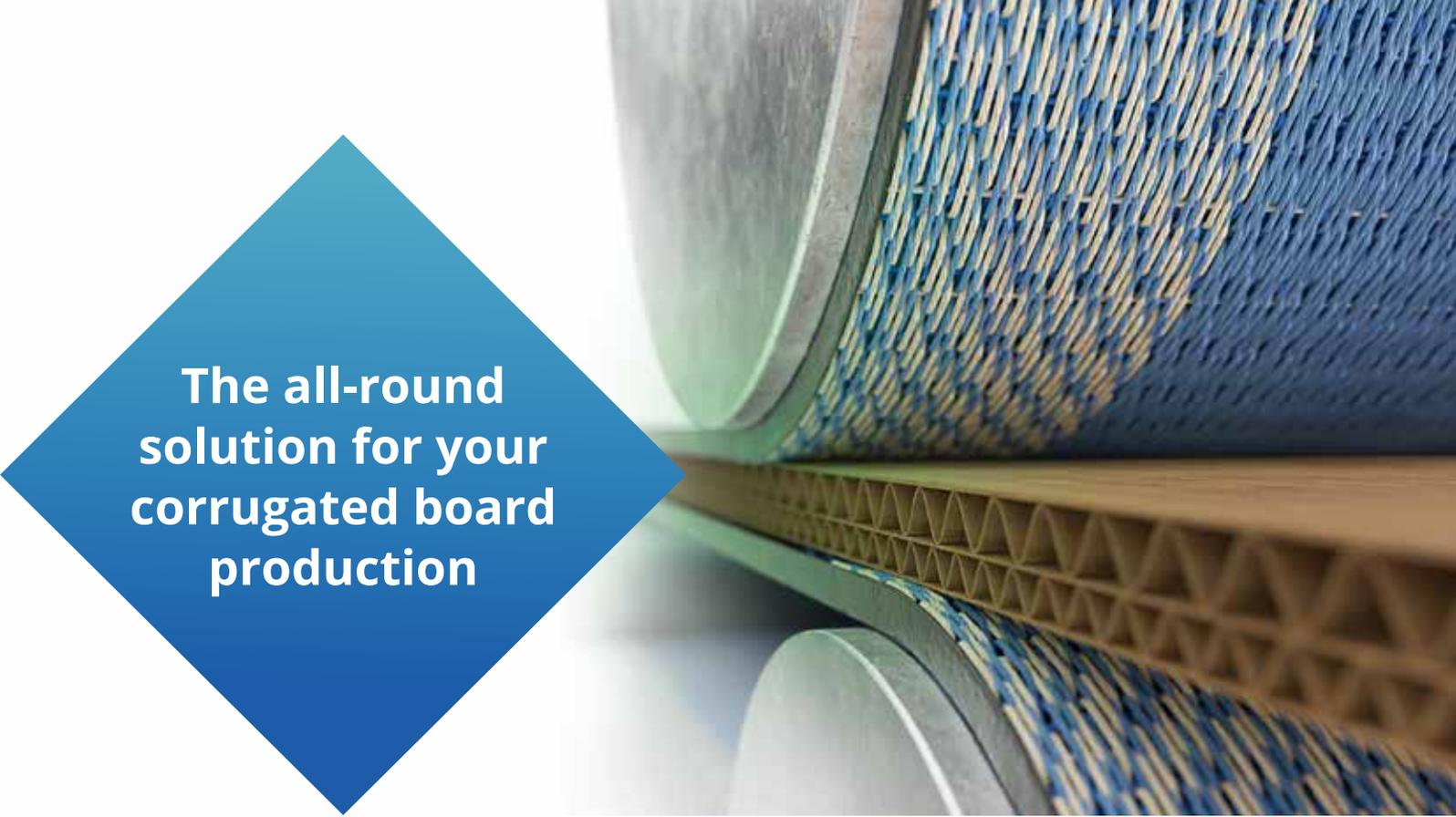


Uncoated or coated: the lower belt

The lower belt comes as standard with an electrostatic dissipation feature to prevent the corrugated board from sticking and minimize the risk of fire. The uncoated version is universally suited to all corrugated board production systems, press systems, and production speeds. Due to the unique mesh design and use of an uncoated lower belt, the corrugator belt's optimization potential is increased several times over. This leads to excellent steam extraction, optimal flatness, and long service life.

With the coated version, the unique, tried-and-true silicone coating significantly increases paper grip. This makes the belt especially well suited for use with heavy corrugated boards and papers with a smooth surface. The silicone coating is abrasion-resistant and high-temperature resistant, guaranteeing a long, trouble-free service life and consistent quality / product properties, even when used at the maximum production speed.

Type	Warp / weft material	Weave type	Thickness	Weight	Air permeability	CFM
Uncoated	Polyester, aramid, bronze / polyester	Double-layer	5.9 mm	3.95 kg / m ²	875 L / m ² / S (200 Pa)	135 (127 Pa)
Coated	Polyester, aramid, bronze / polyester	Double-layer	6.1 mm	4.72 kg / m ²	0 L / m ² / S (200 Pa)	0 (127 Pa)



The all-round solution for your corrugated board production

One mesh, **two functions**

The innovative new process belt for the corrugated board industry uses weave technology with a robust and open mesh design. The BLUEBACKER helps secure more efficient processes in corrugated board production operations and impresses both as a top and lower belt.

The benefits at a glance

- ◆ **Less heating energy**
High air permeability for more even and quicker evaporation of moisture from the corrugated board
- ◆ **Lower maintenance costs**
Less maintenance required for shortening due to the unique dimension stability of the thermally treated belt
- ◆ **Increased performance**
Improved onward processing thanks to optimal flatness of the corrugated board with the same service life that you are used to from the belt
- ◆ **Low drive energy**
Lower energy requirements due to lower belt weight per unit area

BLUE IS THE NEW GREEN

Maximum efficiency
for corrugated board production

Sustainable on every level

Due to its high air permeability, moisture can evaporate from the corrugated board more evenly and quickly on a BLUEBACKER. This has three effects:

Up to

40 %

less
energy-consumption*

Up to

50 %

higher
production speed*

Up to

15 %

less
drive power*

*Depending on the specific conditions and installations at the place of use

All properties at a glance

- ◆ Hybrid mesh with interwoven bronze wire
- ◆ Long service life
- ◆ Significant savings in drive energy due to the lower weight per unit area
- ◆ Constant electrical dissipation thanks to CONDUCTO® technology
- ◆ Dimensional stability thanks to thermosetting and special mesh design



For the toughest requirements

Using a hot melting procedure, a unique pad is melted into the belt mesh and pressed together with metal hooks. The flat PAD seam enables contact pressure systems to glide over the seam area far more easily than with conventional hook seams. The seam is therefore stronger, more durable, and possesses better running properties. The risk of seam damage is also reduced to a minimum. Flock material rounds off the overall package.

The patented PAD seam

Besides ensuring high rotational accuracy, the main challenge for process belts is preventing imprints in the end product. That's where the belt's design and seam play a vital role. Just like the process belts themselves, their seams also have to take a lot of punishment, including mechanical tension, bending cycles, temperature fluctuations, and abrasion caused by the pressure elements and heating pads. This design challenge inspired the engineers at GKD to develop an extremely flat PAD seam. It is technically superior to other seams and can be reproduced in consistently high quality. The exceptional seam is available exclusively from GKD and selected partners – worldwide.

The advantages of the PAD seam

- ◆ Specially matched to the requirements of the corrugated board industry
 - ◆ High strength and durability
 - ◆ Optimized belt running characteristics
 - ◆ Ease-of-use (handling)
 - ◆ Precisely reproducible quality
 - ◆ Flat, non-marking woven seam
 - ◆ The closed form of the PAD seam prevents the staples from coming loose
 - ◆ The PAD layer protects the staples
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Consulting and service around the clock

Individual consulting and technical service

Our expert service technicians and engineers are familiar with your requirements and provide you with detailed support – from belt installation to troubleshooting. Our customer service is available around the clock and offers you quick response times worldwide. Our mobile staple presses complete our service promise. Press systems that are fully calibrated to our PAD seams make it possible to renew seams to a high quality on site, wherever you are in the world.

With GKD tow-in tools, fitting the belts is also easy and uncomplicated – even on very long or hard-to-access systems. Tow-in tools are reusable, and detailed assembly instructions provide additional installation support. Our customer service team is also happy to do this for you, along with fast and professional repairs on site or at one of our factories.

Around the clock, around the globe

Europe	+49 2421 803 308
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China	+86 105 165 9618
South Africa	+27 82 445 6827
Chile	+56 2 2929 7159
For all other countries	+49 2421 803 308

Thanks to the stable wooden packaging, the belt can be safely transported and stored wherever it is needed. The special unwinding device makes installing and towing in the belt much easier, increasing occupational safety as an added bonus.



Production

Manufacturing to the highest standards

This eye for detail, many years of development excellence and process expertise, as well as our consistent cost-benefit orientation are what make GKD a sought-after partner around the world.

What's more, products from GKD are produced to the highest standards – all the way up to production for clean room standards.

Manufacturing: From weaving to finishing

Weaving, cutting, cleaning, rolling, punching, finishing, and much more – GKD produces the full range of industrial mesh and systems from metal, synthetics, and technical fibers using the latest looms and manufacturing equipment. Always leading with the individual requirements of customers in mind.

Adopting a step-by-step approach, we first analyze the demands on the material and the type of application, and then optimize processes and services.

Our services

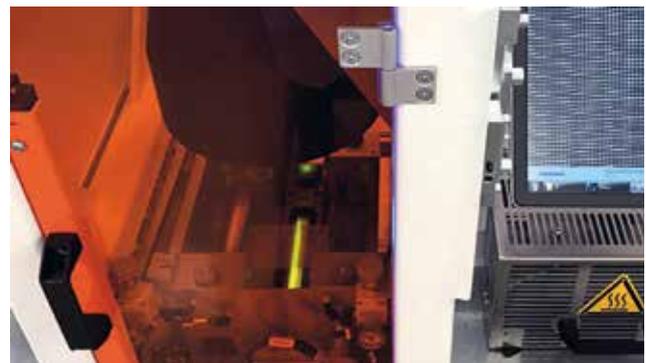
- ◆ Process and requirements analyses with material simulation tools (GeoDict / OpenFOAM)
 - ◆ Consultation on the choice of material
 - ◆ Application optimization and customized component design
 - ◆ Continuous analysis and further development
 - ◆ The latest manufacturing methods and leading production standards
 - ◆ Certified know-how and decades of expertise
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Guaranteed: Certified quality

GKD excels at more than just production. We also have our own laboratory, where we thoroughly inspect all of our meshes and associated components. It's vital that quality products from GKD meet the customer's desired specifications precisely. That's why our physical and technical laboratory conducts tests in the following areas:

- ◆ **Product development**
- ◆ **First sample inspection**
- ◆ **Inspection in the event of damage**
- ◆ **Inspection in the event of a complaint**
- ◆ **Customer-specific tests**
- ◆ **Quality assurance during the production process**



The focus of all testing scenarios is on securing benefits for the customer. Our employees boast the best material and testing expertise, work with the latest laboratory technology, and maintain relationships with professionals from the fields of inspection technology and research. Our laboratory experts monitor the entire lifecycle of GKD products.

Inspection procedures (selection)

- ◆ **Mechanical and physical testing**
 - ◆ **Chemical testing**
 - ◆ **Quality-assurance mesh testing**
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