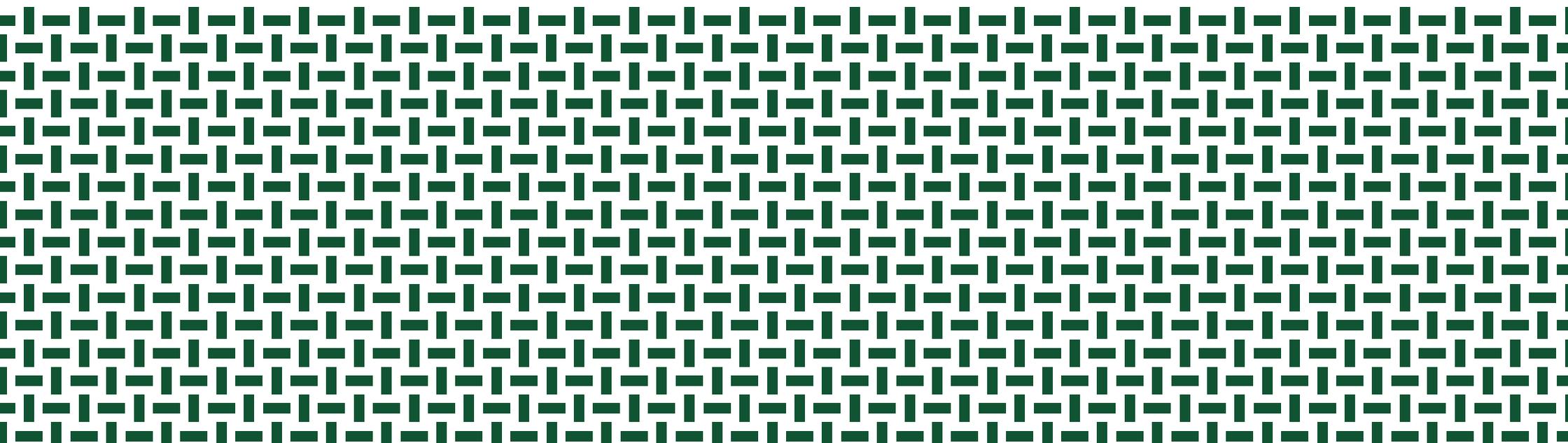
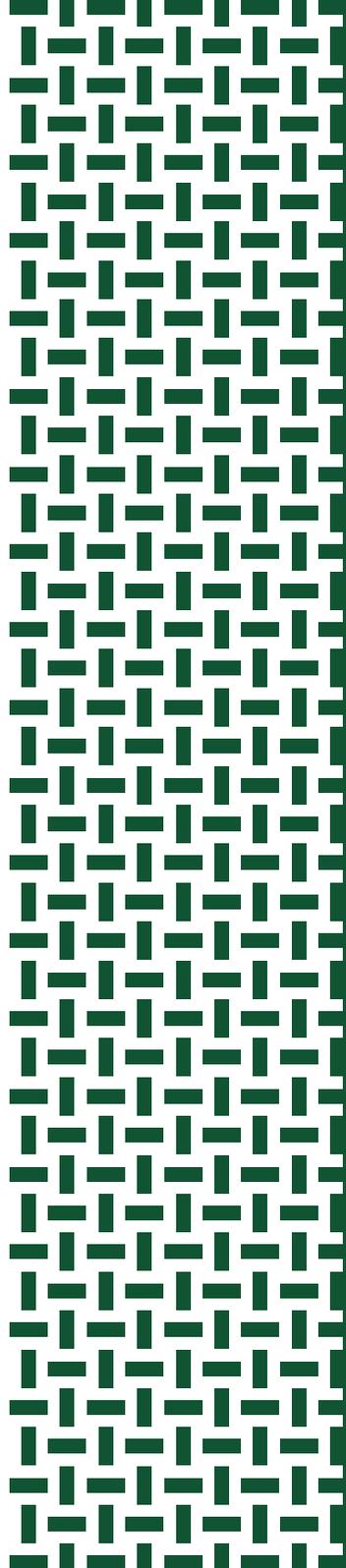


Weaving

Products and services for the weaving industry





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Tradition and Future

Groz-Beckert was founded in 1852 and is active in over 150 countries today with around 9,000 employees. Whether for knitting, weaving, felting, tufting, carding or sewing: Our total product portfolio contains over 70,000 products. As a leading supplier of industrial machine needles, precision parts, precision tools, systems and services for a wide range of textile production and joining methods, Groz-Beckert supports its customers and partners within the textile value chain – and beyond: The Technology and Development Center (TEZ) is a pioneering platform with which Groz-Beckert has been shaping the future of the textile industry together with machine manufacturers, end users, textile producers and institutes since July 2010.

Groz-Beckert

Textiles are everywhere and are found in a wide variety of shapes and functions in all areas of life: Fashion, sports and leisure, home textiles, flooring or in architecture. And textiles are also indispensable for mobility – from cars to space travel – and for health.

Groz-Beckert manufactures machine needles, precision parts and precision tools and offers supporting services for all aspects of the textile industry, from fashion, home and domestic textiles to technical textiles.



Technology and Development Center

Groz-Beckert represents reliable product quality and customer service in the world of textiles. The Technology and Development Center (TEZ) was opened in 2010 in order to develop new development and application fields for textiles in cooperation with customers and partners. Not only is the TEZ furnished with state-of-the-art equipment, it also provides the perfect environment for bundling the competencies and knowledge of Groz-Beckert. As a future-oriented company, Groz-Beckert places great value on the research and continued development of new technologies and application fields in the textile industry.

Weaving product range

Groz-Beckert entered the weaving segment in 2000 with the acquisition of the Swiss company Grob Textile AG and has been offering weaving machine accessories since that time. Today the weaving product range includes over 12,000 individual items. It covers many different steps in the weaving process including drawing-in, warp-tying and weaving. These products are used, for example, to manufacture clothing such as jeans, home textiles and technical textiles. As a system provider, Groz-Beckert offers a wide range of weaving accessories for every weaving machine type as well as products for weaving preparation. This was possible through the merging and integration of additional recognized and reputable companies into the Groz-Beckert Group.

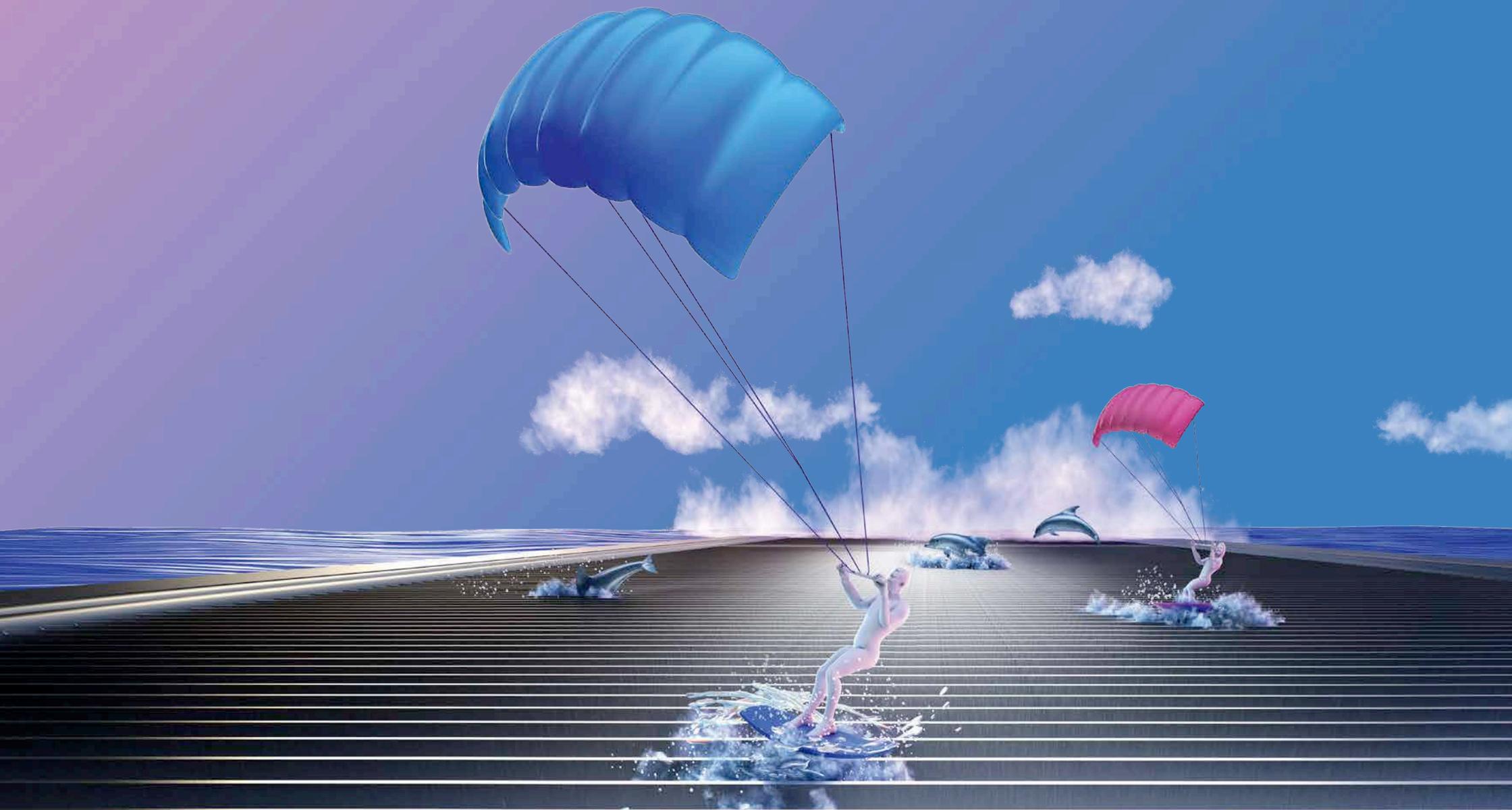
GROZ-BECKERT

| | | | | | | |
|--------------|------------------|-----------------------------------|-------------|-----------------|---------------------|----------------|
| Weaving | Weaving | Warp-tying | Drawing-in | Cleaning | Weaving | Weaving |
| 2000 Grob | 2000 Schmeing | 2008 Fischer-Poege & Knotex | 2009 ELM | 2011 Spaleck | 2011 SteelHeddle | 2017 Steven |



Heald frames, healds, drop wires, warp stop motions and products for leno weaving in the field of weaving accessories, tying machines and frames and drawing-in machines for weaving preparation: The technical competencies of Groz-Beckert are particularly pronounced when it comes to manufacturing dense weaves or weaves with delicate warp threads. Not only does the company provide matching accessories for all existing weaving machines, it also delivers innovative ideas backed by many years of experience – the basis for efficient weaving systems.

Product range



The Groz-Beckert system approach

Groz-Beckert offers high quality, innovative solutions and optimally harmonized products in all areas – from drawing-in and warp-tying to weaving. Among other things, the company has specialized in machines for weaving preparation and drawing-in machines.

Innovative ideas and extensive experience form the basis for the most efficient weaving systems. Whether weaving machine manufacturer, traditional weaving mill or speciality manufacturer: With Groz-Beckert, you minimize setup and non-production time and benefit from the high-performance, flexibility and quality.



The weaving mill

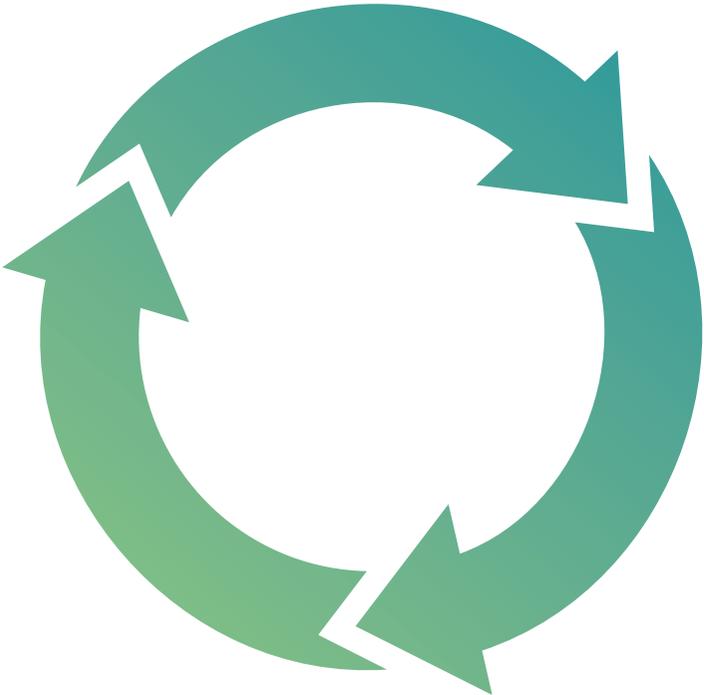
Control of the entire process



Weaving



Drawing-in



Tying



Drawing-in

Groz-Beckert offers an effective drawing-in concept for automatic drawing-in. This type of drawing-in is performed independently of the warp beam. The result: Maximum flexibility with minimal setup effort.



Warp-tying

Convincing technology and simple operation for a wide range of applications distinguish the machines in the warp-tying segment. Customers benefit from fast warp changeover and reduced waiting times.



Weaving

Groz-Beckert provides you with versatile and high quality weaving accessories such as reeds, healds, drop wires, heald frames, leno systems and warp stop motions. The full offering also includes top-notch service and consulting. With Groz-Beckert, you have the entire process under control.

Drawing-in

Productivity increases in weaving begin with weaving preparation. The automatic drawing-in process through the reed, heald and drop wire translates into time savings, efficiency and improved competitiveness.



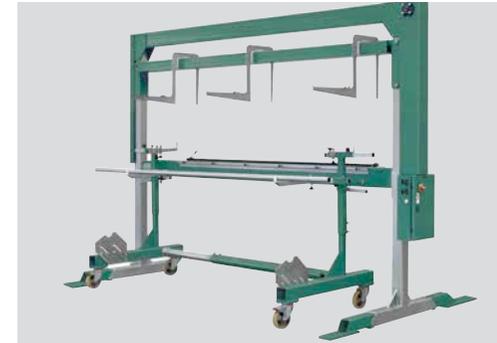
WarpMaster

The WarpMaster is a fully automated drawing-in machine. Drawing-in is performed via a yarn spool, reducing the footprint of the machine. The drawn-in harness, a combination of the sinkers with the healds, can be tied on either in the weaving machine or in the KnotPointPlus. Professional consulting and service by Groz-Beckert is the perfect complement to the many advantages of the WarpMaster. A variety of training programs is available to customers as well.



WarpMaster machine control

Operation and programming take place via an adjustable touchscreen. Among other things, the operator can use it to localize faults which are visualized by way of a short video. Thanks to the integrated video support, even inexperienced operators can handle the WarpMaster within a very short time. The technology allows the WarpMaster to be operated by one person.



KnotPointPlus

The Groz-Beckert warp-tying station KnotPointPlus allows the yarn which was drawn in with the WarpMaster to be tied to the warp beam – as well as pulling the knots through outside of the weaving machine. The advantage is that downtime due to weaving harness changes are minimized.

Warp-tying

Groz-Beckert offers tying machines and frames for all applications – for standard and custom warp-tying applications.

KnotMaster

The tying machines are available in single knot, double knot and switchable versions.

The Groz-Beckert tying machines also support all four knot types: Either individually through quick change tying groups or in combination.

Operation is very simple despite the extensive feature set. This means that even inexperienced personnel is familiar with the machine very quickly. The modular design allows the maintenance work to be performed quickly and easily.



KnotControl

KnotControl is the high-performance and user-friendly computer control system that ensures the operator is in command of all the application and control functions at all times. A dialog-based operator guide simplifies day-to-day warp-tying. The control also enables precision tying of multicoloured warps and displays double as well as missing warp ends.

Operator and service-friendly modular system



All functions are designed and positioned logically, so operation is intuitive and easy to learn. Standards are set with regard to ease of servicing and maintenance. Virtually every part can be reached quickly and easily to inspect or replace it.

Warp-tying

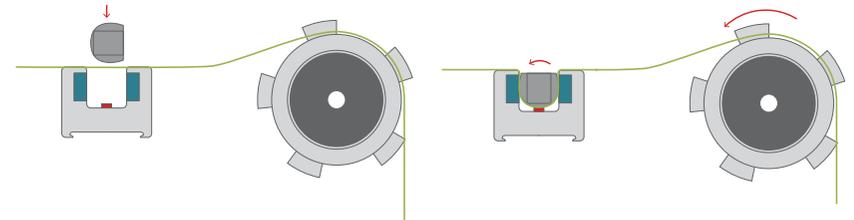


Tying frames: Clamping rod tension system

The clamping rod tension system is a reliable clamping system for tying frames. The fact that the clamping points are arranged one behind the other means that both warp sheets can be clamped and removed quickly and simply.

The tying frames are available for warp widths of 70 cm to 560 cm.

Depending on warp yarn specifications, the set of brush rollers can consist of various different bristle qualities.



Functionality of the clamping rod tension system

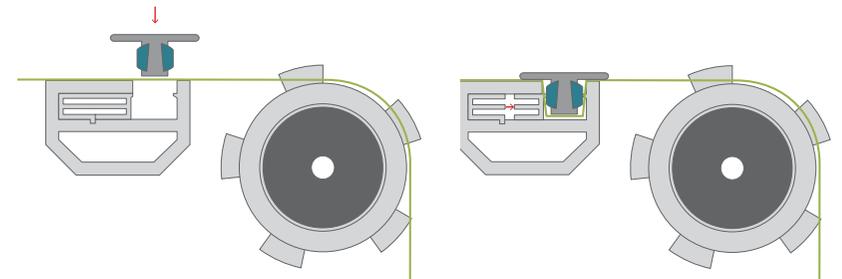


Tying frames: Clamping rail tension system

In this tension system, the clamping points for the top and bottom sheets aren't next to each other but rather above one another. This makes the frame more compact than with other systems.

The clamping can be continuously adjusted to the yarn count, thus guaranteeing reliable clamping of all yarn qualities.

Optimal ideal flexibility is ensured through numerous adjustment options.



Functionality of the clamping rail tension system

Weaving

As a system provider, Groz-Beckert offers a wide range of accessories for weaving mills, from traditional weaving mills to speciality manufacturers. The products are distinguished by high quality, innovative details and a long service life: Whether healds and heald frames, warp stop motions and drop wires or products for leno weaving.



High-performance heald frames



Aluminium heald frames



Projectile heald frames

Heald frames

The many different types of Groz-Beckert heald frames stand for effective woven textile production on modern, high-performance weaving machines. High stability, low weight and ease of use are the defining features of the proven quality and reliability.

The Groz-Beckert heald frame range includes many innovative solutions, such as the intelligent damping system or high-performance carbon fibre profiles. Whether for healds with J- or C-shaped end loops, for rapier, air jet or projectile weaving machines: Groz-Beckert offers outstanding heald frames for the most diverse applications!

Healds

Healds from Groz-Beckert are renowned for top quality, innovative details and a long service life. A comprehensive range of healds with different materials and end-loop shapes is available for every application.

Excerpt of the product range



Tempered flat steel healds



Leno healds



TWINtec healds



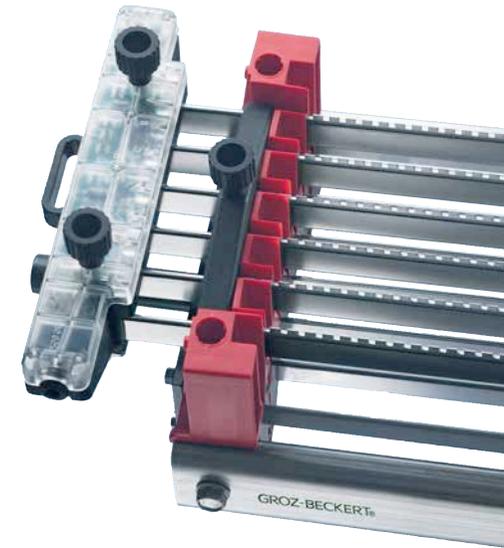
Jacquard healds

Weaving

Warp stop motions

A reliable warp stop motion is the fundamental prerequisite for producing top-notch woven fabrics. And Groz-Beckert supplies the perfect gauge parts. Durability, sturdiness and flexibility – those are the outstanding features of warp stop motions from Groz-Beckert.

From modern basic models, systems for weaving filament and silk warps or for terry products. Warp stop motions from Groz-Beckert allow for higher efficiency, less strain on the personnel and reduced waste.



Drop wires

Modern weaving machine are equipped with electrical warp stop motions. These are complemented with the matching drop wires. Groz-Beckert offers a wide product range with fast availability.

Drop wires from Groz-Beckert control every warp thread individually and gently. This ensures that the weaving machine always comes to a stop immediately in case of imperfections. Thanks to reliable dimensional accuracy over large series production runs, the products are suitable for automatic drawing-in machines and for direct beaming machines as well.



Groz-Beckert Academy

Apart from offering personal application advice, Groz-Beckert has always supported their customers by providing product as well as basic knowledge along the textile value chain. Since 2012 this part of the comprehensive service package has a name: The Groz-Beckert Academy has set itself the task of sharing and passing on knowledge, imparting experiences as well as making know-how and competencies accessible.

Whether it is knitting, weaving, felting, tufting, carding or sewing – the Groz-Beckert Academy offers a comprehensive training program that covers all the most important textile production and joining methods. Using a mix of theory and practice, our experienced trainers share expertise and know-how. As a result, the participants are optimally equipped for their tasks within the textile world.

The course range covers various basic, advanced and special training courses, which are held in the Technology and Development Center (TEZ) in Albstadt. Moreover, the Groz-Beckert Academy offers individual trainings on-site at the customer's location.

All courses are offered in German and English. Selected courses are also held in additional languages, such as Spanish and Chinese.



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