



Technical Fabrics

Agro textiles

Airbag and OPW Airbag

Awning and light tent fabrics

Carpet backing

Car seats

Coating fabrics

Conveyor belts

Gauze



Geo grids

Heavy canvas / Filter fabric

High-speed leno weaving

Industrial glass fibres

Light filament fabrics

Para-aramides

Tire cord

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brochure
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FOR THE APP

This brochure makes **intensive use of AR** (Augmented Reality), so make sure you have the Picanol app downloaded and your smartphone ready!



Scan the QR Code, or download the app at: www.picanol.app



Scan the pictures of the features in this brochure with the Picanol app and learn more about their possibilities.



Picanol weaving machines for **technical fabrics**

For over 80 years already, Picanol develops, produces and markets high-tech weaving machines. Picanol has always set the standards in the main-stream weaving markets, by combining speed and versatility with excellent customer service. Simply said, we try harder.

This competitive benchmark is now also available for the technical textiles market. More than ever Picanol weaving machines prove to be the right platform for those weavers producing very demanding technical fabrics.

This brochure makes use of Augmented Reality technology (AR) to explain the Picanol solutions for some of the most common technical textile segments served.

In several steps, we are highlighting solutions for **Heavy fabrics** such as **Airbags, Conveyor belts, Heavy canvas, Filters** and **Awnings** that are woven on the latest reinforced OptiMax-i Connect rapier machine.

Super wide fabrics, such as **Agro textiles, Carpet backing** and **Geo grids** that are woven on a highly competitive guided positive gripper machine, also require dedicated features.

OptiMax-i Connect rapier machines in Free Flight execution flawlessly handle **In-elastic fibers**,

Industrial glass fibres and **Para-aramids**. Meanwhile, more **general industrial fabrics**, such as **Car seats, Coating fabrics, High-Speed leno fabrics, cloth for abrasives** and **bolting cloth** benefit from special features that push productivity and quality to new heights.

The state of the art airjets OmniPlus-i TC Connect and OmniPlus-i Connect are best placed to weave **Tire cord, Airbags, Car seats, medical Gauze, tape backings, light filament-fabrics** and **Awnings** at the highest industrial speeds.

Picanol supports its machines with the same strong world-wide service organization that serves its machines sold for apparel and household applications. Service stations are located at all "gravity points" of the global textile industry.

Backed by our large R&D department, our factory of the future, and a world-class level of service, Picanol's solutions for the technical textiles markets are built on the principles that also support our well-known solutions for mainstream textiles:

Smart Performance, Sustainability Inside, Driven by Data, Intuitive Control.

Discover our **latest machines**

To know more about Picanol's Platforms **OmniPlus-i Connect** and **OptiMax-i Connect** scan below pictures by means of the AR-feature in the Picanol app.

This will bring you to the general brochures describing machine and it's general features.



OmniPlus-i TC Connect

Reliable Tire cord weaving machine with an integrated design based on the proven Airjet OmniPlus-i Connect technology.



OmniPlus-i Connect

The new benchmark in Airjet-weaving OmniPlus-i Connect is built with a clear vision of the future, based on a rich heritage of more than 40 years' experience.



OptiMax-i Connect

The future oriented Flexible Rapier. The OptiMax-i Connect machine offers best in class versatility and productivity.

Create the right amount of tension for your Heavy fabrics using S-tube

The S-tube backrest is designed to be able to add enough tension when weaving Heavy fabrics. The tension is adjusted by creating friction between warp-ends and a large diameter tube locked in a fixed position.



Control the beat-up-line with the Picanol Full width temple

The Picanol Full width temple is fully interchangeable with roller temples. Especially on Heavy fabrics, a Full width temple can be useful for reducing beat-up on the fell-of-the-cloth.



Improved take-up for Heavy and Wide fabrics

In order to increase the holding power, the diameters of the sand roller and the press rollers have been increased significantly.

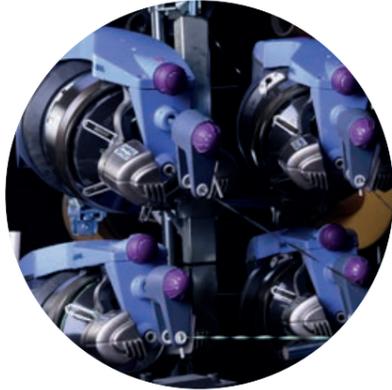


Weaving from creel made easy

Thanks to Picanol's combination of false beam arrangement and the drawing-in section, weaving from creel is now fully integrated.

Heavy canvas | Filter fabric | One-Piece-Woven Airbags
Awnings | Conveyor belts

Weaving Heavy fabrics
OptiMax-i Connect



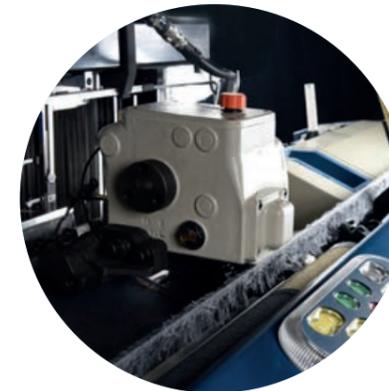
A proven configuration for weaving tapes

LGL Tecnico prewinders equipped with Attivo output brakes are ideal for weaving tapes on wide machines. The braking force is programmable and the brake itself is predominantly self-cleaning.



Achieve low and constant warp-tension over the full width

Thanks to very low inertia, the Direct Warp-Control backrest is ideal for weaving non-elastic yarns, s.a. fibreglass and Para-aramids since very low warp-tensions can be reached. This device is also the standard for very wide machines, as this execution can be mounted directly on the machine frame and there is no deformation under load.



High-speed Mechanical Tucking-in for tapes and monofilament yarns

The MTI (Mechanical Tucking-in) is designed to handle tape and monofil as well as spun yarns. Clamping-units and needles have been adapted to deal with higher forces and coarser yarns.



Eliminate left-hand side waste

EcoFill was introduced with the main focus on applications where high value weft yarns are used. Building further on the experience with this system, EcoFill is now further developed to be used up to 4 colors.

Maximum performance for each application

Whether you are looking for high speed, ultimate versatility or dedicated technical applications, the OptiMax-i Connect can be equipped with the most suitable rapier system.



Improved take-up for Heavy and Wide fabrics

In order to increase the holding power, the diameters of the sand roller and the press rollers have been increased significantly.



Compact waste ribbons safely for further processing

Waste ribbons from industrial fabrics are often quite bulky. A winder that compacts the ribbon can hold a much larger capacity and reduces the number of interventions. The compacted waste ribbon is easier to handle and takes up less storage space.

Carpet backing | Agro textiles | Scrims

Weaving Wide fabrics
OptiMax-i Connect



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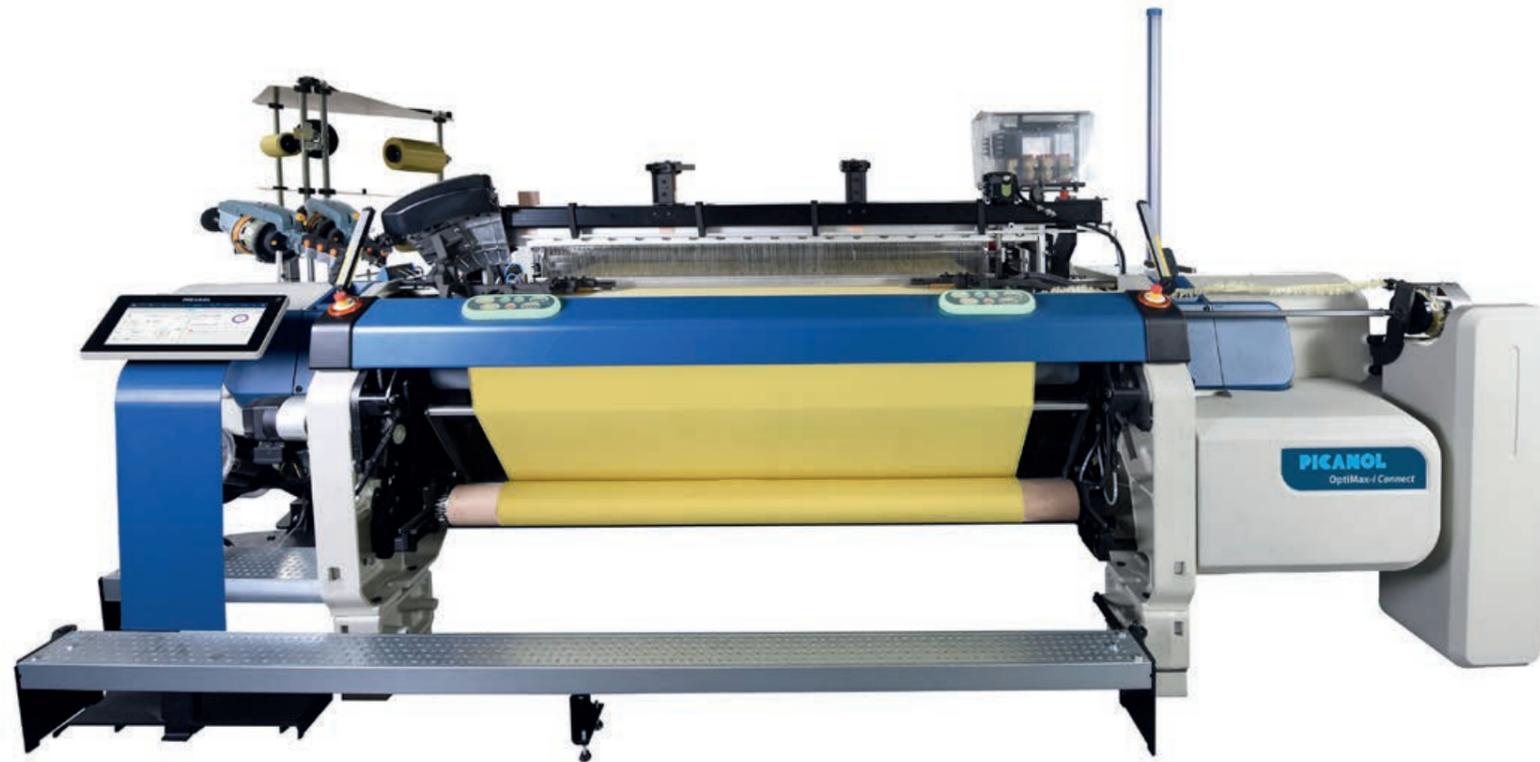
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Obtain low weft tensions using programmable brakes

Using programmable weft brakes, TEC allows one to weave with very low static tension at the exit of the rewinders. TEC decreases the brakeforce when the yarns are traveling at high speeds. This is thanks to a fast-reacting brake shoe. The control of TEC is fully digital through the display.



Ceramic inserts protect the grippers against abrasive yarns

Well-placed ceramic inserts protect the gripper bodies against wear caused by abrasive yarns such as glass, basalt, quartz, etc.



High-performance waste cutters guillotine type for glass fabrics

Glass fabrics require long-lasting scissors. This involves breaking the glass fibers by means of a guillotine-like blade and an underlying rubber block.



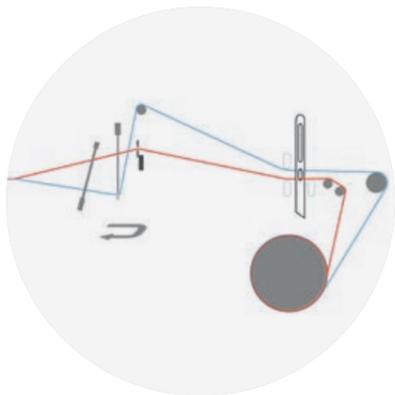
Maximum performance for each application

Whether you are looking for high speed, ultimate versatility or dedicated technical applications, the OptiMax-i Connect can be equipped with the most suitable rapier system.



Minimize the length of the right-hand side weft waste

Improved control of weft length is assured by positive opening of the right-hand side gripper with the ERGO (Electronic Right Gripper Opener). ERGO allows individual setting through the display of the gripper opening timing per weft channel.



Most robust High-speed leno system

The Optileno system has been designed to cope with abrasive and difficult-to-weave yarns in warp, such as fiberglass fabrics and secondary Carpet backings.

Explore extra design possibilities or double your warp capacity

Adding a fancy beam increases the capacity of the ground beam, but it also enables you to use additional (fancy) yarns in the warp or create fancy designs, such as pleated fabrics, seersucker, etc. Alternatively, designs can be used with a different yarn consumption: ground versus fancy.



Airbags | Car seats | Gauze | High-speed leno
Parachute | Shoe fabrics

Weaving **General industrial fabrics**
OptiMax-i Connect

Weft knots automatically extracted during weaving

PKE (Picanol Knot Extractor) detects the position of knots in the weft yarn, whether from a bobbin change or indeed all weft knots. This safeguards fabric quality and maximizes productivity as the machine continues to weave while the knot is removed.



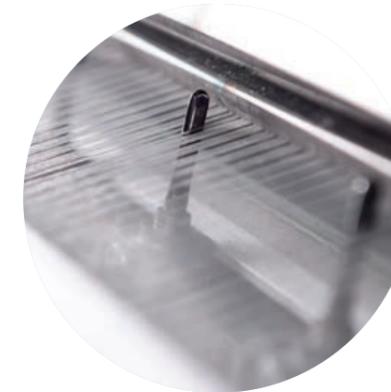
Optimum filling detection for all kinds of filament wefts

The Argus optical filling detector for cut reed execution is best-suited for fine up to coarse filament wefts. The wide detection-zone assures secure detection under all circumstances.



Manage the filling length to reduce waste

The unique, patented design of the Blue22 and Blue11 prewinders makes adjustment of the waste as quick and simple as possible. And with the EasySet function it is even fully electronic.



The stability needed to optimize air consumption

With the optimized relay nozzle spacing the stability of the weft insertion is lifted to a higher level. This makes it possible to minimize air consumption without compromising on fabric quality and machine stop level.



Maximum industrial speeds

The new-generation sley cams are designed and produced by Picanol. The optimized reed motion is invaluable for coping with unclear sheds, affording more insertion time at even higher speeds.



The smart digital shedding motion

SmartShed is built for weavers who want maximum digitization and flexibility in the weaving process. The movement and crossing timing for each harness frame are now electronic settings. In addition the harness frame stroke is measured electronically and shown on the machine display.

Car seats | Gauze | Light filament | Awnings

Weaving **Industrial fabrics on Airjet OmniPlus-i Connect**

Auto-tabby weaving made easy

The programming of the Auto-tabby sequence has been made very easy thanks to the use of comprehensive alphanumeric designation of sub-patterns.



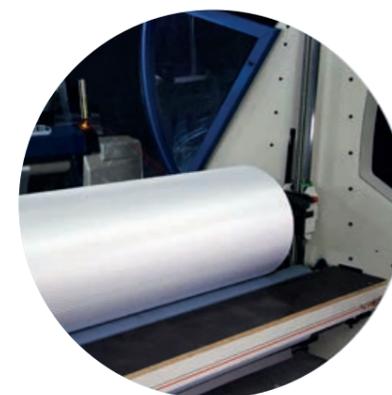
Reach high speeds, even with tucked selvages

Picanol's air tucker is compatible with both cut and continuous reed executions. Air tuckers can be a value-adding replacement for mechanical tuckers in applications where higher machine speeds can be achieved.



Weaving from creel made easy

Thanks to Picanol's combination of false beam arrangement and the drawing-in section, weaving from creel is now fully integrated.



Wind up bales flawlessly

Up to 4 tons or 2,000 mm diameter. The weight-compensated batching motion delivers flawless bales. The easy-to-use auto doffing and sideways motion to align to the middle of the fabric are smart extra features. The Tire cord batching motion of Picanol is the result of know-how accumulated over many years of TC weaving.

Built in the factory of the future



Training is part of the deal Picanol makes with its customers

Well-trained employees are a real asset to your company. Skilled staff make your machines run at optimum performance, producing excellent fabric quality and resulting in superb plant efficiency.

We feel it is our duty to help your employees to improve their skills and knowledge. Hence, in 2015 we decided to invest in a state-of-the-art Technical Training Center in Ypres.

Three fully equipped rooms (each with weaving machines, cut models, mini workshop etc.) cover a total area of 270 m². This new knowledge center allows Picanol to train technicians from customers around the world in optimal conditions.

All facilities are there to give your employees a warm welcome. If your employees are not able to travel to one of our training centers, our instructors come to you and will organize training at your premises.

Spare Parts & WeaveUp

Weaving machines are one of your most important investments. Keeping them in optimal condition is essential to safeguard the high value of this asset and to remain competitive as a weaver in a globalizing world.

Use of original Picanol parts guarantees a continued high performance of the Picanol weaving machines.

Moreover, timely replacement of original parts enables Picanol's customers to run their machines in the most economical way.

Regardless of the age of the machine, the use of original parts will keep the machine in top condition which has a positive influence on the value of the machine throughout its life time.

Furthermore, to expand your weaving range and/or increase your machine performance, Picanol offers upgrade packages for installed Picanol machines. WeaveUp upgrades add state-of-the-art technology to your machines, which apart from the benefits in weaving equally increase the value of your investment.



Scan the pictures of the factory with the Picanol app and see the factory come alive.

Curious about our **upcoming news**?

Download our new app on your mobile phone or tablet and thanks to the news notifications feature you will be the first to know about all our innovations. This app is updated frequently so keep an eye out for new arrivals and updates.

You can also subscribe to our **newsletter** at www.picanol.be/newsletter to be the first to learn about our latest news, updates and events.

Book your training course

As already mentioned, training is part of the deal Picanol makes with its customers.

A full list of our training courses can be found on our **website**: www.picanol.be/training-services.

For more information, please contact your local Picanol agent or Customer Service Representative (CSR). See www.picanol.be/agents for contact details.



We make it easier

Our calculators, freshly designed, developed to make weavers' everyday lives easier.

Visit our website www.picanol.be and discover our new integrated weaving calculators online, or **download the app** with the calculators.



Meet us around the world

During the year, Picanol is present at events and trade fairs around the world. Thanks to the "Trade Fair" function on our app, **you can prepare for your visit**.

With the Picanol app you can discover the machines and the features on show at the main trade fairs, in preparation for your visit. Download the app at www.picanol.app.



Download the app at: www.picanol.app or scan this QR code.

About Picanol



The Picanol Group is an international, customer-oriented group specialized in the development, production and sale of weaving machines, cast iron parts and controllers.

Its Weaving Machines division (Picanol) develops, manufactures and sells high-tech weaving machines based on airjet or rapier insertion technology. Picanol supplies weaving machines to weaving mills worldwide and also offers to its customers products and services such as weaving frames and reeds, training, upgrade kits and spare parts. For more than eighty years, Picanol has played a pioneering role in the global industry and is currently one of the world's leading weaving machine manufacturers.



The Industries division covers all the other activities not related to weaving machines. Proferro comprises all foundry activities and the group's machining activities. It produces cast iron parts for compressors and agricultural machinery, and parts for Picanol weaving machines. PsiControl designs, develops, manufactures and supports, among other things, controllers in various industries such as textile machinery, compressors and fleet management.

Melotte is a high-precision producer of metal components, molds and reconditioned molds. It has also played a leading role in the 3D printing of components for a number of years.

Next to the head office in Ypres (Belgium), the Picanol Group has production facilities in Asia and Europe, linked to its own worldwide service and sales network.

The Picanol Group employs more than 2,300 employees worldwide and has been listed on the Euronext Brussels exchange (PIC) since 1966. Since 2013, the Picanol Group has also had a reference interest in the Tessenderlo Group (Euronext: TESB).

Next to Ypres, Picanol has two first-in-class training centers located in Suzhou (China) and Greenville (USA). All our training centers are specialized in technical training on weaving machines for machine operators, fitters and weaving managers.

Our team is always at your disposal for further information or questions.

www.picanol.be



The illustrations and descriptions in this publication do not commit Picanol in any way: specifications may change as a result of developments in engineering and materials. EN 03.01.2022.



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