PICANOL
Let's grow together

OptiMax-*i Connect*

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ENGLISH

His **eagerness to grow** is our benchmark.

SCAN HERE FOR THE APP

Discover our vision in a video by scanning the image above with our new app.

www.picanol.app

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Let's grow together

The future. Should we be afraid of it?

At Picanol we believe our children already show us what the future brings.
Their expectations are **our new benchmarks.**

Their today is our tomorrow.

Because more than ever, in the future, we don't just want to grow. We want to **grow together**.

Our design principles: how we build our machines.

When starting the design of a new machine, we have to do better than just a few picks faster than the previous generation. Today's world is all about connectivity, user-centric design, intuitive controls, self-learning capacities and sustainability ... to name just a few.
These are the benchmarks for a future-proof design.

Smart Performance

Performance is the first requirement for any machine or feature, and the obvious indicator is the **theoretical maximum speed.** Very often, however, the gap between this theoretical speed and **the effective speed** under real-life conditions is huge.

Sustainability Inside

When it comes to **preventing waste** and **reducing energy consumption,** Picanol has long faced up to its responsibility. Our machines are designed with a built-in capacity for sustainability.

Driven by Data

We all know that **digitization** will become ever more important in the next decades. **Data** have to be captured and made available for **artificial intelligence**, making production more efficient.

Intuitive Control

Kids nowadays handle new technology **effortlessly and intuitively**. That's what we want for our machines as well. Just like your smartphone or your car, the **machine display** is the interface that controls nearly all the machine functions.

Smart Performance, **Sustainability Inside**, **Driven by Data** and **Intuitive Control** are the basic principles of any Picanol weaving machine. They allow your company to thrive in today's world of Industry 4.0: connected, digital and sustainable.

That's why we at Picanol design our machines around the principle of 'Smart Performance': **intelligent machine design** combined with self-setting software, allowing the highest possible practical speed and best performance under all conditions.

We have demonstrated this with our pioneering Sumo drive. Introduced back in 1996, it is still the **most energy-efficient** main drive available. Sustainability is also about **waste management**. We not only reduce waste but also try to avoid it completely. Our EcoFill feature is an excellent example of this.

Ever since the first introduction of electronics on weaving machines in the 1970s, Picanol has been at the **forefront of digitization**. With every new machine, we continue to be a trendsetter in this field and to further deploy Industry 4.0 in the weaving industry: the **self-setting machine** is just around the corner!

Wireless-ready, robust and **designed for instant readability**: new generations will not accept anything less! This **user-centric approach** is also embedded in the design of the overall machine, making all operations easy, intuitive and self-explanatory.

OptiMax-*i Connect*
The new benchmark in rapier weaving

If versatile and productive weaving driven by digitization and Industry 4.0 is your objective, you can now be sure to experience real added value with the unique, future-oriented OptiMax-*i Connect*.

The OptiMax-*i Connect* offers you all the possibilities for being at the top in your market. Ready for every new opportunity.

Our market is nowadays driven by an increasing concern for environmental topics, higher costs, and the lower availability of resources and skills, as well as the digital revolution. That is why the OptiMax-*i Connect* has been built around our **four leading design principles**.

Smart Performance

Picanol machines have always been built for maximum performance, and they always will be. Smart performance not only focuses on speed but also on **top quality and versatility**.

With the OptiMax-*i Connect*, **smart performance** is guaranteed by the robust machine structure combined with the proven shed geometry and the most suitable rapier system for any application.

Sustainability Inside

Minimizing the energy consumption cannot be an optional extra - it has to be embedded in the machine design. To this end, the Sumo drive concept has become even more **energy-efficient**. **Sustainability inside** is not only about energy but also about resources. EcoFill and ERGO are just a few features on the OptiMax-*i Connect* that will help you optimize the use of your most valuable materials.

Driven by Data

Picanol has pioneered the digitization of weaving machines for many decades now. The **BlueBox** is our reliable electronic platform, ready for Industry 4.0. With the **BlueTouch display**, all data is gathered and visualized in overview dashboards. The data is ready to be used for further optimization of the machine performance or to be exchanged – be it with data from other machines or data available in the cloud. Therefore, weaving with Picanol becomes truly **driven by data**.

Intuitive Control

Picanol machines are always designed to be as user-friendly as possible. Thanks to the **BlueTouch display** with its complete newly designed user interface, the **Smart signal lights** and the implementation of Access control, the highest level of **intuitive control** has been incorporated in the machine design of the OptiMax-*i Connect*.

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

Now enabled by PicConnect

PicConnect is our online platform offering digital services. It serves as a powerful extension of your weaving capabilities. Whatever your reflexes tell you to do, PicConnect amplifies it. We call it intuitive weaving – it's about allowing you to follow your weaving instincts.
Learn more at **www.picanol.be/intuitiveweaving**

Gentle treatment of all kinds of yarn

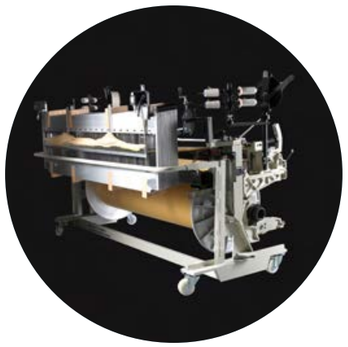
From **detection of the filling yarn** to the unique **quickstep weft presenter** and the various **weft cutter systems**, all are designed throughout to handle the **widest variety of weft yarns** in the smoothest possible way.

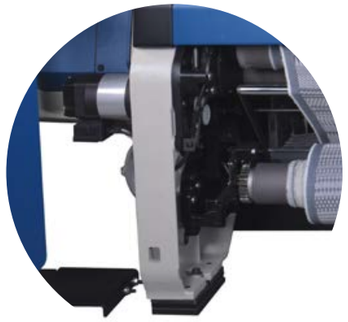
The world's first digitalized gripper stroke setting

Optimize your machine performance. The **integrated measurement** of the gripper stroke enables you to run at **maximum speed** according to the drawing-in width and allows you to reduce the setting of the gripper stroke to a minimum period of time.

The quickest way to get new styles up and running

With the Picanol **Quick Style Change (QSC)**, preparation of a new style is done outside the weave room. Furthermore, various design aspects facilitate quick setting with maximum digitization, greatly contributing to the uptime of the installation.





Solid structure combined with proven shed geometry, the basis for any application

The proven Picanol concept combines **two solid sideframes** connected by **large-section cross rails**. The sley is driven by conjugated cams located under the fabric line to guarantee **equal beat-up force** over the full width.

Smart Performance

Keep an eye on the condition of the gripper tape

Guarantee the **lubrication** and monitor the **temperature** of the cooling blocks of the **gripper tape** thanks to integrated sensors.

Future-proof thanks to modular design

The **highly modular machine concept** allows upgrades and modifications to be retrofitted as desired, with a wide range of variants in shedding motion, cutter design, warp beam set-up etc.

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**.

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**.

Minimize the length of the right-hand side weft waste

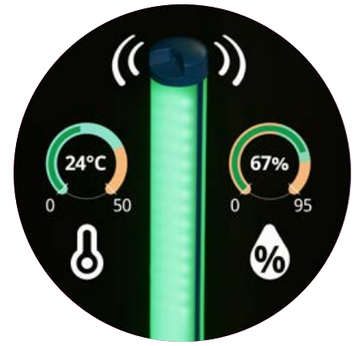
Improved control of weft length is assured by positive opening of the right-hand side gripper with the **Electronic Right Gripper Opener (ERGO)**. ERGO allows individual setting through the display of the gripper opening timing per weft channel.

Monitor the power consumption in real time

The electrical power consumption is **monitored on a continuous basis** and it can be consulted at any time on the display.

No more doubts about the temperature and humidity

Every Picanol machine has an **integrated temperature** and **humidity sensor**. The data is available on the BlueTouch display.



Smart energy use thanks to improved lubrication

As well as **filtering and cooling the oil**, the integrated lubrication system brings the **optimum amount of oil** to all crucial points in the machine. This not only **extends the lifetime** of the components but also assures the **lowest possible energy consumption** in all gear transmissions.

Sustainability Inside

The most energy-efficient main drive has now become even more energy-efficient

The redesigned **SUMO** drive concept pioneered by Picanol is the most energy-efficient main drive on the market. It affords the **lowest possible energy consumption** while at the same time offering many other advantages such as full-range speed control, slow motion, pick finding, and even **automatic crossing setting**. The new integrated temperature sensor completes the redesign.

The highest level of digitization

The 15.6" BlueTouch display is the perfect tool for both handling and visualizing your data. This is clearly illustrated with examples such as the **Sensor dashboard** and the **Action center** with **Logbook** functionality.

The reliable electronic platform, ready for Industry 4.0

The **BlueBox electronic platform** got an update to enable **improved data handling**. In combination with the well-known reliability and the new design of the BlueBox, this sets the benchmark for electronic platforms in the market.

Prepare your weaving mill for the next industrial revolution

PicConnect is the gateway to all of **Picanol's digital services**, from industrial IoT to service-related applications. PicConnect enabled means that the machine is ready to fully leverage PicConnect applications.

Driven by Data

Every step of the insertion is digitally controlled

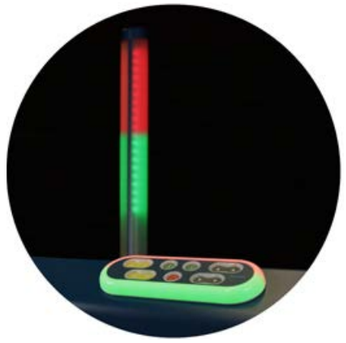
The insertion parameters are digitally controlled and managed on the BlueTouch display.

Perfect overview of sensor data

Essential sensor data is **easily accessible** and can be visualized on a dedicated dashboard on the **BlueTouch display**.

Full, quick data control at your finger tips

The advanced **15.6" BlueTouch display** allows **quick access** and **control of all settings**. With features such as **Access control**, help functionality, and others, the BlueTouch display sets new standards in the market.



Smart visibility of the machine status

The light combination of the **LED signal torch** and the LED strip on the **push buttons** is **synchronized**. In addition, it can be fully **customized** by the user.

Full control of your machine settings

Access control manages the access level of the different users and allows you to define personal screens.

Width changes easily made in a minimum amount of time

All components involved in a width change are mounted on a **single support**. A **display procedure** that can be combined with the **gripper stroke measurement** reduces the time for changing the width to the absolute minimum.

Enjoy operating the machine

In addition to the various **user-friendly features** that are standard on all Picanol machines, handling the machine is made even easier thanks to a **range of innovative design features**.

On Picanol machines only! All shed information is available at the snap of your fingers

The **settings of the shed** can now be done in the most intuitive way thanks to the **visualization** of the shed on the BlueTouch display.

Intuitive Control

OptiMax-*i Connect*

Technical specifications

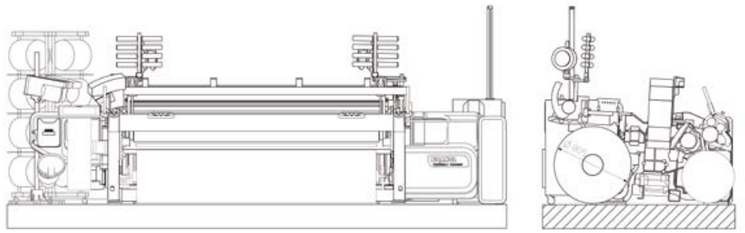
∗ patented
∗∗ patent pending

Fabric specifications			
Useful widths	190, 210, 220, 230, 240, 250, 280, 300, 320, 340, 360, 380, 400, 430, 460 and 540 cm		
Width reduction	80 - 100 cm depending on reed width		
Yarn range	Spun yarns	Nm 254 - Nm 3	Ne 118 - Ne 1.
		Free Flight up to Nm 1	Ne 0.6
	Filament yarns	20 den - 3,000 den	22 dtex - 3,300 dtex
		Free Flight as fine as 10 den	11 dtex

		Standard	Optional	Aftermarket
Connect packages				
Monitor package		-	●	●
	Access control	-	-	-
	OptiStyle	-	-	-
	Raw material use	-	-	-
	AutoSens filling detector	-	-	-
	Gripper tape monitoring	-	-	-
Optimization package		-	●	●
	Power monitoring	-	-	-
	Gripper stroke measurement (dobby- or cam-motion)	-	-	-
	Harness frame stroke measurement & Shed simulation (dobby- or cam-motion)	-	-	-
Filling insertion				
Filling selection	Up to 12 colors or yarn types	●	-	●
	Weaving 2 weft yarns simultaneously ∗	-	●	●
Grippers		●	-	-
	GC - Guided Gripper	-	●	●
	FF - Free Flight gripper	-	●	●
	GPG - Guided Positive Gripper (for dedicated technical applications)	-	●	-
	FPG - Free Flight Positive Gripper (for dedicated applications) ∗	-	●	-
Prewinders & options	PSO - Prewinder Switch-Off	-	●	●
	Pneumatic feeder threading up	-	●	-
	TED - Tension Display	-	●	●
Active filling brakes	TEC - Programmable Filling Tensioner	-	●	●
	EFT - Electronic Filling Tensioner ∗	-	●	●
Filling detector	Piezo-electric filling detector with anti-2 protection	●	-	●
	SmartEye filling detector	-	●	●
Filling cutter	EDC - Electronic Disc Cutter	●	-	●
	Mechanical filling cutter	-	●	●
	SmartCut filling cutter	-	●	●
Knot detector	Bobbin change detector	-	●	●
	PKE - Picanol Knot Extractor (knots at bobbin change)	-	●	●
	Full PKE - Picanol Knot Extractor (all knots)	-	●	●
Gripper opener	ERGO - Electronic Right-hand Gripper Opener ∗	-	●	●
Warp let-off				
Let-off system	ELO - Electronically controlled Let-Off	●	-	●
Warp beam	Diameter 805 mm - 1,000 mm - 1,100 mm	●	-	●
	Double warp beam for reed widths of 250 cm and up	-	●	●
	Fancy beam system on top	-	●	●

			Standard	Optional	Aftermarket
Backrest	Double backrest rollers		●	-	●
	Double backrest rollers with possibility to add drag roller		-	●	●
	DWC - Direct Warp Control (available for dedicated technical applications) ∗		-	●	●
	TSF - warp tension sensor in the feeler		●	-	●
	TSW - warp tension sensor in the warp		-	●	●
	Warp tension compensation with springs		●	-	●
Electrical warp stop motion	6 contact bars 25 mm pitch or 8 contact bars 16 mm pitch		●	-	●
	Detection per contact bar		-	●	●
	Zone detection LHS / RHS		-	●	●
Style change system	QSC - Quick Style Change		-	●	●
Cloth take-up					
Take-up system	ETU - Electronically controlled Take-Up		●	-	●
Cloth take-up	Diameter of cloth roll	550 mm (warp beam 805 mm)	●	-	●
		600 mm for larger beams	●	-	●
	PBM - Picanol Batching Motion (up to diameter 1,500 mm)		-	●	-
	Take-up directly over pressure roller		-	●	-
Fabric illumination	LED illumination	above reed	-	●	●
		under the fabric	-	●	●
		above back shed (in case of fancy)	-	●	●
Machine drive and control					
Main control	BlueBox electronic platform		●	-	-
Main motor	SUMO main motor with direct machine drive		●	-	●
	OptiSpeed (automatic stepless speed variation)		●	-	-
	Automatic full pickfinding ∗		●	-	-
Reed motion	Positive conjugated cam units (2, 3 or 4, depending on machine width)		●	-	-
Shedding motion			●	-	-
	Positive cam motion (P)	max 8 harness frames	-	●	●
		automatic shed levelling	-	●	●
	Positive dobby (R) max 20 or 24 harness frames, with levelling		-	●	●
	Execution for electronic jacquard (J)		-	●	●
	Execution for servo-driven jacquarette		-	●	●
	OptiLeno: continuous or alternating S/Z full-width leno system ∗		-	●	-
	AKM - electronic setting of the crossing moment		●	-	-
Lubrication	Centralized lubrication, forced circulation of filtered oil to all major drive functions		●	-	-
Cooling system	Water cooling		-	●	●
Interactive display	15.6" BlueTouch display		●	-	●
Smart signal lights	Pushbuttons on front panel with integrated signal lights ∗(design)		●	-	●
	LED signal torch ∗∗		●	-	●
Harness frames					
Driving element	Harness drive DRC2 or DRC30		●	-	-
Harness frames	For 11", 13" or 15" heddles	standard	●	-	●
		extra reinforced	-	●	●
		hybrid	-	●	●

			Standard	Optional	Aftermarket
Selvedge formation					
Selvedge systems	ELSY	LHS / center / RHS	-	●	●
	- independent electronically controlled selvedge system				
	e-Leno (rotary fabric tying)	LHS / RHS	-	●	●
	MTI - Mechanical Tucking-In	LHS / center / RHS	-	●	●
	ATI - Air Tucking-In	LHS / center / RHS	-	●	●
	EcoFill 2C/4C (wasteless system LHS) *		-	●	●
Selvedge cutters	Electronic cutter	LHS / RHS	●	-	●
		center	-	●	●
	Hotwire cutter	LHS / center / RHS	-	●	●
Temples	Cylinder temples		●	-	●
	Full-width temple		-	●	●
Waste ribbon	Waste ribbon winder (incl. Waste ribbon detection)		-	●	●
	Waste ribbon detection **		-	●	●
Monitoring and software tools					
BlueTouch display	Loom monitoring and reporting		●	-	-
	Browser functionality		●	-	-
	Action center (including Logbook)		●	-	-
	Machine manual + Context based assistance		●	-	-
	Sensor dashboard		●	-	-
PicConnect enabled			●	-	-
Connection provided for major weaving room monitoring systems (parallel communication)			●	-	-
Bi-directional communication on ethernet or serial connection			-	●	●
Climate monitoring			●	-	-
Safety					
Light curtain	Depending on country of delivery		●	-	●



RBB0020 – 4 – R – 190

How to read the name

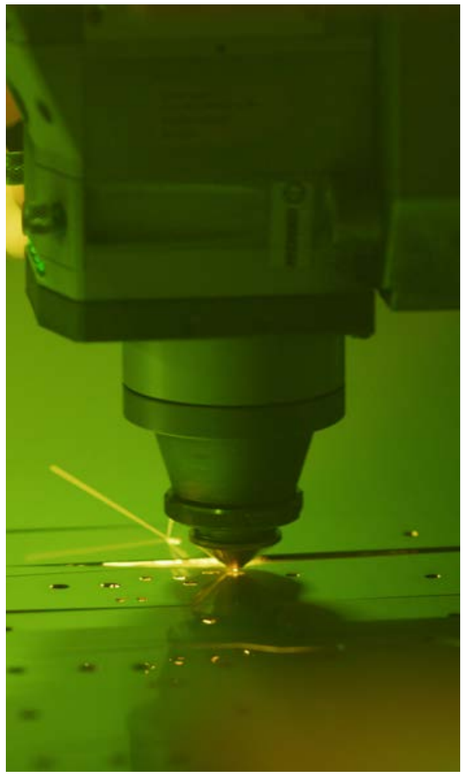
RBB0020 – 4 – R – 190

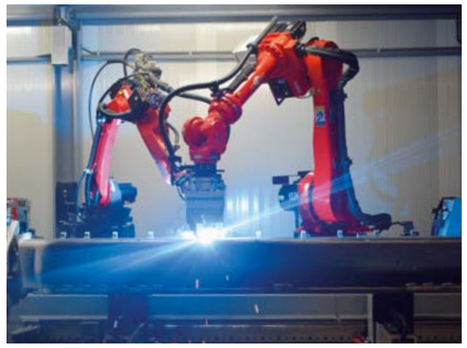
- Reed width
- Shedding motion
- Number of filling colors
- OptiMax-*i Connect*

Regulations

In designing the OptiMax-*i Connect*, Picanol has taken into account current international regulations concerning safety (mechanical and electric) and the environment (ergonomics, noise, vibrations, and electromagnetic compatibility).

Built in the factory of **the future**





Spare Parts & Weave-Up

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. Weave-Up upgrades add state-of-the-art technology to your machines, which apart from the benefits in weaving equally increase the value of your investment.

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 m^2. This new knowledge center allows Picanol to train technicians from customers around the world in optimal conditions.

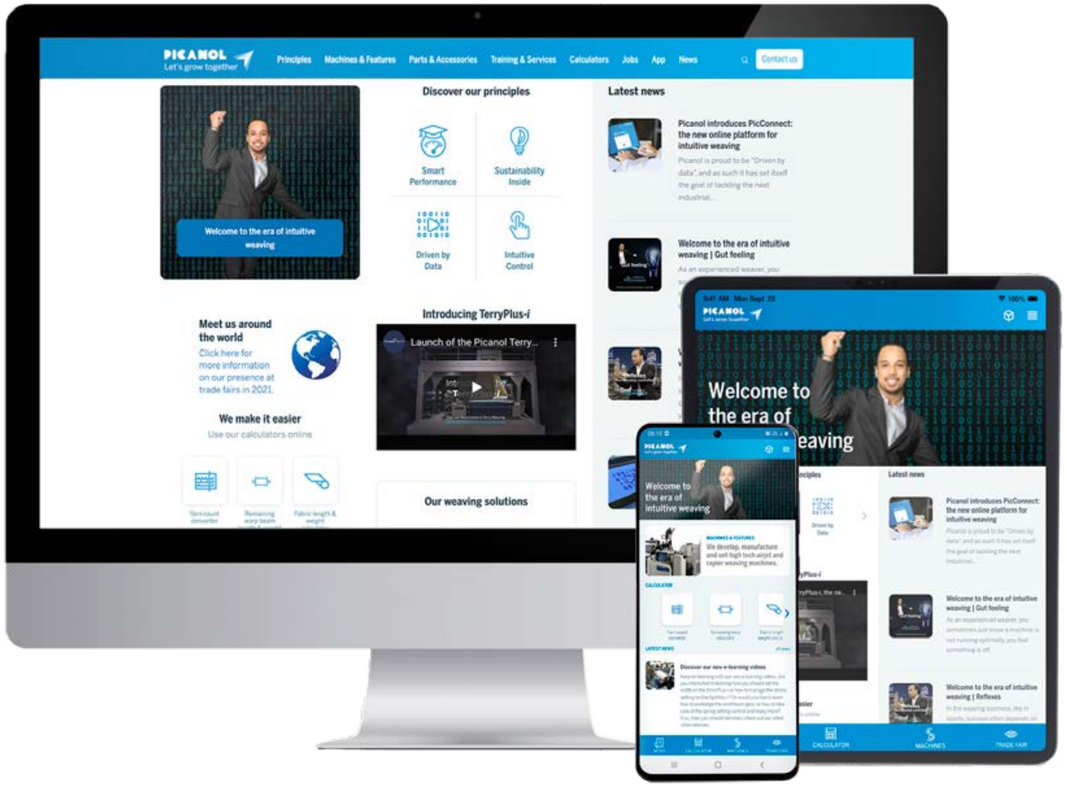
All facilities are there to give your employees a warm welcome. If your employees are not able to travel to one of our training centers, our instructors come to you and will organize training at your premises.

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.

DOWNLOAD ON THE App Store

ANDROID APP ON Google play

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**.

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

About **Picanol**

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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

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