

LET'S **GROW** 
TOGETHER

PICANOL

TerryMax-*i*

EN

ABOUT THE PICANOL GROUP

The Picanol Group is an international, customer-focused group specialized in the development, production and sale of weaving machines, engineered casting solutions and custom-made controllers.

Its Weaving Machine division (Picanol) develops, produces and sells advanced weaving systems based on airjet or rapier insertion technology. Picanol has played a pioneering role around the world for more than 75 years, and is now one of the world's leading producers of weaving machines.

The Industries division covers all the other activities not related to weaving machines. Proferro represents the group's metal casting and mechanical finishing activities. It produces cast iron parts for among other things compressors and agricultural machinery, as well as parts for Picanol weaving machines. PsiControl for its part develops and produces custom-made controllers, Human Machine Interface (HMI) and touch devices. Finally, Melotte develops and manufactures innovative product solutions using 3D printing.



Since 2013 the Picanol Group has also had a leading stake in the Tessenderlo Group (TESB).

In addition to its headquarters in Leper (Belgium), the Picanol Group has production facilities in Asia and elsewhere in Europe, backed up by its own worldwide sales and services network. The Picanol Group employs some 2,000 people around the world, and has been listed on the Euronext Brussels exchange (PIC) since 1966.




PICANOL GROUP

TRAINING TAKES YOUR TALENT FURTHER

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.

Training is part of the deal Picanol makes with its customers. We feel it is our duty to help your employees to improve their skills and knowledge. Hence, last year we decided to invest in a state-of-the-art Technical Training Center in Leper. 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.

Next to Leper, 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.

A full list of our training courses can be found on our website: <http://www.picanol.be>

Our team is always at your disposal for further information or questions. Contact: ttc-ieper@picanol.be (tel. +32 57 22 21 11).



SPARE PARTS

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.

With special services and a dedicated aftermarket team, Picanol takes care of the particular requirements and requests of its customers around the globe. These tailored solutions include among others :

- Online ordering of spare parts through P@rtsline
- Electronic spare parts catalogue (eSPC)
- On-time delivery of high-quality original parts
- Harness frames for different brands of weaving machines
- Tailor made upgrade proposals for installed machines
- Analysis and recommendations in respect with running costs
- Preventive maintenance and service audits

With headquarters in Belgium and local offices in China, India, Indonesia, Turkey, USA, Mexico, Brazil, Picanol is able to assure a close, long-term relationship with all its customers.

For more information, please contact your local Customer Service Representative (CSR).





TerryMax-i

The standard in terry weaving

PICANOL
TerryMax-i

LET'S GROW
TOGETHER

PICANOL

If versatile and productive terry weaving is your objective, now you can be sure of real added value with the unique, future-oriented TerryMax-i.

Based on the same high-performance weaving technology as the OptiMax-i, the TerryMax-i offers all the possibilities for growing to the top in your market. Ready for every new opportunity. Guaranteeing optimum fabric quality. Best in class for minimum energy consumption. Optimizing your precious time. And creating space to unleash your utmost creativity.

Together with our customers we constantly strive to improve our machines and services, in order to stay ahead of the competition. So if you really want to get the most out of your market, your material, your energy, your talent and your time, the TerryMax-i provides the platform for you to keep growing. Because that is the essence of weaving.

FABRIC DESIGN

The TerryMax-i offers full flexibility in design.

The pre-beat-up is independently driven by the pile height motor, and all settings are electronically set on the microprocessor.

No mechanical settings are required. The pile height changing device makes it possible not only to change the group beat-up rate, but also to weave structured patterns such as waves: no limitations on product design.

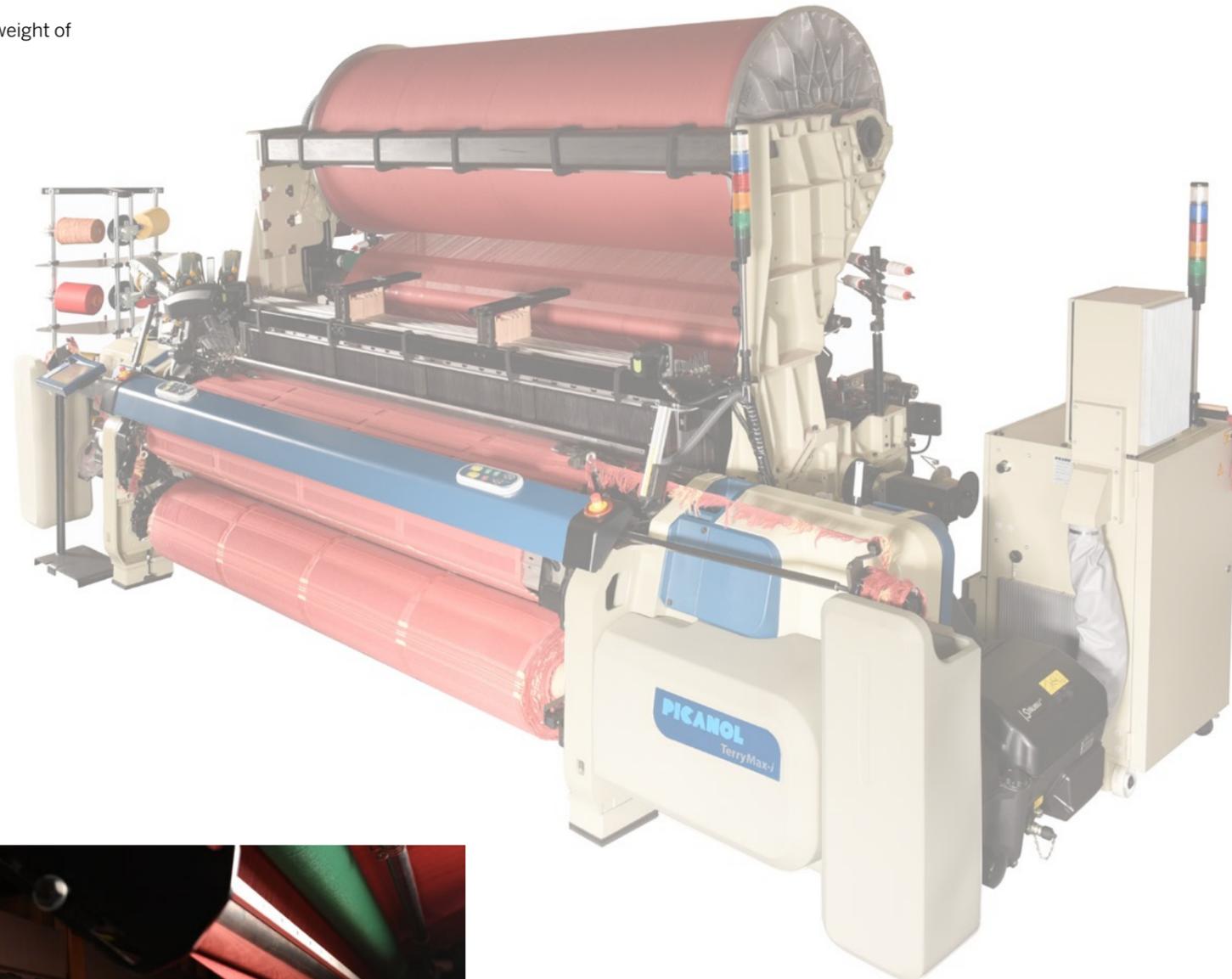
Pre-beat-up distance up to 24 mm; weight of more than 1600g/m².



ERGONOMIC MACHINE

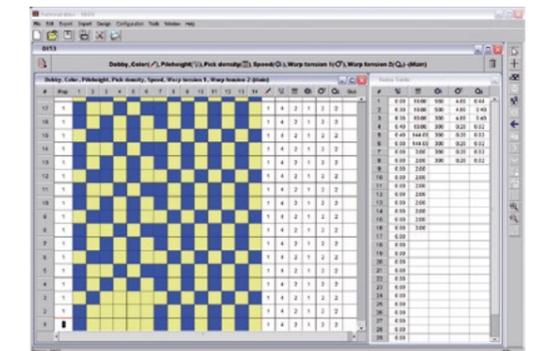
The TerryMax-i machine is unusually low at the front. Pushbuttons with metal dome technology are conveniently located and have optical command confirmation. All main settings are carried out above the fabric line, providing perfect accessibility for weavers and operators.

Connecting the harness frames to the drive system is done in a single movement (DRC30 quick connections), and setting frame heights is done at the top of the frames.



MAXIMUM CONTROL

All machine functions are controlled by the microprocessor. Mechanical settings have wherever possible been replaced with digital ones. The microprocessor records, analyses and stores all production data. The weaving machine itself can be linked to a central monitoring system (as integrated in LoomGate, for example) by Ethernet or bidirectional connection. The interactive touchscreen can store settings of numerous articles.



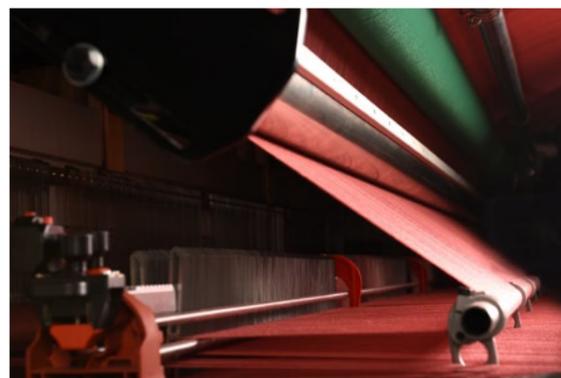
FABRIC QUALITY

The fabric quality is guaranteed by the stability of the unique pile formation. The cloth movement is driven simultaneously with the backrest movement (patented) and is directly driven from both sides by a torsion-free shaft without mechanical settings or additional transmissions (patented).

The ultra-light compensation rollers in combination with the robust structure ensure that the pile is formed smoothly, with a completely even pile height (patented). The fabric quality is further ensured by the minimal distance between cloth formation and take-up and by the constant yarn tension.

The pile height monitoring gives continuous feedback on the woven pile height.

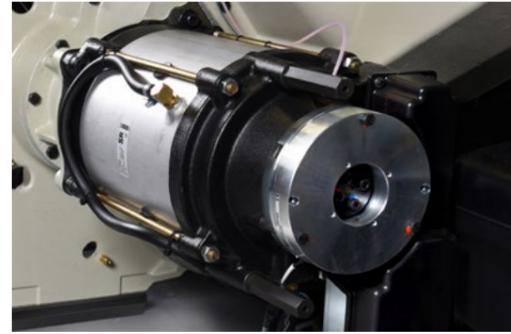
The tension is automatically released at stop, and automatically re-tensioned again to the required tension at start, ensuring correct pile height even after a stop.



GET THE MOST 
OUT OF YOUR TALENT

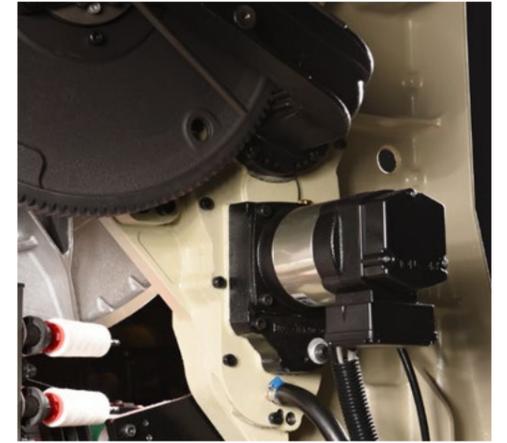
SUMO MAIN MOTOR

The oil-cooled Sumo main motor drives the weaving machine directly, without belt or clutch and brake. The combination of the highly energy-efficient Sumo motor with the direct drive (patented) for main shaft and shedding motion results in power savings of more than 10% in comparison with conventional clutch and brake configurations. The energy cost for air conditioning is also reduced as the Sumo motor generates less heat in the weaving mill.



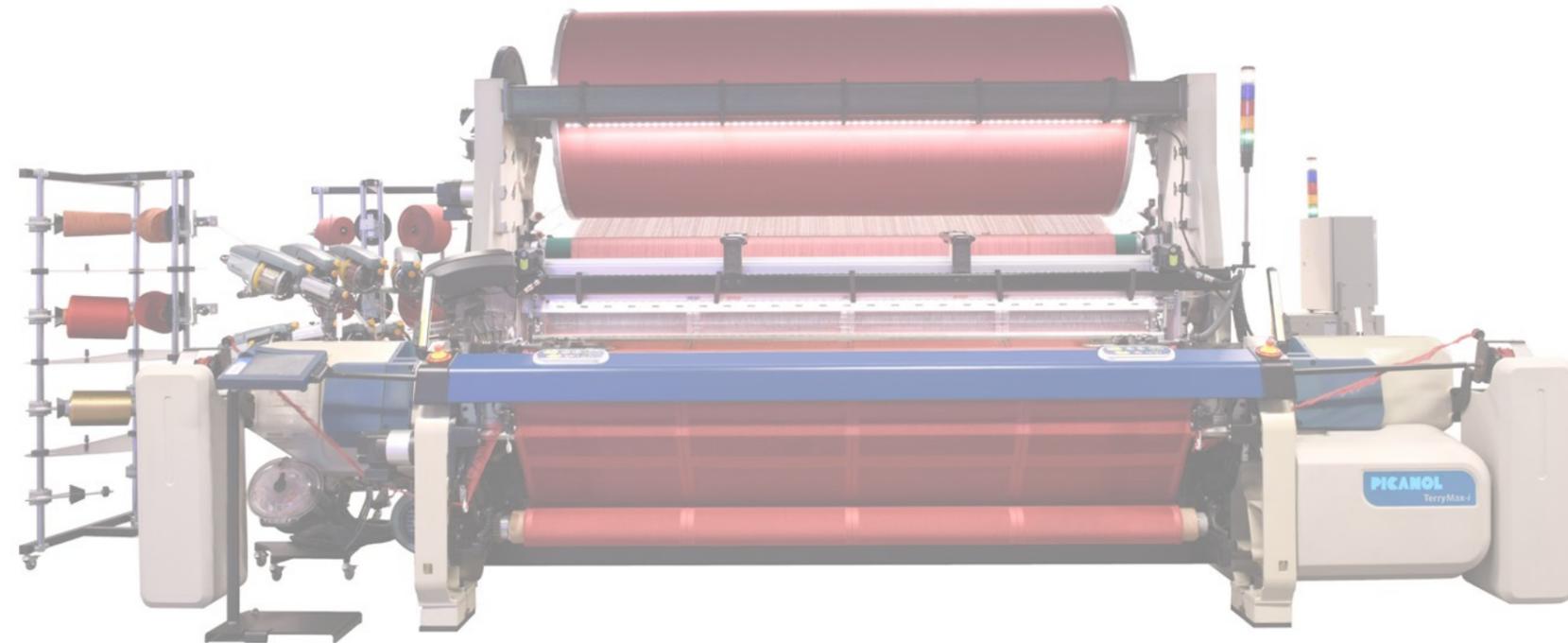
ELECTRONIC TAKE-UP (ETU) AND LET-OFF (ELO)

Same technology as Sumo main motor.



SHORT DRIVE TRAIN

The motor speed is controlled electronically, without frequency converter, thus reducing power consumption and permitting greater flexibility. The very short drive train brings the machine to full speed right from the very first pick.



OPTIMIZED LUBRICATION

The redesigned lubrication system further reduces the energy consumption.

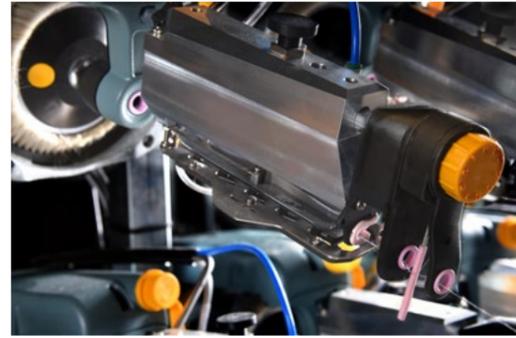


GET THE MOST 
OUT OF YOUR ENERGY

ACTIVE FILLING TENSIONERS

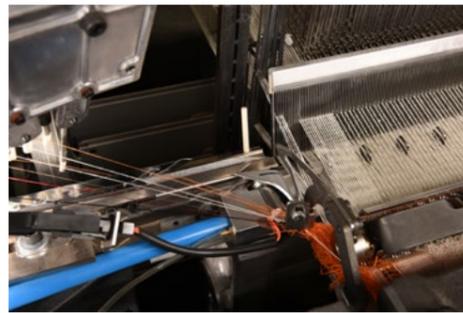
Each prewinder can be equipped with a Programmable TEC Filling Tensioner (patented). Tension control makes it possible to weave weak yarns at even higher speeds.

As an alternative for very demanding applications the Electronic Filling Tensioner (EFT) (patented) can be offered.



FILLING CUTTER

The Electronic Disc Cutter (EDC) cuts every filling yarn always at the right moment, while clamping the filling. A mechanical filling cutter is also available for more demanding filling yarns. The SmartCut allows programming of the cutting moment of each insertion channel.



ELECTRONIC SELVEDGE SYSTEM (ELSY)

The unique full leno selvedge motions are electronically driven by individual stepper motors. They are mounted in front of the harnesses, so that all harnesses remain available for fabric pattern formation.

The selvedge crossing and pattern are programmed on the microprocessor independently of the shed crossing, even while machine is in operation, allowing an immediate check of the result of a resetting.



QUICK STEP FILLING PRESENTER

The Quick Step operates with independent modules, each consisting of an electronically controlled stepper motor with presenter needle. After the left gripper has taken the presented yarn, the Quick Step needle returns to an intermediate position. At filling break, the needle is presented automatically in the most convenient position for re-threading, thus saving time for weavers.

The color and weave pattern are controlled by microprocessor or jacquard.

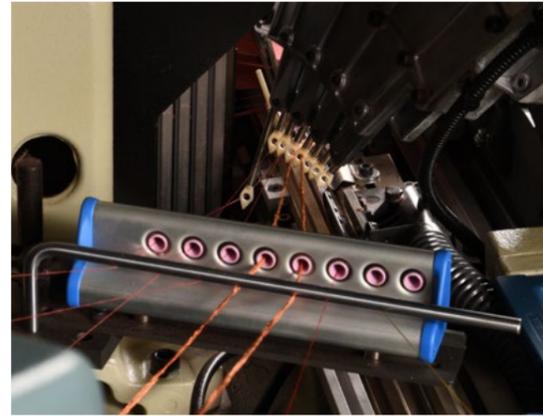
The Quick Step modules have no mechanical drives, so no maintenance or lubrication is required.



GET THE MOST
OUT OF
YOUR MATERIAL

PREWINDER SWITCH-OFF (PSO)

The piezoelectric filling detector stops the machine in case of a filling break. With its Prewinder Switch-Off system, the machine carries on weaving if a filling break occurs on the bobbin creel or one of the prewinders.



ELECTRONIC SETTING OF SHED CROSSING (AKM)

The crossing timing of the shedding motion can be set from the machine display – no tools required! A unique Picanol feature that allows the weaver to easily control the aspect and feel of the fabric.



WIDTH ADJUSTMENTS IN A MINIMUM OF TIME

The TerryMax-i has many unique features to keep machine downtimes ultra-short: all components to be moved on the left and on the right are mounted on a single support whose position can be easily varied. Software-assisted procedures are available in case transfer position of rapiers is to be modified.



SUMO MAIN MOTOR

The Sumo motor makes it possible to continuously adapt the machine speed pick by pick to match the strength of the filling yarn or weaving pattern (OptiSpeed). This combination of Sumo motor with electronic settings makes it easy to obtain the highest possible industrial speeds, taking into account the yarn quality, the number of harnesses and the weaving pattern, and considerably reduces set-up times.



AUTOMATIC FULL PICKFINDING

Driven by the Sumo main motor. In case of a broken pick, the machine stops and only harness frames are brought in motion – automatically – so as to free the broken pick, without the reed touching the beat-up line.

SHED ANGLE INDICATORS

Standard on dobby – Picanol exclusivity (patent pending).



GET THE MOST
OUT OF YOUR TIME 

OPTIMIZED SHED GEOMETRY

The short stroke of the sley and the frames and the redesigned rapier heads allow the TerryMax-i to weave with a small shed opening. The location of the sley cams below the fabric allows heavier beat-up forces, so fabrics with high density borders can be woven with ease.

RIGID CONSTRUCTION

Two redesigned cast-iron side frames are connected by sturdy cross-members. The sley is driven by conjugated cams with cam followers below the fabric. The sley with its reed holder is perfectly balanced by counterweights and provides powerful beat-up. This results in uniform fabric characteristics over the whole width.

PICANOL PC SUITE

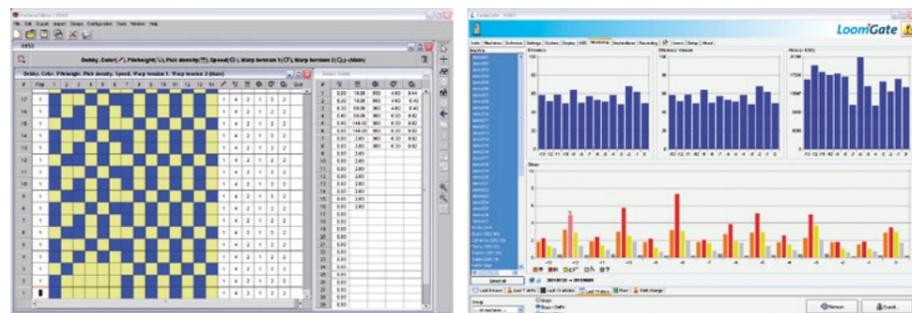
Picanol PC Suite is a collection of PC software applications.

LoomGate makes it possible to communicate between PC and weaving machines over the network.

Picanol Pattern Editor is used to create new designs on PC, for transfer to weaving machines.

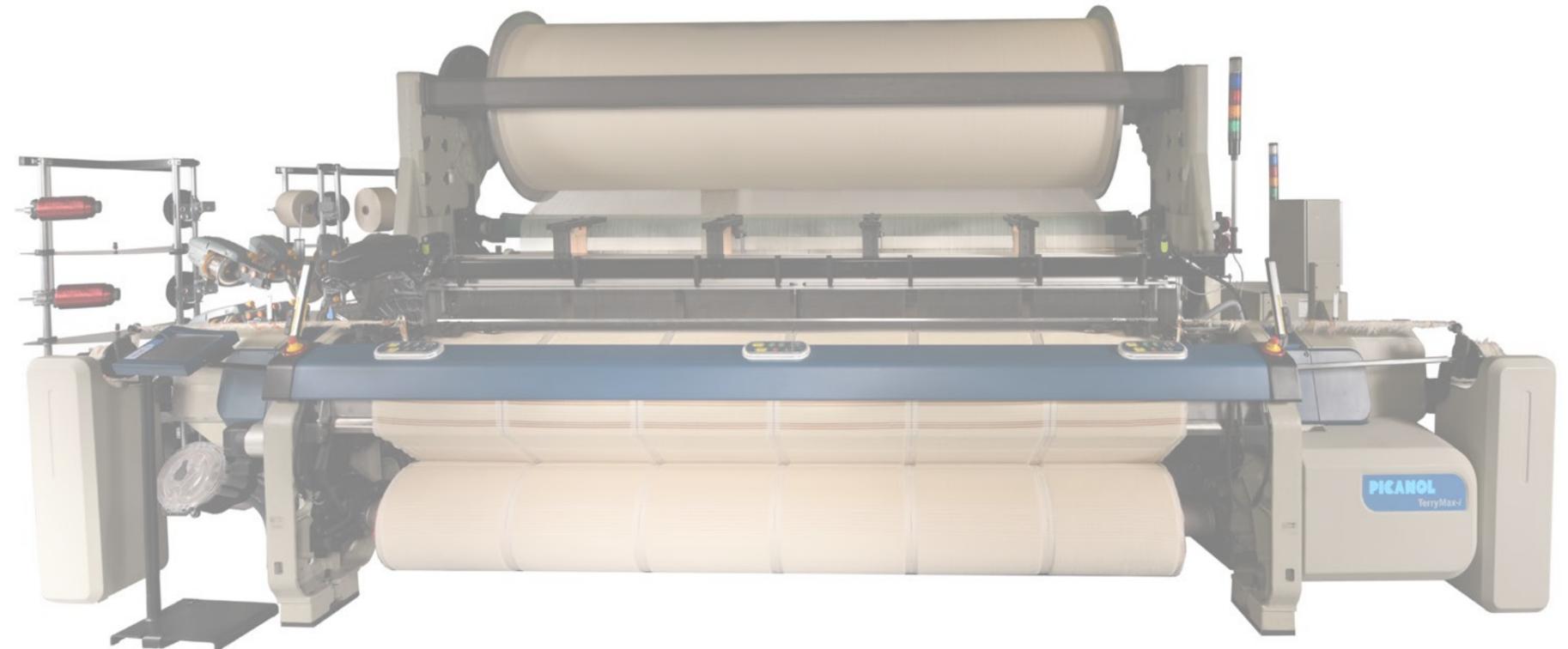
Picanol Style Administration is used to prepare settings while the weaving machine is running another style.

EasyStyle helps to select optimum machine settings.



GUIDED GRIPPER SYSTEM

Standard solution for spun yarns. The rapier tape on the lightweight Guided Gripper system is perfectly guided by one-piece hooks (patented). Together with a small shed and a small rapier head, industrial speeds are reached that were never attained before.



EXCHANGEABLE SHED FORMATION

The TerryMax-i can be fitted with electronic positive dobby or electronically driven jacquard. The basic machine structure for dobby and jacquard versions is identical, making it possible to change the shed formation system at any time in the future.

LET'S **GROW** 
YOUR **MARKET**

TECHNICAL SPECIFICATIONS

Available for
the aftermarket 

FABRIC SPECIFICATIONS

Useful widths	230, 240, 260, 280, 300, 340 and 360 cm	
Width reduction	Up to 100 cm	
Yarn range	Spun yarns	Nm 200 - Nm 3 (Ne 118 - Ne 1.8)
	Filament yarns	20 den - 3,000 den (22 dtex - 3,300 dtex)

PILE FORMATION

Direct driven cloth formation for up to 12 mm pile height	Standard
Pile height monitoring	Optional 

FILLING INSERTION

Filling selection	1 - 8 colors or yarn types (filling presenter with insertion position)	Standard
Prewinder	Prewinder Switch-Off (PSO)	Optional 
	Pneumatic feeder threading up	Optional
Active filling brakes	Programmable Filling Tensioner (TEC) (patented)	Optional 
	Electronic Filling Tensioner (EFT) (patented)	Optional 
Filling monitor	Piezo-electric filling detector	Standard
	Double pick prevention (anti-two)	Standard
Filling cutter	Electronic Disc Cutter (EDC)	Standard 
	Mechanical filling cutter	Optional 
	SmartCut filling cutter	Optional

WARP LET-OFF

Warp beam diameter	Ground	805 or 1000 mm	Standard
	Pile	805, 1000, 1100 or 1250 mm	Standard
Warp stop motion	Electrical, with toothed electrodes	Standard	
	Sectional warp stop motions	Optional	
Backrest	Universal type with built-in sensor	Standard	

CLOTH TAKE-UP

Cloth take-up	Diameter of cloth roll: 600 mm	Standard
	Picanol Batching Motion (PBM) system for diameters up to 1,500 mm	Optional
Central cutter devices		Optional 
Needle roll control		Optional 
Fabric illumination	LED illumination above reed	Optional 
	LED illumination above back shed	Optional 

MACHINE DRIVE AND CONTROL

Main motor	Sumo main motor with direct machine drive (patented)	Standard
	OptiSpeed	Standard
Automatic full pickfinding (patented)		Standard
Reed motion	Positive conjugated cam units (2 or 3, depending on machine width)	Standard
Shedding motion	Electronic rotary dobby for 20 frames, 12 mm pitch with levelling	Standard
	Harness drive DRC30	Standard
	Electronic jacquard	Standard
	Electronic setting of the crossing moment	Standard
Let-off motion	Load-cell electronically controlled warp let-off system (ELO)	Standard
Take-up motion	Electronically controlled take-up system (ETU)	Standard
Lubrication	By forced circulation of filtered oil to all major drive functions	Standard
	Centralized lubrication points	Standard
Machine controls	LCD touchscreen with color display	Standard
	Pushbuttons on front panel (design patent pending)	Standard

SELVAGE FORMATION

Independently electronically controlled selvage system (ELSY)	Optional 
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MONITORING & SOFTWARE TOOLS

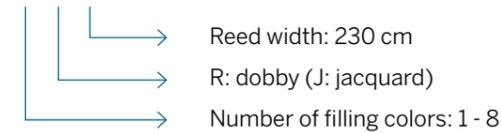
Self-diagnosis	Standard
Stop distribution reporting	Standard
Connection provided for major weaving room monitoring systems	Standard
Ethernet connection	Optional
Picanol PC Suite	Optional 

SAFETY

Light curtain (depending on country of delivery)	Standard
Protection guard over take-up rollers	Standard

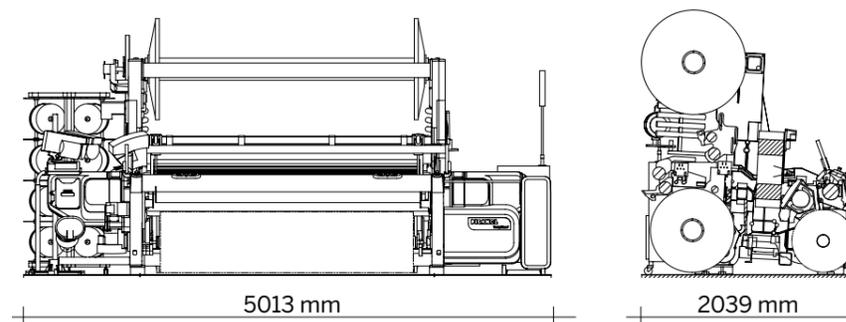
How to read the name

TerryMax-i - 4 - R - 230



Regulations

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



TerryMax-i-4-R-230



Growing is the essence of weaving.

Thread by thread, line by line, from the most basic to the most exquisite, a wide range of fabrics emerge from our weaving machines. That's why Picanol offers a wide variety of machines and services that enable weavers to create every fabric imaginable.

Growing is the essence of doing business.

The relentless pursuit to weave faster, better and more cost-efficiently is what drives you, and motivates us. That's why we make our machines ever more energy-efficient, user-friendly and easy to set.

Growing is the essence of the future.

The world changes quickly, and only those who are ready to learn and adapt will survive. That's why Picanol machines are sustainable, future-proof and intelligent machines that can adapt to changing circumstances and connect with each other. And that's why at Picanol, we want to be an intelligent organization that listens to our customers and develops together with them.

Because our goal is to Grow Together.

With you, our customers and partners.

We will grow together by removing all the obstacles and conventions holding back your ambition and our imagination. We will grow together by enabling your continued access to the latest technology. We will grow together by inspiring each other, listening to each other and learning from each other.

We truly believe that the future holds tremendous opportunities for growth.

Let's grab them.

Let's grow together



**LET'S GROW
TOGETHER** 

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