

LET'S **GROW** 
TOGETHER

PICANOL

TERRY*plus* Summum

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.

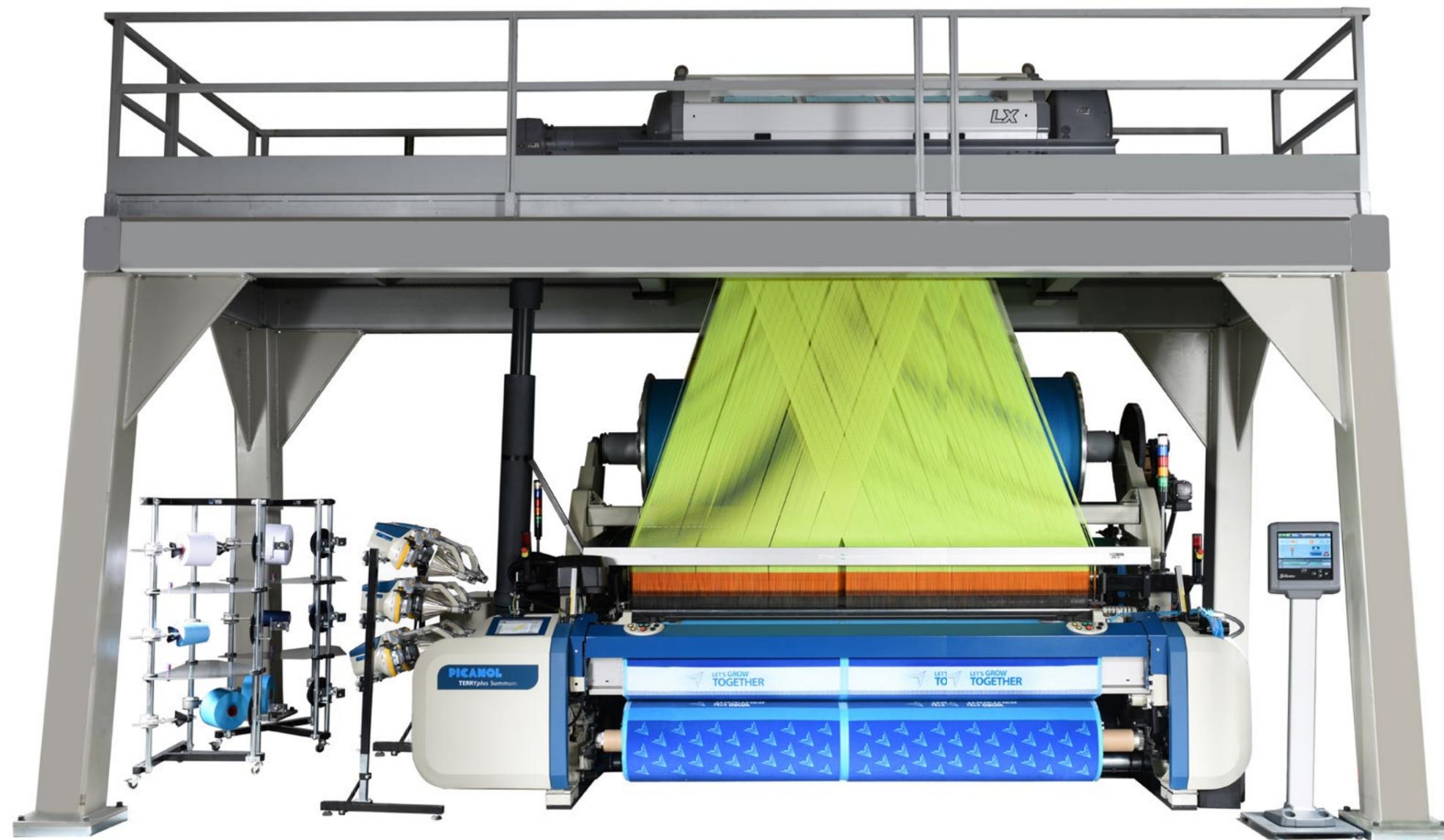
With special services and a dedicated aftermarket team, Picanol takes care of the particular requirements and requests of its customers around the globe. These tailored solutions include among others :

- 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).





TERRYplus Summum

The new standard in terry weaving

PICANOL
TERRYplus Summum

**LET'S GROW
TOGETHER**

PICANOL

If terry weaving is your objective, now you can be sure of real added value with the unique, future-oriented TERRYplus Summum. Based on the same high-performance weaving technology as the OMNIplus Summum, the TERRYplus Summum offers all the possibilities for growing to the top in your market.

This Picanol machine is characterized by its robust structure and offers the highest stability and performance on the market.

By combining state-of-the-art technology in hard- and software, the TERRYplus Summum offers your weaving plant the next upgrade to meet new market demands in quality, performance and energy consumption.

Built on the BlueBox platform, the TERRYplus Summum is packed with new features that enhance your weaving performance and allow us to continue adding improvements in the future.

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 TERRYplus Summum provides the platform for you to keep growing. Because that is the essence of weaving.

FABRIC DESIGN

The TERRYplus Summum 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. 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!

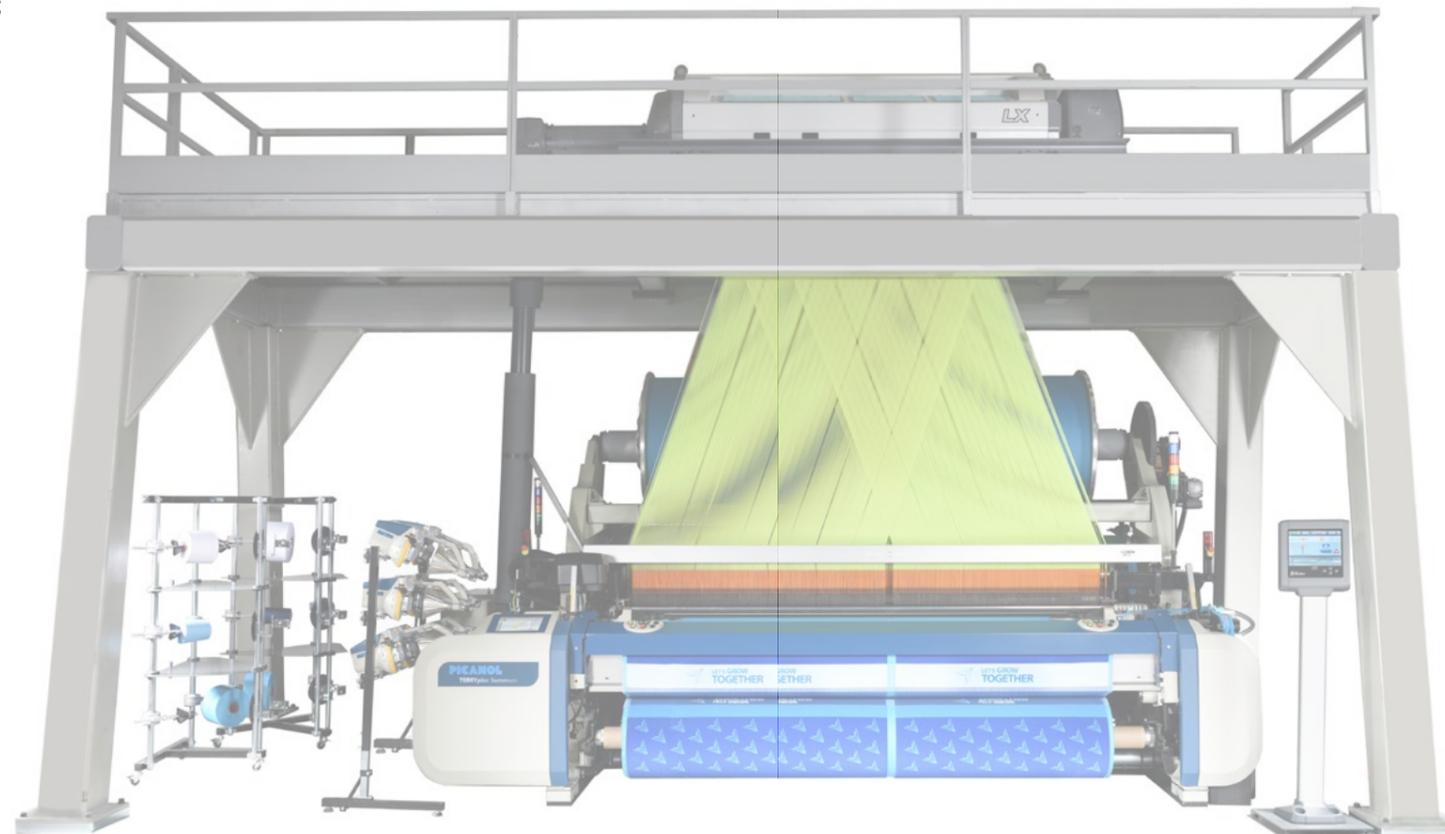
Pre-beat-up distance up to 24 mm; weight of more than 1600 g/m².



ERGONOMIC MACHINE

The TERRYplus Summum machine is unusually low at the front. Pushbuttons are conveniently located and all main settings are carried out above the fabric line, providing perfect accessibility for weavers and operators.

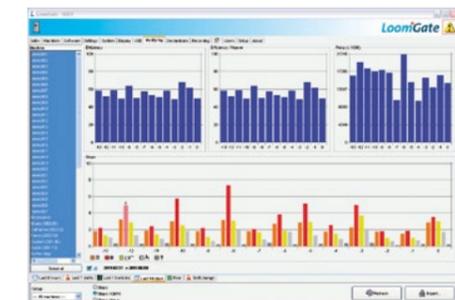
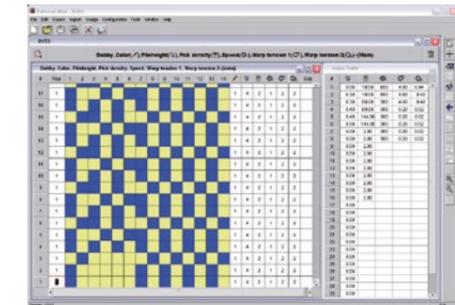
Connecting the harness frames to the drive system is done in a single movement (DRC30 quick connections), and setting frame heights is done at the top of the frames.



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.

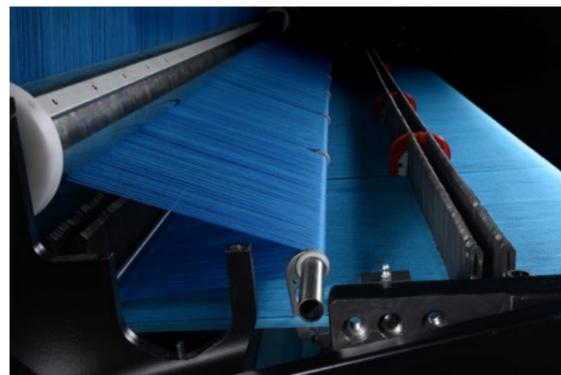


FABRIC QUALITY

The fabric quality is guaranteed by the stability of the unique pile formation. The cloth movement is driven simultaneously with the backrest movement 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.

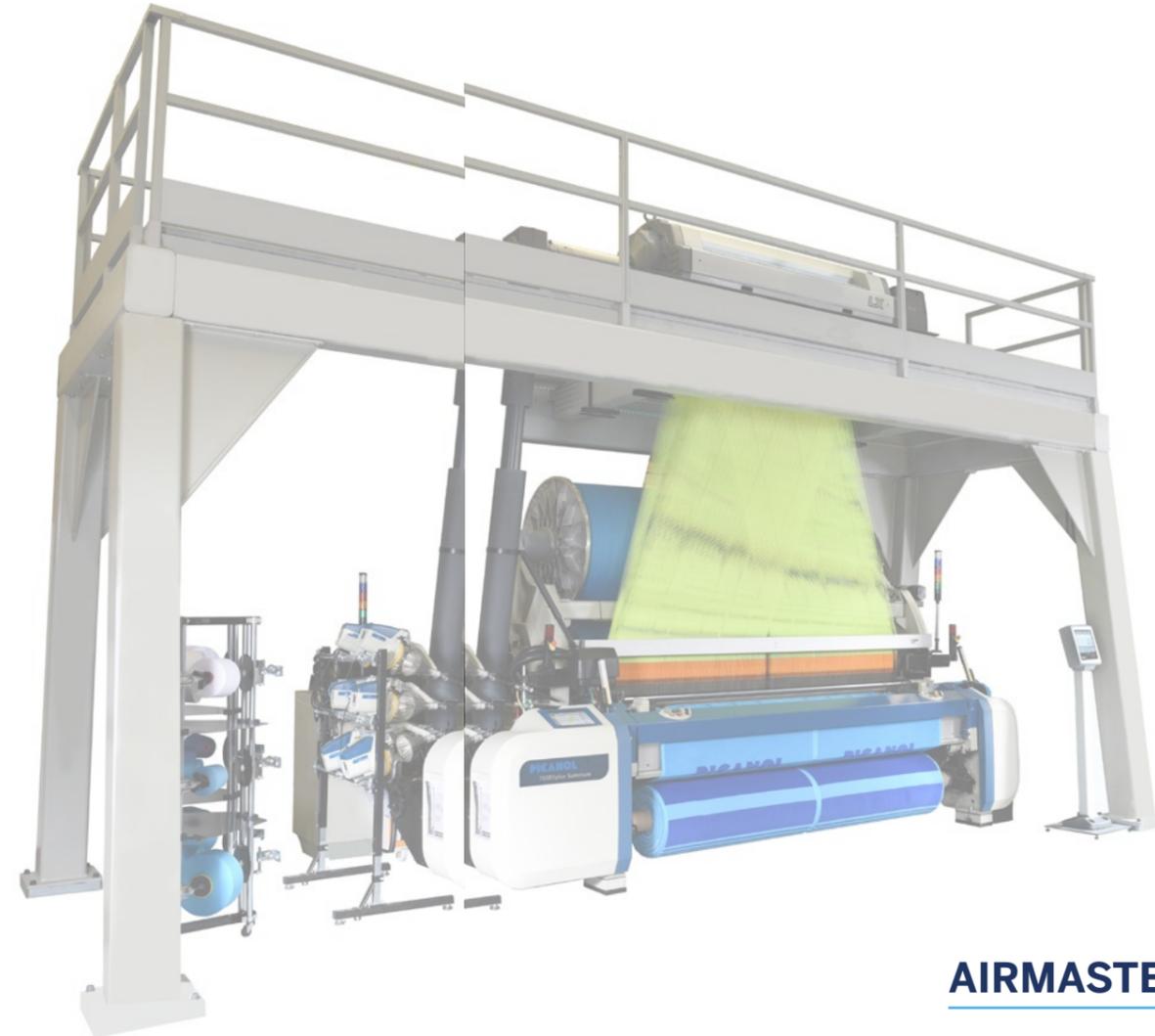
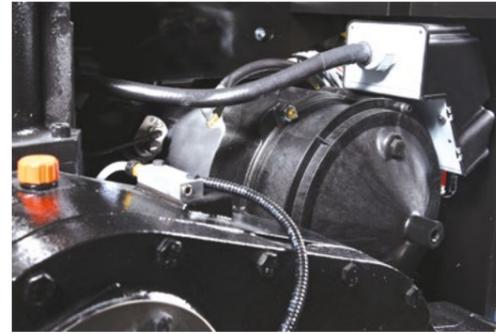


GET THE MOST 
OUT OF YOUR TALENT

SUMO MAIN MOTOR

The oil-cooled and highly energy-efficient Sumo main motor drives the weaving machine directly, without belts, pulleys or clutch, guaranteeing the highest possible energy efficiency. The energy cost for air conditioning is also reduced as the Sumo motor generates less heat in the weaving mill.

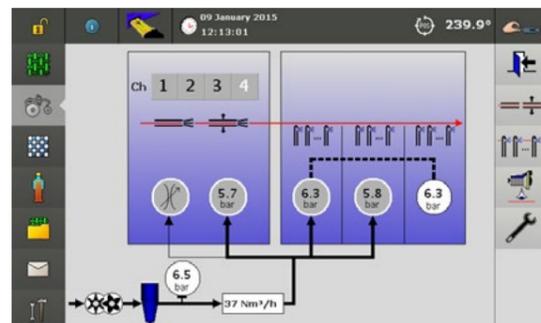
The motor speed is controlled electronically, without frequency converter, thus reducing power consumption and permitting greater flexibility. The very short drive train brings the machine to full speed right from the very first pick.



ELECTRONIC AIR PRESSURE REGULATORS

The electronic air pressure regulators (patents pending) offer full control via the machine display over the pressure settings for main and relay nozzles.

Thanks to the unique configuration of the pressure regulators, air pressure is displayed in bar – a direct and easily understandable reading. Pressure for the main and the relay nozzles is managed completely digitally from the machine's terminal. The pressure settings can easily be monitored by a central system or transferred to another machine weaving the same style.



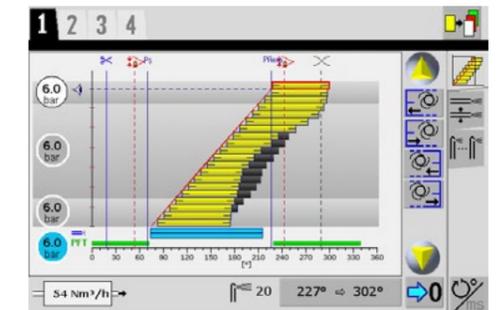
UNIQUE PICANOL RELAY NOZZLE DESIGN

Picanol has developed relay nozzles that offer an optimal performance/consumption ratio. One of the main reasons why air consumption is fully under control on the TERRYplus Summum. The multi-hole relay nozzle offers the highest traction force.



ADAPTIVE RELAY VALVE DRIVE (ARVD II PLUS)

Automatic optimization of relay nozzle blowing timings, saving up to 20% on air consumption (patented).



AIRMASTER

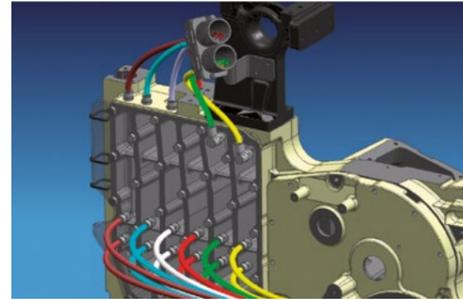
Airmaster (patented) monitors and manages the air consumption. It automatically checks the consumption of each individual insertion component by means of an automated diagnostic procedure.



**GET THE MOST
OUT OF
YOUR ENERGY**

SEPARATE AIR TANK PER CHANNEL

A separate air tank per weaving channel for the main nozzles enables optimal setting by means of an electronic pressure regulator for each individual weaving channel. The new configuration of the air preparation results in a significantly improved pressure build-off time in the main nozzles. This reduces the impact on the filling yarn, bringing a real advantage when handling delicate or weak yarns.



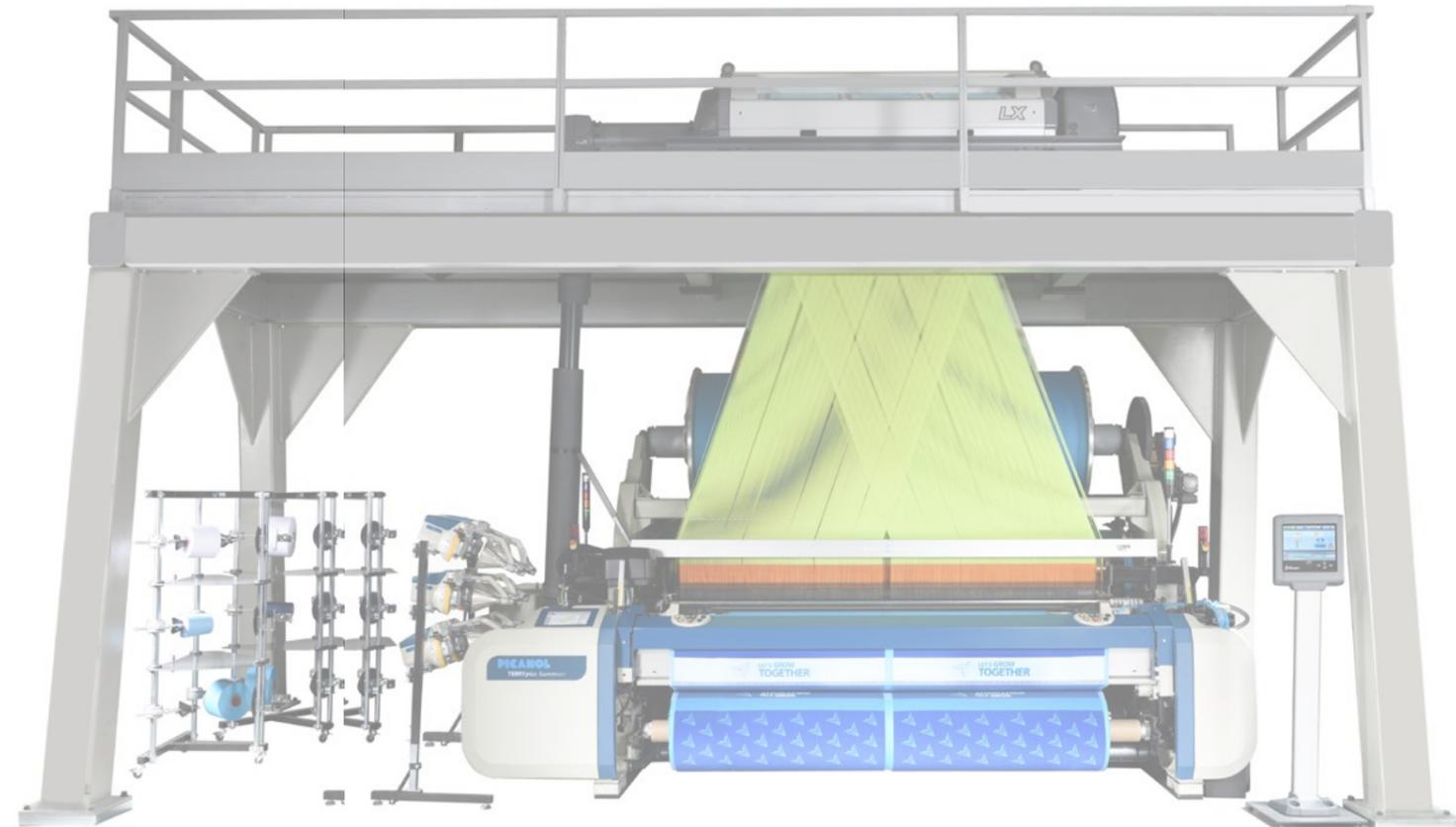
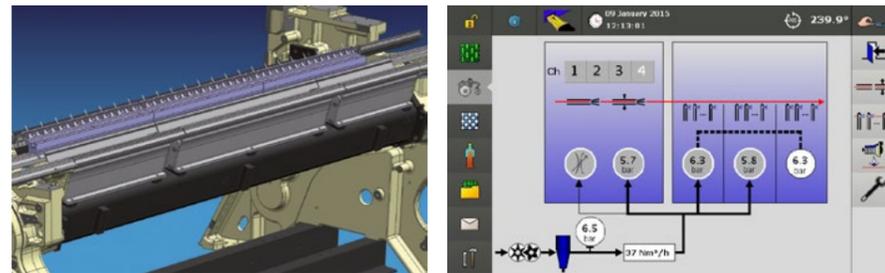
PROGRAMMABLE FILLING TENSIONER (PFT)

The PFT reduces the peak tension in the yarn at the end of insertion and makes it possible to weave weaker or more delicate yarns at higher speeds. The PFT is mounted on the balloon breaker, ensuring the ideal insertion line together with the fixed main nozzle.



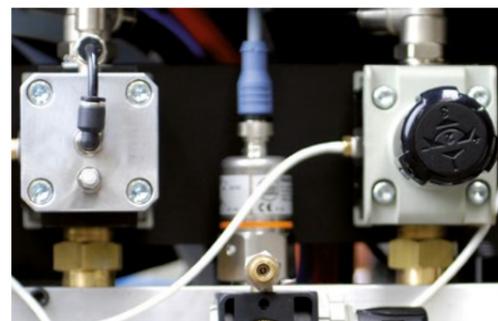
UNIQUE TRIPLE AIR TANK CONFIGURATION

Setting a lower air pressure on the center air tank minimizes the impact from the relay nozzles on the fabric (patented). It enables the user to set the machine with the lowest possible pressure and reduces the air consumption by up to 15% without compromising on fabric quality.



BUILT-IN PRESSURE SENSOR

The pressure sensor gives an indication of the pressure levels throughout the machine. The machine behavior is adjusted according to the air supply pressure.



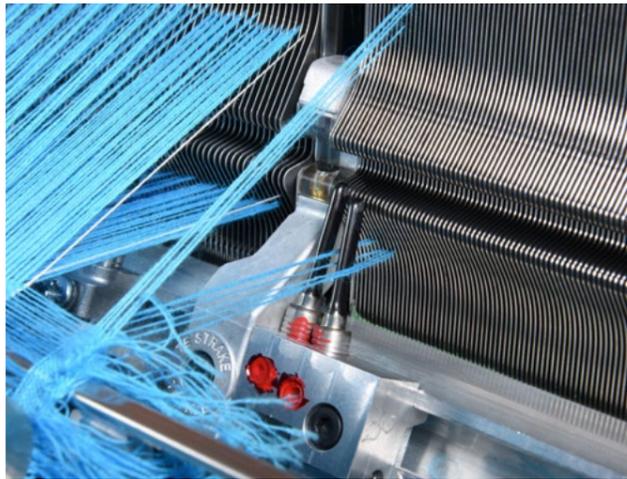
CLAMP ON THE MOVABLE MAIN NOZZLE

A pneumatically controlled mechanical clamp at the entrance to the main nozzle (patented) holds the yarn during the non-insertion period. The clamp enables the continuous airflow to be kept at a very low level. It improves the fabric quality and reduces the number of stops with weaker yarns.

GET THE MOST 
OUT OF YOUR MATERIAL

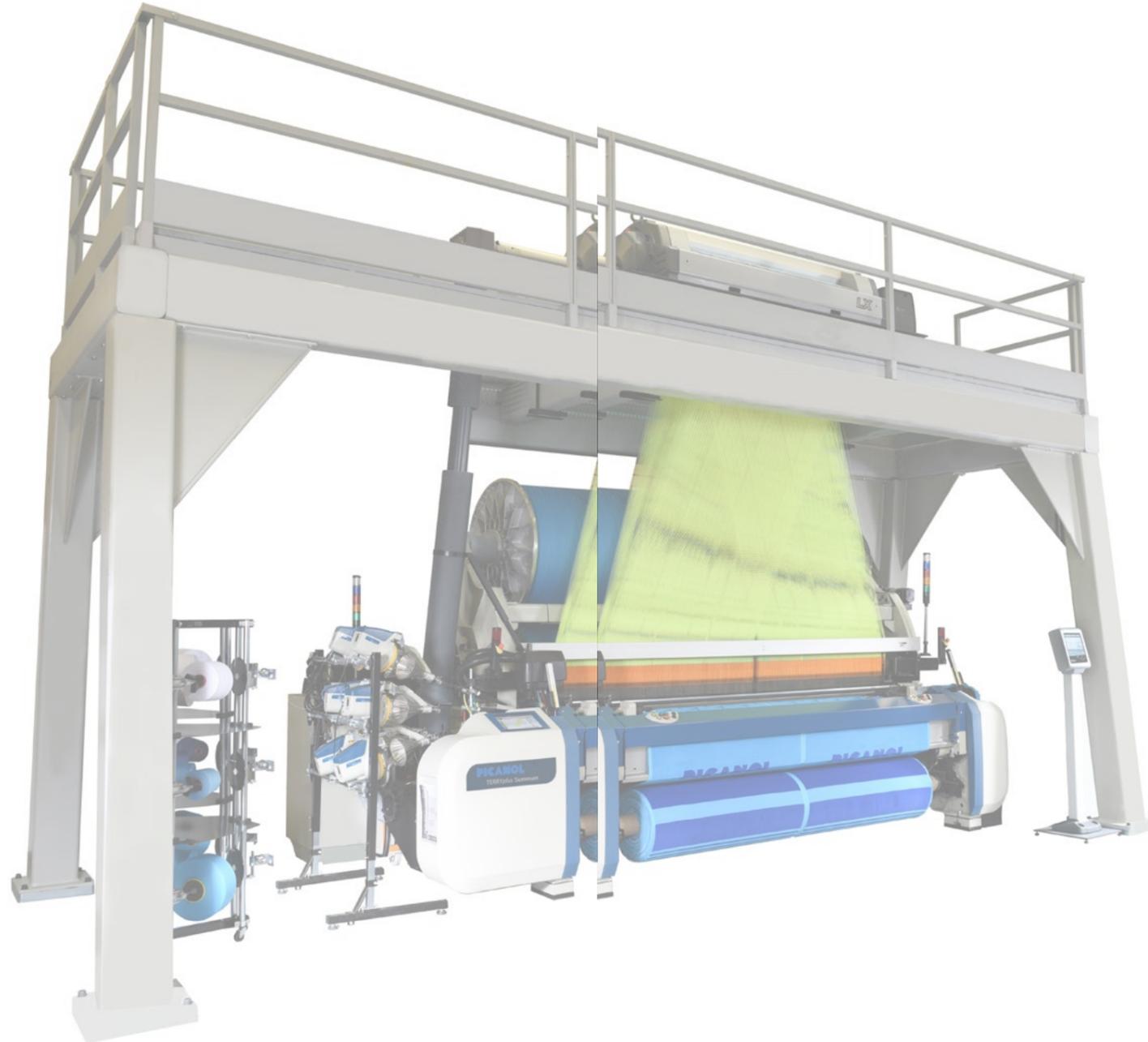
TWIN STRETCH NOZZLE

The twin stretch nozzle (patent pending) adds that extra stretch to prevent flip-backs throughout the fabric.



ARGUS FILLING DETECTOR

The Argus offers high reliability thanks to the detector having a full view of the entire cross-section of the insertion channel, so that detection is independent of the position of the yarn in the channel.



ELECTRONIC SELVEDGE SYSTEM (ELSY)

The unique full leno selvedge motions are electronically driven by individual stepper motors. The selvedge crossing and pattern are programmed on the microprocessor independently of the shed crossing, even while the machine is in operation, allowing an immediate check of the result of a resetting.



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

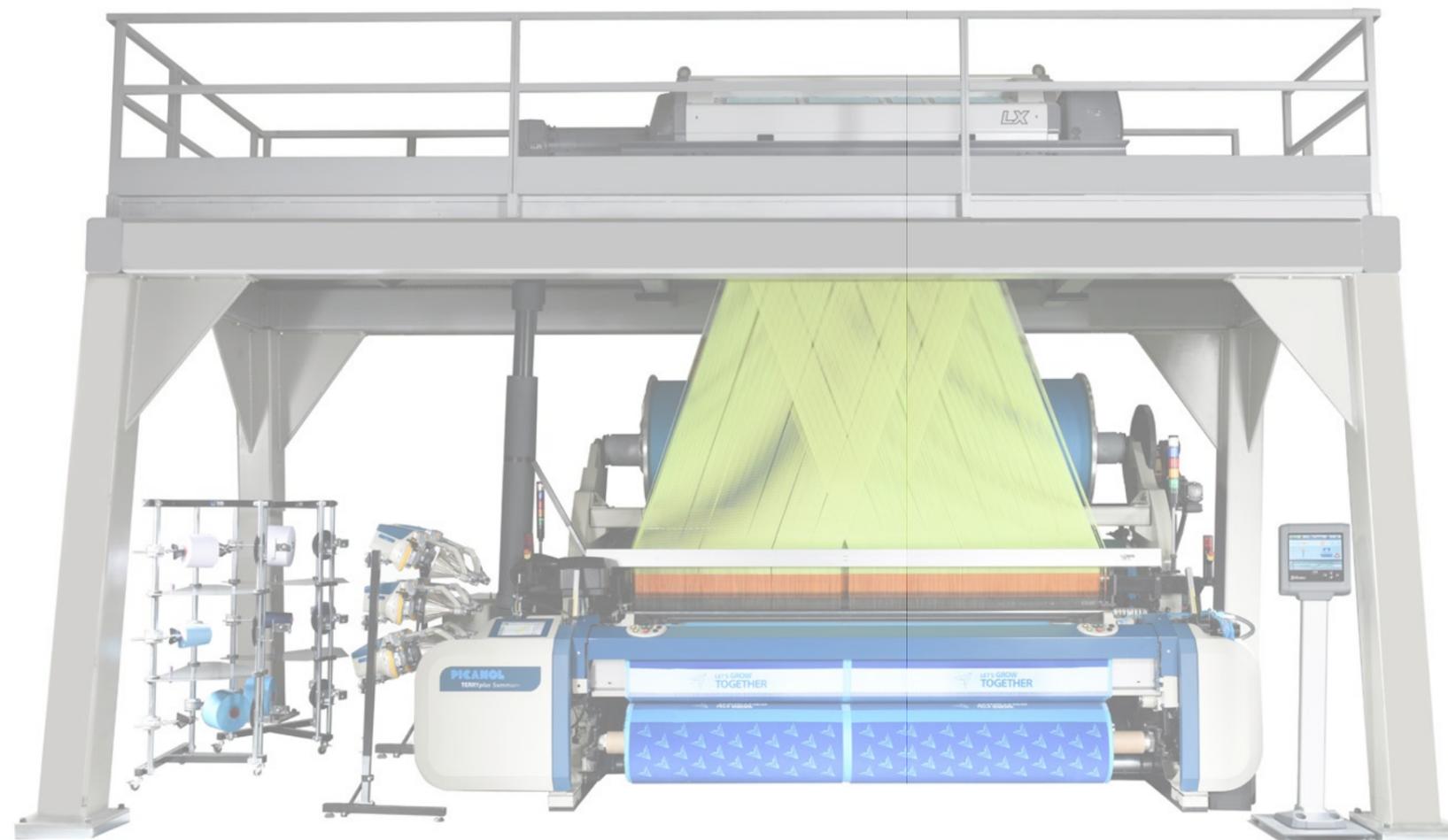
Same technology as Sumo main motor. Makes it possible to weave fabrics with variable pick densities and warp tensions, with highly accurate settings.



GET THE MOST 
OUT OF YOUR MATERIAL

PICANOL BLUEBOX SYSTEM

Future-proof platform with optimal microprocessor speeds, increased memory capacity and modular print setup. Network connectivity allows for remote monitoring and service. Picanol BlueBox is the electronic platform to keep up with increasing requirements from modern weaving mills and be ready for future developments.



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.

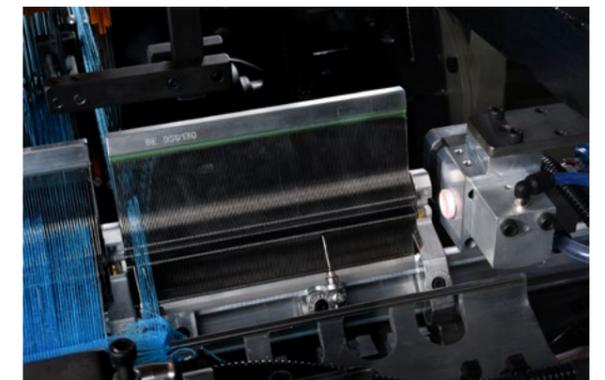
ELECTRONIC SETTING OF SHED CROSSING (AKM)

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.



PICK REPAIR AUTOMATION (PRA II PLUS)

In case of a machine stop (filling stop), the new PRA II Plus system (patent pending) automatically removes the filling from the shed and starts the machine again if conditions allow this. The new PRA II Plus system combines pneumatic and mechanical actions for removing the yarn, making it unique in its kind. A guarantee of the highest possible success rate and lowest work load for the weavers!



**GET THE MOST
OUT OF
YOUR TIME** 

WEFT FEEDERS

Picanol offers a range of weft feeders with mechanical or electronic adjustment of the yarn length. The Blue22 weft feeder simplifies the adjustment of the waste by means of a single mechanical screw.

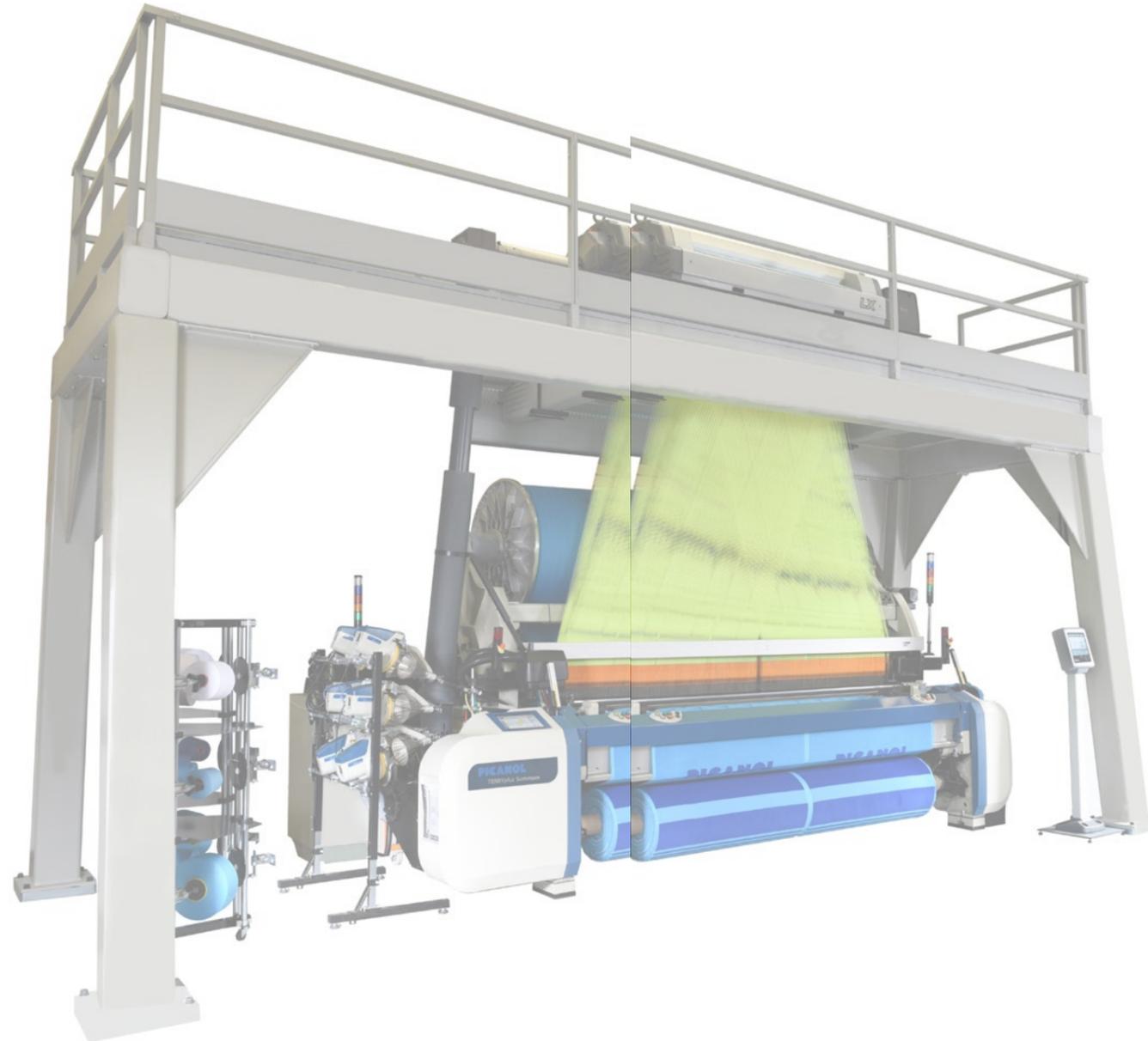
The Blue22 Easysset function (patents pending) is entirely controlled through the terminal and eliminates the hassle of mechanical adjustments with special calibration tools.



EASY FITTING AND REMOVAL OF WARP BEAMS

AND CLOTH ROLL

Warp beams driven by an electronically controlled let-off system via a separate gearwheel that remains on the machine. Fitting the warp beam and changing the cloth roll are done by means of quick connections. No special tools required.



SHED ANGLE INDICATORS

Standard on dobby – Picanol exclusivity (patent pending).

CENTRALIZED LUBRICATION

High-pressure oil pump brings oil from the central reservoir to machine parts that require constant lubrication. The oil is constantly filtered and the pressure constantly monitored, assuring long lifetime of crucial machine parts.

Centralized lubrication is far more reliable than splash lubrication. Less maintenance: changing oil can be done very quickly as all the oil can be taken from the central oil reservoir.



GET THE MOST
OUT OF YOUR TIME 

INSERTION SYSTEM

The TERRYplus Summum can be equipped for up to eight different colors or filling yarns. The filling insertion system is modular, with two channels per module, making it possible for the machines to be converted to more colors.



STYLE CHANGE WITH MAXIMUM CONTROL

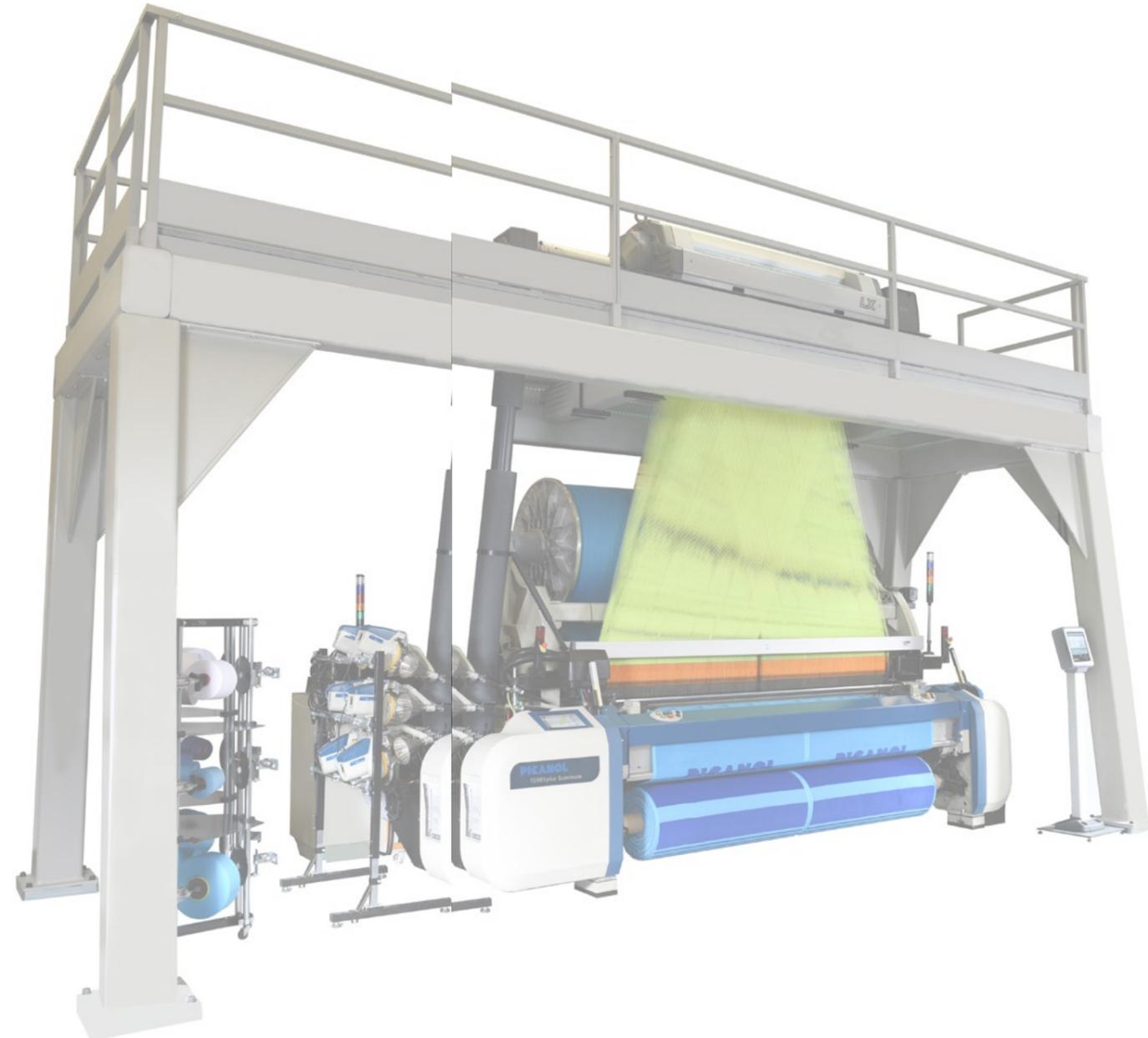
Fast width changes. All components to be moved are mounted on a single support whose position can be easily varied. Mechanical settings have wherever possible been replaced with electronic ones. The ability to set the crossing time of the harnesses fully digitally is unique.

The microprocessor controls all machine functions. Thanks to the real-time nature of the digital settings, results are immediately visible. The microprocessor also records and analyses all production data. The weaving machine itself can be linked to a central monitoring system by an Ethernet or bidirectional connection.



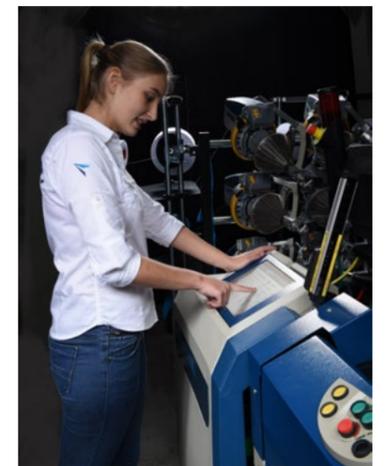
EXCHANGEABLE SHED FORMATION

The TERRYplus Summum can be fitted with an 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.



INTERACTIVE DISPLAY

A high-quality color touchscreen allows easy access and navigation during setup and weaving. All settings combined in easy-to-understand screens. The interactive touchscreen can store settings of numerous articles.



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

TECHNICAL SPECIFICATIONS

Available for
the aftermarket 

FABRIC SPECIFICATIONS

Useful widths	200, 230, 260, 280, 340, 360 cm		
Asymmetrical width reduction	200 and 230 cm: up to 785 mm 260, 280, 340 and 360 cm: up to 845 mm		
Yarn range	Spun yarns	Nm 170 – Nm 4 (Ne 100 – Ne 2.4)	
	Filament yarns	20 den – 1,000 den (22 dtex – 1,100 dtex)	

PILE FORMATION

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

FILLING INSERTION

Bobbin change detector				Optional
Up to 8 colors				Standard
Prewinders	Adjacent windings	Blue22 (patent pending)	Standard	
(integrated bobbin break sensor)	Separated windings	Blue22 EasySet (patent pending)	Optional	
		1131	Optional 	
Prewinder Switch-Off (PSO)				Optional 
Programmable Filling Tensioner (PFT)				Optional 
Balloon breakers				Standard
Fixed and movable main nozzles (patented)				Standard
Clamp on movable main nozzles (patented)				Optional 
Electronic Low Continuous Airflow (ELCA) (patented)				Standard
Adaptive Relay Valve Drive (ARVD II Plus) (patented)				Optional 
Airmaster (patented)				Optional 
Electronic filling cutter with separate cutting time per color				Standard
Multi-hole relay nozzles				Standard
Filling detection	Photoelectric, in front of or next to the reed			Standard
	Argus filling detector			Optional 
Pick Repair Automation (PRA II Plus) (patent pending)				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, toothed electrodes	Standard	
	Detection per electrode	Standard	
	Sectional warp stop motions	Optional 	
Backrest	Universal type with built-in warp tension sensor	Standard	

CLOTH TAKE-UP

Cloth take-up	Diameter of cloth roll: 600 mm	Standard
	Picanol Batching Motion (PBM) for diameters up to 1500 mm	Optional
Central cutter devices		Optional 
Needle roll control		Optional 

MACHINE DRIVE AND CONTROL (BLUEBOX PLATFORM)

Main motor	SUMO motor with direct machine drive (patented)	Standard
	OptiSpeed	Standard
Automatic full pickfinding (patented)		Standard
Reed motion	Conjugated cams with cam followers	Standard
Shedding motion	Electronic, positive dobby for up to 16 harness frames	Standard
	Electronic, positive dobby for up to 20 harness frames	Standard
	Harness drive DRC-30	Standard

	Electronic Jacquard	Standard
	Electronic setting of the crossing moment (AKM)	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	Pressurized oil circulation system with continuous filtration	Standard
	Centralized lubrication points	Standard
Interactive display	12" touchscreen	Standard

HARNESSES FRAMES

Standard harness frames	Standard
Extra reinforced harness frames	Optional

SELVEDGE

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

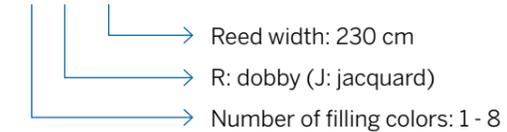
Loom monitoring and reporting on machine display	Standard
Universal connection for major weaving room monitoring systems	Standard
Bi-directional communication on ethernet or serial connection	Optional 
Picanol PC Suite	Optional 

SAFETY

Light curtain (depending on country of delivery)	Standard
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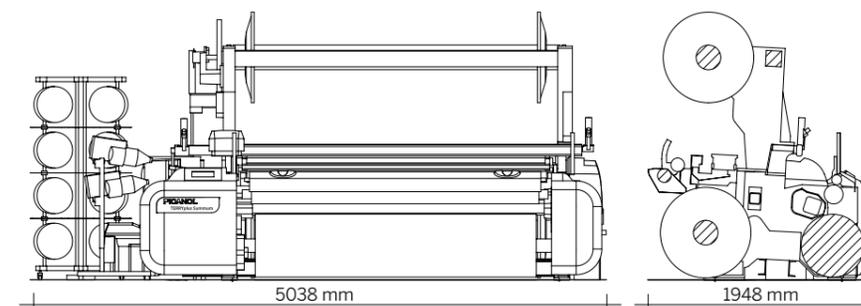
How to read the name

TERRYplus Summum - 4 - R - 230



Regulations

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



Minimum dimensions TERRYplus Summum - 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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