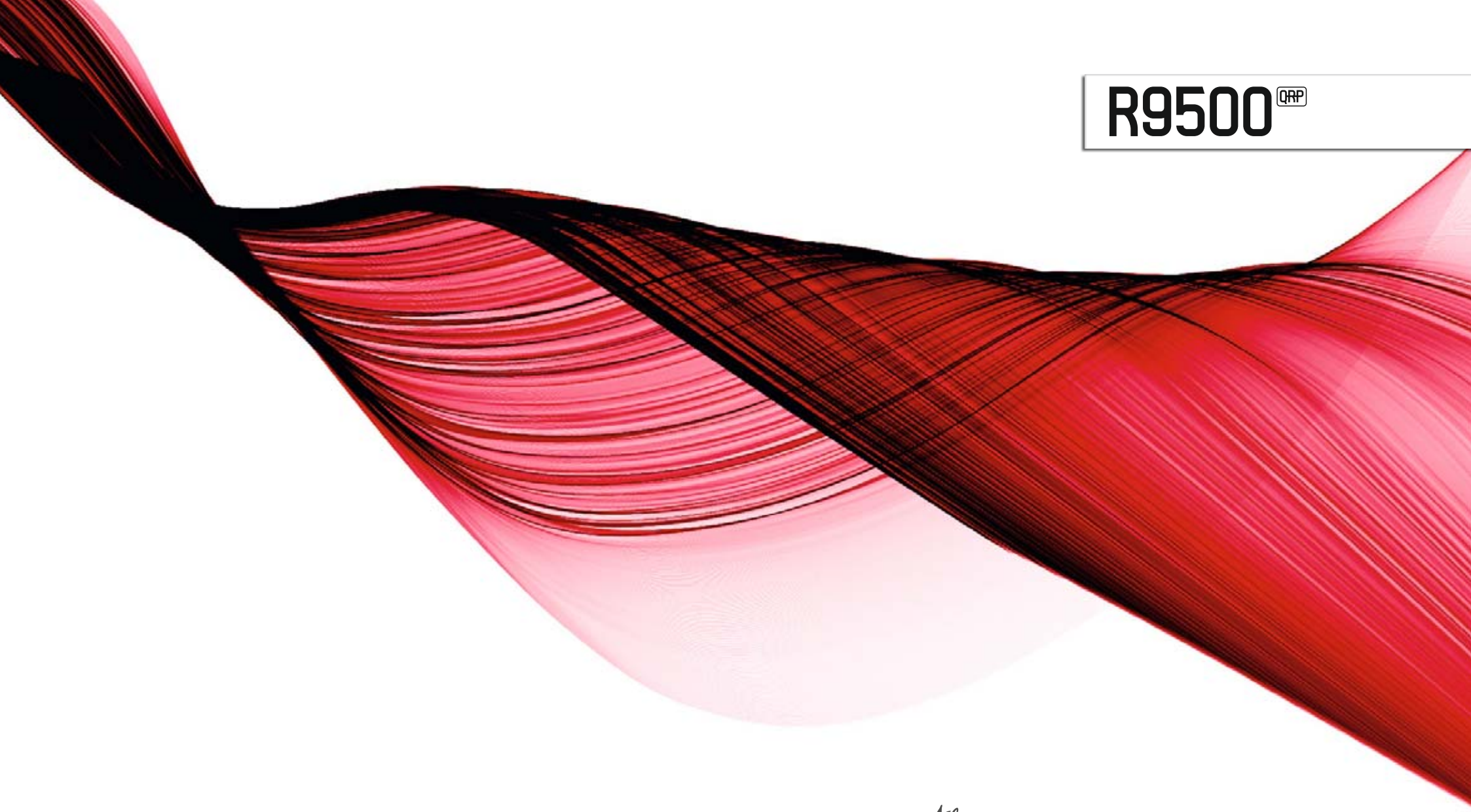
R9500 QRP



Because we believe

itema

R9500 QRP

Itema Rapier Weaving Machine

The new R9500 Rapier Weaving Machine: surpassing the expectations of rapier weaving performance

With the widest application range, the R9500 is the backbone of Itema. It is simple to operate & maintain producing unsurpassed quality providing the highest added value of Itema products.

With virtually no limits to versatility, the R9500 enables the Customer to attack new opportunities and quickly penetrate new markets.

The simple, yet comprehensive, design of the NCP or New Common Platform allows easy control of all technical parameters of the weaving machine.

Radical developments of the drive and transfer system provide a more robust machine which insures a consistent, high speed transfer at the lowest vibration pattern.

Wide interchangeability of mechanical & electrical parts with the A9500 reduces operational costs for customers having both technologies.

A modern machine offering the latest technology for remote access & control, strategically designed for easy use & integration into the most challenging environments.

- Sturdy, High Precision Machine Frame
- Reduced Number of Parts
- Lowest Vibration Pattern at High Speeds; including multi frames and unbalanced styles

- Perfect Fabric Quality
- No Stop Marks
- Best Fabric Hand

- Forced Lubrication System
- Minimal Maintenance Requirements
- New Electronic HI-Drive Brushless Motor
- Lower Power Consumption

QRP itema

Our vision

To manufacture and deliver products as well as provide services of superior quality that insure added value to our customer's bottom line.

The QRP Certification

The QRP Certification is evidence of Itema's commitment to quality through the consistent application of enhanced processes to design, develop, lean manufacture and deliver products, with unsurpassed after sales support, that clearly illustrate superior **Quality, Reliability** and **Performance** is embedded into each machine.

QRP Thinking

Doing the right thing is our mission!

Promoting the success of our customer is our aim!

We are relentlessly committed to advance the weaving function through seeking real innovation, simplification, optimization in design and standardization toward total quality and user friendly products.

Responsibility

For the future of Itema and its' customers, we incorporate sustainability into our products. In everything we do, our strategy encompasses the entire life-cycle of procurement, production, distribution and use.

Time is money and our just-in-time expertise will prove reliable and cost effective for customers and Itema alike.

QRP Realized

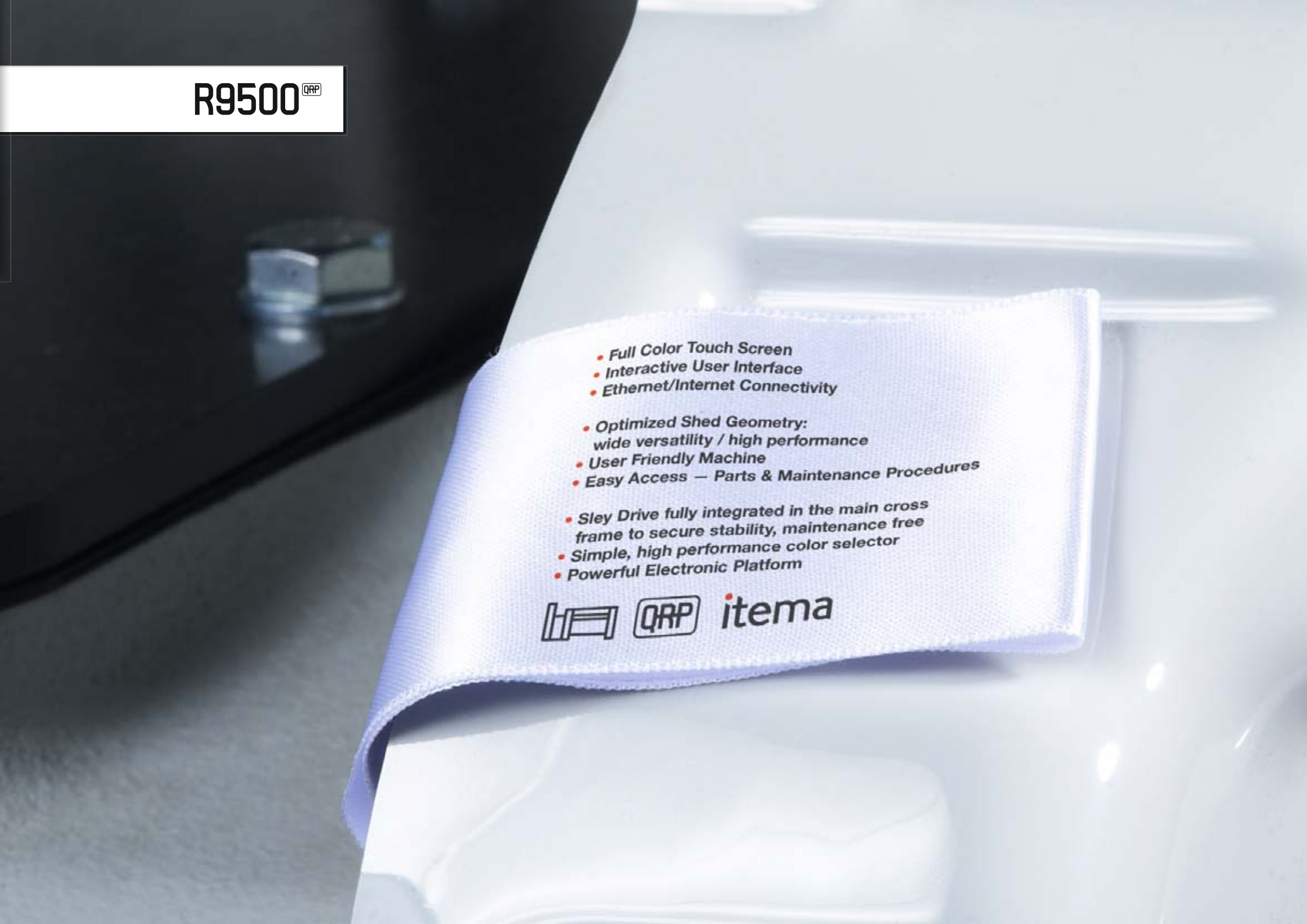
We are focused on the creation of high use machinery which enhances the ergonomics, productivity and satisfaction of our customers. Our cross compatibility among insertion technologies will be exploited in the development of easy to use, more versatile new products.

Simplicity in static and dynamic parts will define Itema machines. An un-yielding commitment to research and development along with extensive product testing insures high performance & investment return. The QRP insignia represents total quality and to demonstrate our confidence, every QRP certified Itema machine will be guaranteed for a period of two years.*

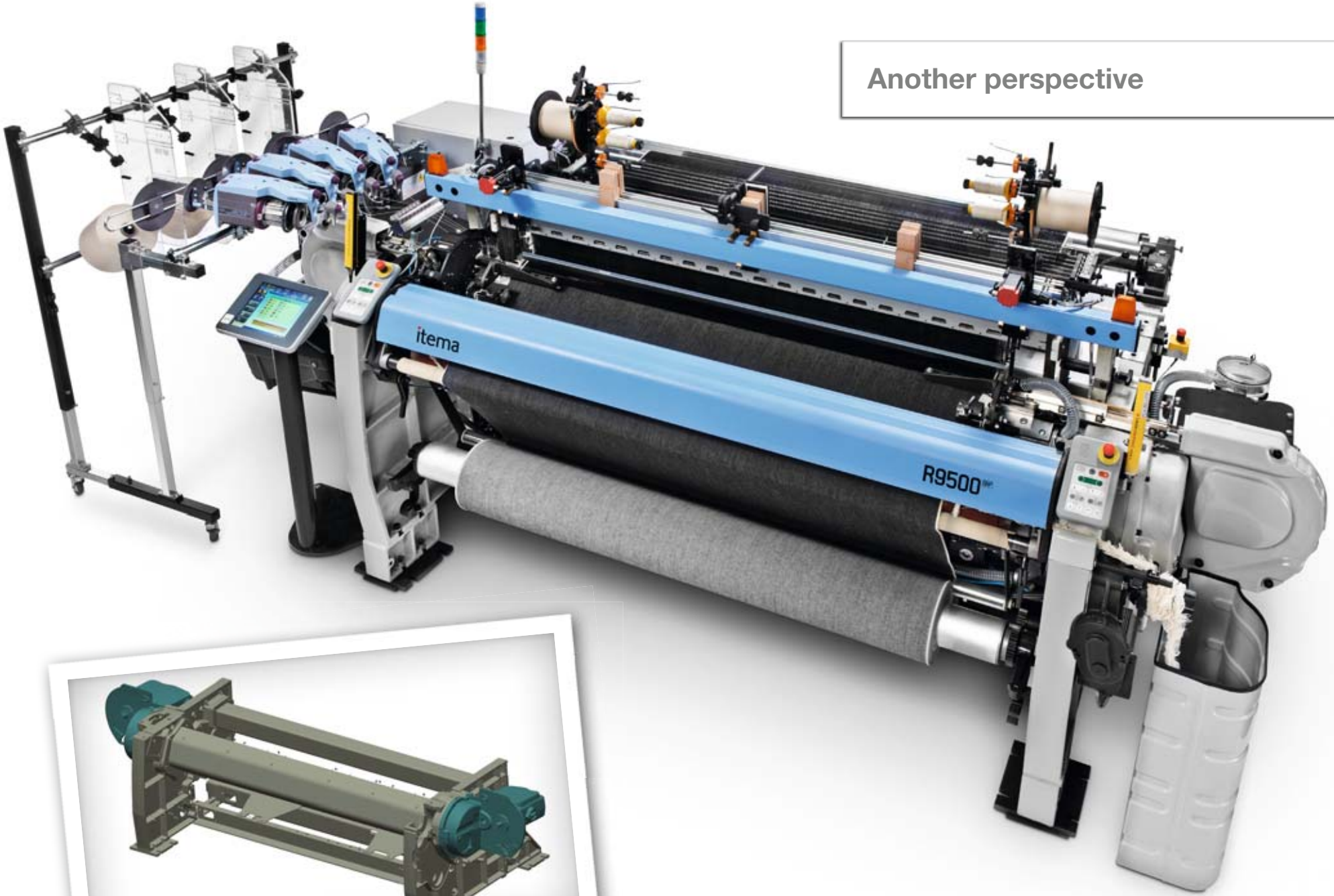
The aforementioned statements represent our pledge to quality, our guarantee demonstrates our commitment.

** Terms and conditions apply*

R9500 QRP

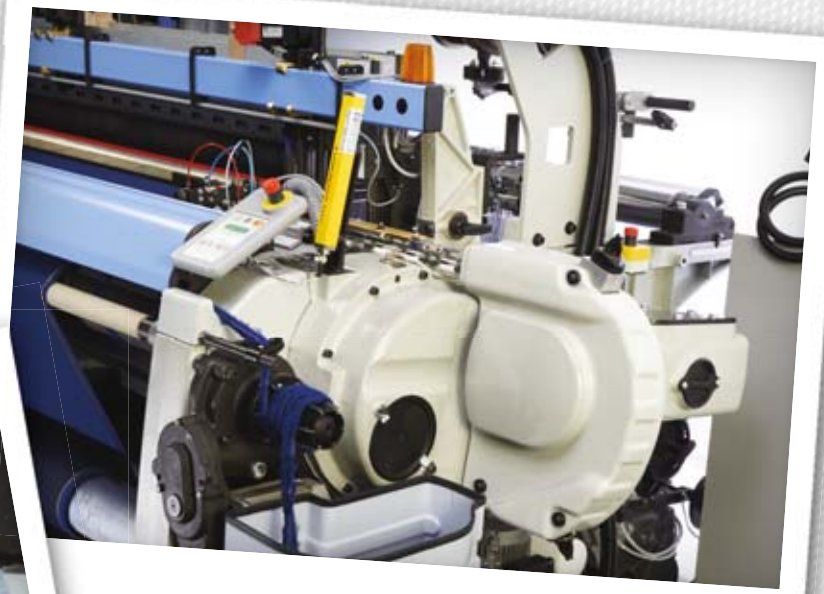

• Full Color Touch Screen
• Interactive User Interface
• Ethernet/Internet Connectivity
• Optimized Shed Geometry:
wide versatility / high performance
• User Friendly Machine
• Easy Access — Parts & Maintenance Procedures
• Sley Drive fully integrated in the main cross
frame to secure stability, maintenance free
• Simple, high performance color selector
• Powerful Electronic Platform
QRP
itema

Another perspective



Strong mainframe, powerful machine

R9500 QRP

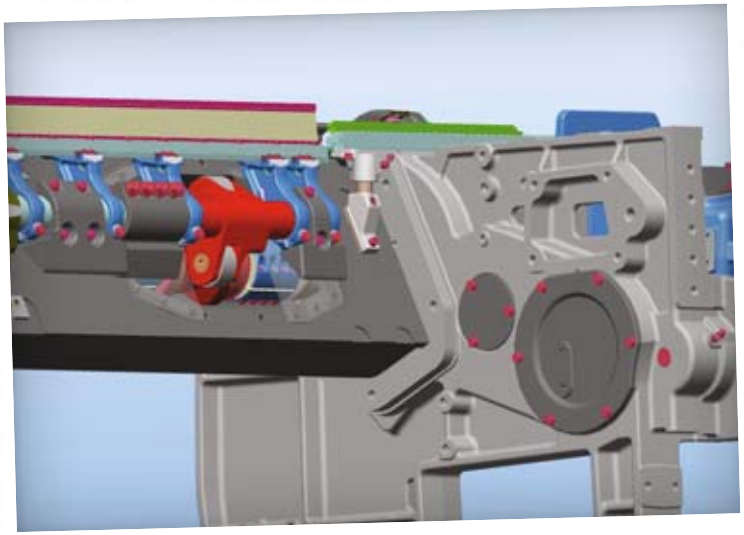


Reduced covers

Easy on style change

Centralized lubrication

Direct drive motor



Beat up

Solid product — green machine

Sturdy, high precision machine frame

The R9500 utilizes heavy-duty frames, promoting a low vibration pattern at high speeds.

The solid drive, positioned in main lateral frames, is engineered for extensive control of moving masses to consistently process heavy patterns or unbalanced styles with minimal cost & maintenance.

The re-designed sley and back rest modules represent key new developments. The new sley design promotes speed & versatility while the new back rest module enables less warp tension and a cleaner shed break.

The R9500 personifies simplicity; user friendly, low profile, few covers allow easy access for maintenance.

An efficient footprint for maximum floor space utilization, providing low power consumption and a minimal noise profile promotes the R9500 as the “Greenest Machine” in its class.

Beat up

The beating motion of the R9500 is positioned in gear boxes and centered directly beneath the sley motion.

Depending on width & specifications, two or more positions are linked and fully integrated into the lubrication system and main traverse to eliminate any possibility of oil leaks.

Centralized lubrication

Machine components are lubricated by a Centralized Lubrication System which provides oil from a main reservoir with double filter. By design and through extensive testing of new gearing and mechanical parts, the lubrication system significantly reduces energy consumption, promoting lower oil temperatures (less 10°C) of its predecessors therefore extending the life cycle of mechanical components.

Quick & easy dispensing and removal orifices are standard on all machines assuring an efficient lubrication program, thus reducing associated maintenance costs.

Reliability is assured by the NCP Electronic System maintaining constant control of system pressure & temperatures.

Direct drive motor

The main drive is based on an electronic drive and brushless motor technology which provides easy touch-screen adjustment for machine speed. Traditional gearing and mechanical parts have been minimized, saving up to 20% in energy cost compared to its predecessors; also providing added value by fewer spare parts and maintenance.

Simple, reliable, maintenance free. No cooling system required.

Thanks to dedicated software, no tools are required to change harness crossing; simply input the desired setting through the user interface.

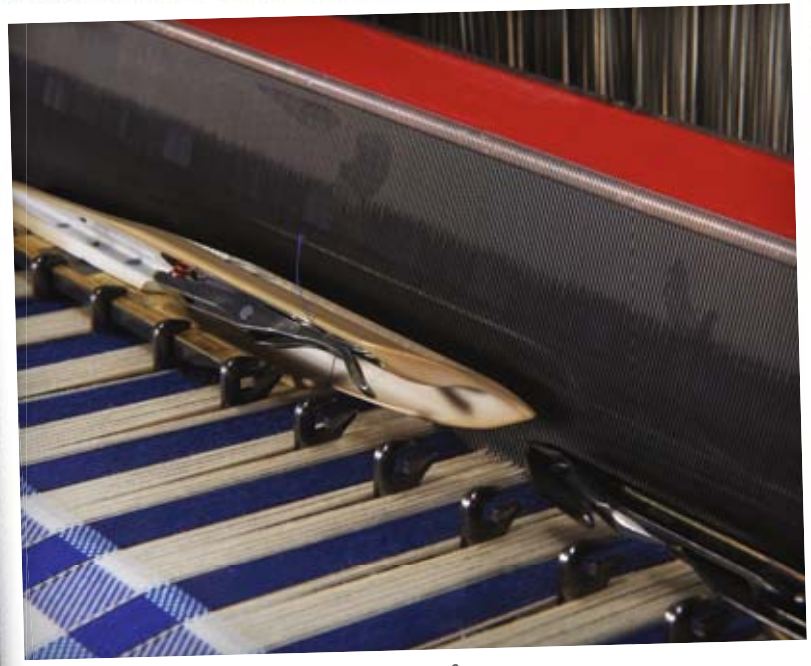
Easy on style change

The R9500 was designed to reduce downtime for style changes by eliminating time consuming maintenance and settings. Quick beam release is standard on all machines and DRC10 connections eliminate the need for leveling.

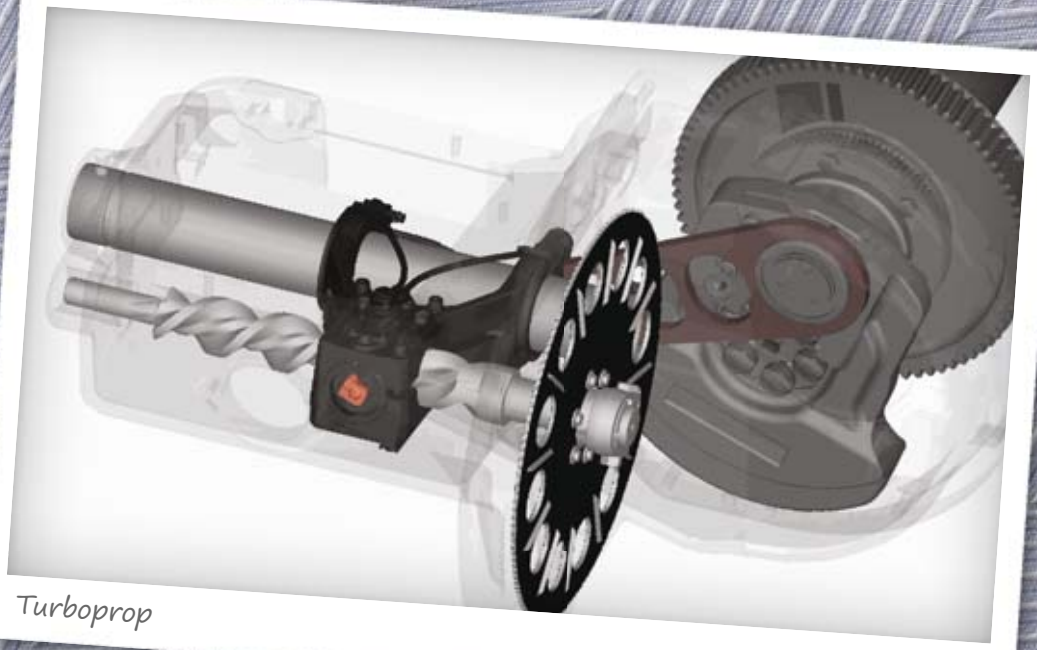
Without sacrificing safety, the number of machine covers has been reduced, allowing quick access for machine cleaning & maintenance. Additionally, fewer machine covers improve ergonomics through dissipating the heat load within the working room.

R9500 QRP

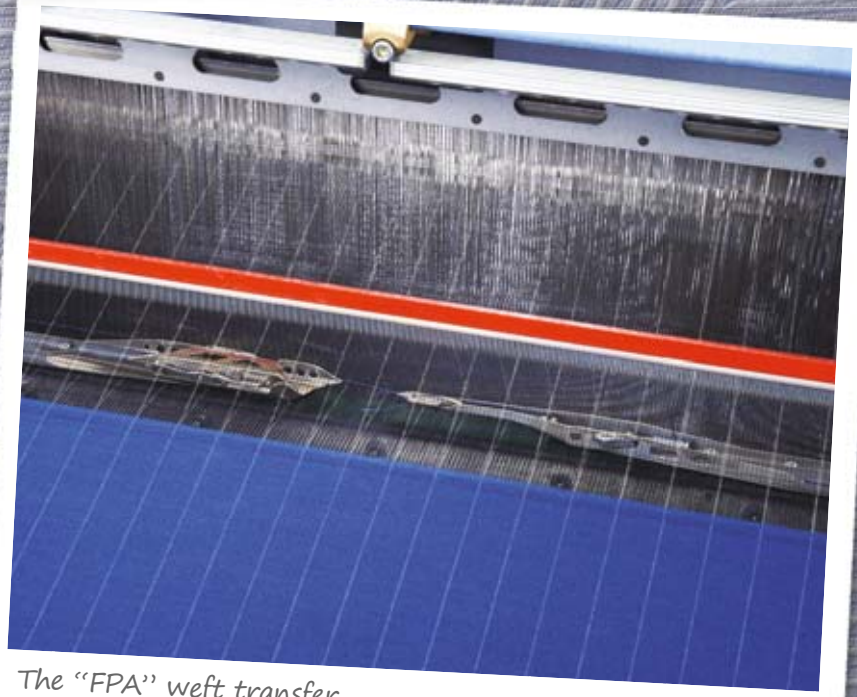
Optimized shed geometry



The innovative "SK" weft transfer



Turboprop



The "FPA" weft transfer

Indeed, a unique weft insertion system

Optimized shed geometry

The basis for the new shed geometry of the R9500 Rapier Machine lies in the need for a smaller shed for maximum speed and rapiers, appropriately sized, with diverse capabilities.

- Positioning of the first frame closer to the reed allows a shorter stroke providing higher speeds and longer life cycles for heddles and harness frames.
- The beating stroke has been increased to guarantee the highest beating force and the capacity to weave heavy fabrics.

All elements have been studied and applied to guarantee perfect quality of the fabrics produced.

The "TURBOPROP": an unique rapier drive system

The R9500 utilizes a completely re-designed version of the renowned propeller drive system. Affectionately called the "Turbo Prop", the drive remains compact with minimal moving parts for reliability and less maintenance. Additional design features are as follows

- The mechanism is secured into the side frame to insure stability and precision.
- New carriage and swinging sliders are designed with aeronautical grade alloys.
- Direct lubrication of all sliding parts as well as dynamic lubrication is standard.

Customary to the design, the settings of the new Turbo Prop do not "drift" over time eliminating the need for continual settings and adjustment by maintenance personnel. With reliable, low cost, consistent performance, the new Turbo Prop embodies the true essence of the R9500 Rapier Weaving Machine.

The innovative "SK" weft transfer

The new SK Transfer System is engineered for high speed and versatility. While providing for a wide array of weft yarns, the SK System is the most advanced transfer system on the market today. With an ultra-light, ceramic coated, one piece design rapier, the SK System provides consistent, high speed performance and less wear.

Other key points:

- The insertion gripper is positioned very close to the reed promoting increased efficiency and dependable quality.
- The receiving gripper features a unique, patented opening system utilizing a permanent magnet integrated within the gripper.

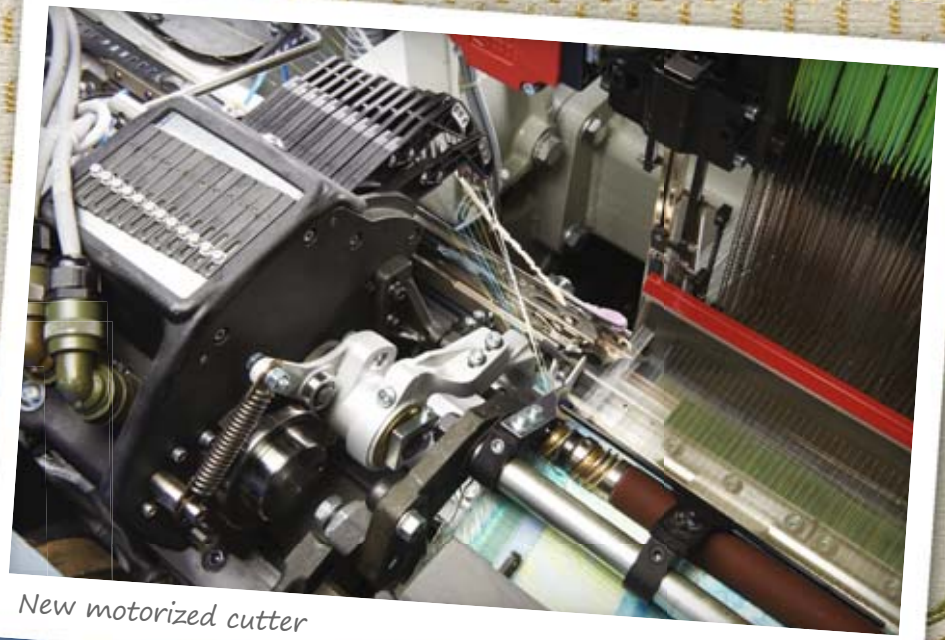
The "FPA" weft transfer

The newly developed FPA or Free Positive Approach weft transfer offers a race board with no guiding elements in the shed and is the key to versatility and flexibility.

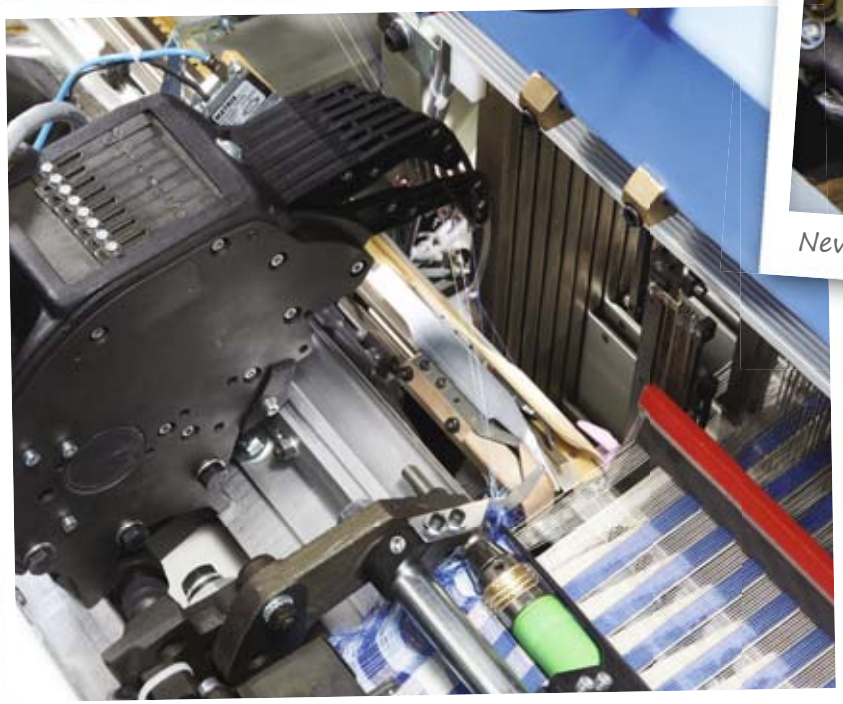
It features yarn weaving ranges from fancy yarns up to Nm 1, filament up to 7000 dtex or monofilament up to 0.7 mm. It is the perfect solution when weaving with the widest mix of yarns or in case of technical textiles with the finest 10 den yarn or with high tenacity, multiple pick insertion fabric.

The innovative "SK" weft transfer

R9500 QRP



New motorized cutter



The weft cutter choice: Rotocut

FPA — Free Positive Approach

Indeed, a unique weft insertion system

The weft cutter choice

The R9500 Weaving machine has a double option for the weft cutter to fit all weaving needs.

For simple wefts, Customers can choose the newly designed Rotocut.

For more complex styles and/or multiple weft configurations, a unique electronic cutter is available upon request. Utilizing innovative technology and controlled by the microprocessor, independent cutting times can set for each weft/color. A precise tool that works to increase efficiency and minimize waste.

Weft yarn selector

Available for configurations for 4, 8 or 12 colors.

Completely re-designed to promote the maximum in versatility and reliability.

Maintenance free, driven & controlled by the microprocessor. Fine tuning the stroke of the selected finger promotes a gentle movement and works to eliminate interference with adjacent wefts. Its compact design allows the selected weft to be presented in close proximity to the cutting position insuring firm control.

The device is easily accessible for weaving & maintenance personnel reducing downtime for weft repairs and style changes.

Weft yarn selector

R9500 QRP

Intuitive menus for a perfect quality

Warp let off and fabric take up — Quick beam release

ISD

Quality and versatility: the winning mix

The R9500 is a versatile machine that offers a complete range of key configurations for numerous applications.

The R9500 provides the solution to penetrate new markets without sacrificing quality, speed & efficiency.

Warp let off and fabric take up

All Weaving machines are equipped with an electronic warp let-off and fabric take up.

The gearing system is in an oil bath; pick density can be changed via the on board microprocessor.

Multiple beam applications are all electronically controlled.

Warp let off and fabric take up — Double back roller

ISD: electronic leno and selvedge device

The R9500 Weaving Machine utilizes a standard motion both for selvedges and leno binding designed for speeds in excess of 1,000 rpm.

Other than routine cleaning frequencies, the brushless motors eliminate the need for maintenance & adjustments.

The ISD provides independent setting of the harness crossing and basic shedding patterns through the on-board user interface.

Superior fabric quality

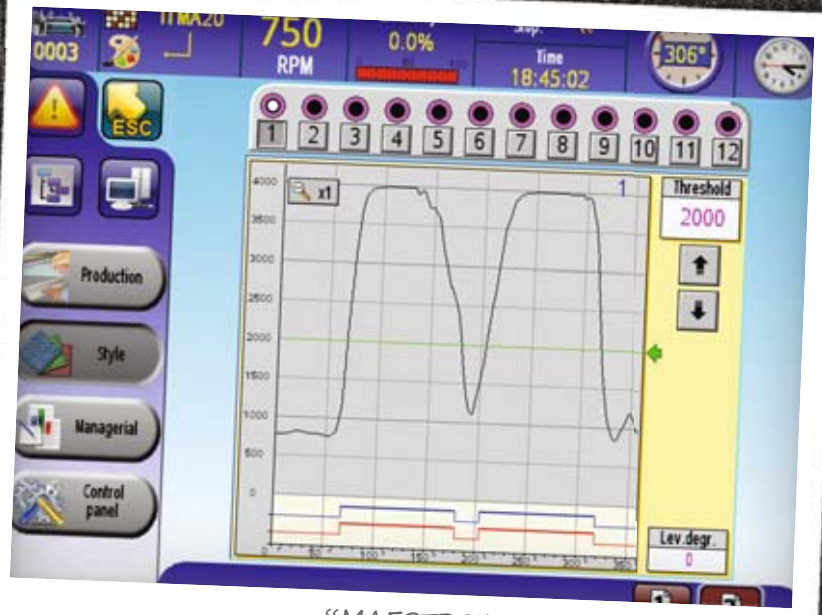
Dedicated software has been designed to prevent stop marks. Quick start/stop of the machine, with correct positioning of the reed is guaranteed, thanks to the direct drive motor. The software can be easily modified to address complex construction demands.

Innovative shed geometry, designed by Itema, clearly supports maximum weaving speeds and superior fabric quality. Working in conjunction with the continuous monitoring of the sley position by the machine PC, the shed geometry eliminates start marks. Without question, the R9500 is strategically designed to minimize off-quality fabric.

R9500 QRP

Pneumatic tuck-in device

Electronic weft tensioner



"MAESTRO" a unique weft control

Versatility, efficiency and optimization

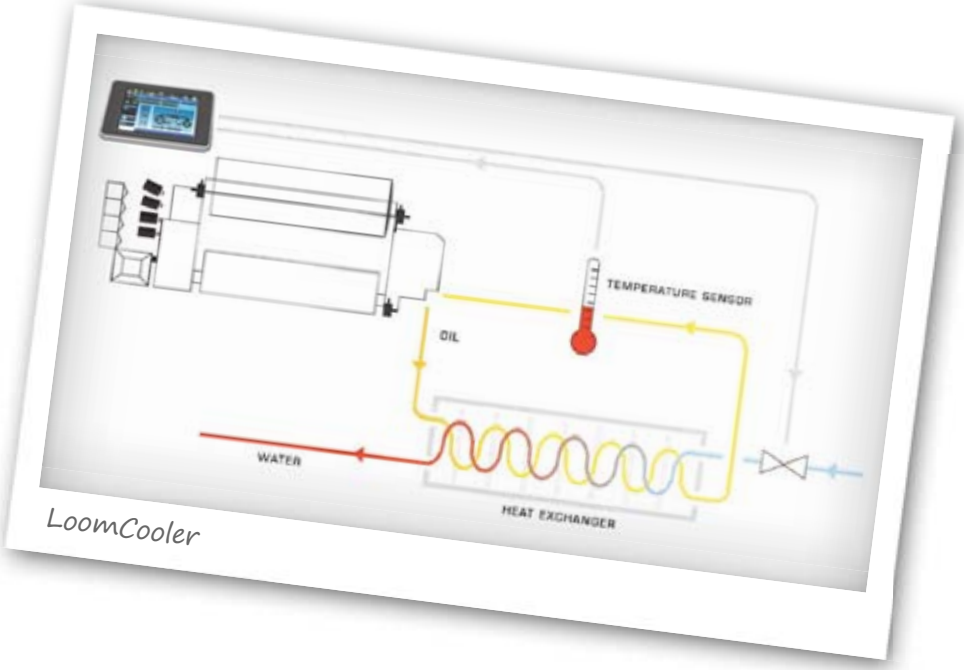
Selvedge options

A wide range of options for selvedge formation is available. In addition to standard cutters, a melting device as well as mechanical and air tuckers are available.

Electronic weft tensioner

Electronic weft tensioning is available on request. However, with the smooth controlled weft insertion of the R9500, use of this electronic device is generally relegated to assist in processing weak, fragile yarns or in adverse weaving conditions.

Programmable through the user interface, the electronic weft tensioning is equipped with a self-cleaning system to prevent dust accumulation.



LoomCooler

Inherent to its design and construction, the R9500 provides maximum heat dissipation.

However, constant increases in machine speeds have led to an increase in generated heat and the increasing importance to consider precautionary investment for cost avoidance.

For this reason, Itema offers a reliable cooling system as an option. The Loomcooler is electronically controlled to efficiently remove much of the heat generated by the machine to then recover the thermal power downstream to be used in other processes.

“MAESTRO” a unique weft control

The R9500 MAESTRO Weft Control System is innovative, unique and only offered by Itema. The system provides:

- Full digital processing of each weft by the NCP Processor.
- Sensitivity adjustments defined by each individual position.

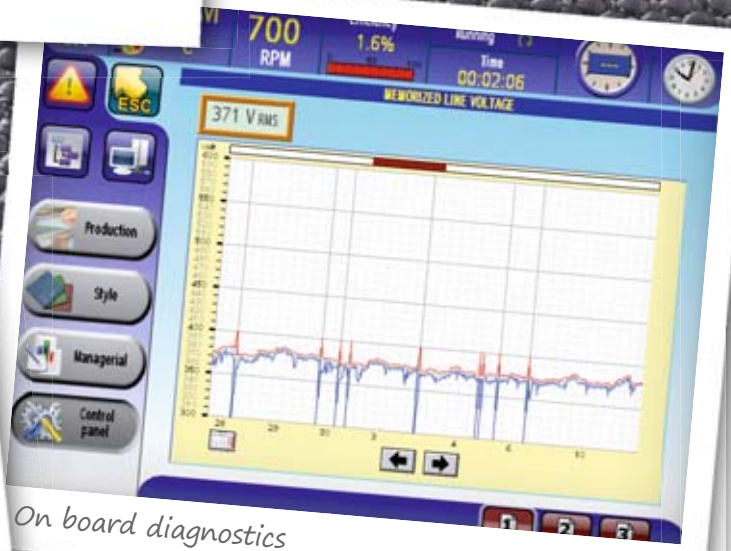
Additionally, any weft defect created by the weft selector/rapier will be avoided. For example, the machine will stop before allowing the wrong weft or double filling to be inserted.

Monitored and controlled by the NCP, the MAESTRO is without question, the most flexible and precise weft stop motion device available in the market.

R9500 QRP

Easy performance reading

Full color touch screen



On board diagnostics

IPOS

LoomBrowser

NCP: a new electronic platform

Full color touch screen

The R9500 arrives with the latest in technology offering a new electronic platform where the full color, touch screen acts as the user interface. The intuitive software actually encourages dialogue with weavers & technicians. Animated machine symbols ensure a user-friendly experience by guiding personnel to the information desired.

State of the art technology

The machine utilizes “State of the Art” Microprocessor Technology with a PC Board running Windows CE to drive the user interface. Ethernet connectivity allows the R9500 to quickly engage both the mill network and Internet.

With a standard USB memory stick saving, changing or transferring machine settings has never been easier.

On board diagnostics

At Itema, we recognize time is money. This is why we equipped the R9500 with our best diagnostic software ever! By simply accessing the touch screen, a functionality test can be selected for any device or application on the machine – even circuit boards. Our Engineers specifically designed this feature to be utilized without tools or a background in electronics but by the people on the floor who operate the machine.

IPOS

IPOS or Intelligent Production Optimizing System is a new, optional feature designed to optimize machine productivity by monitoring machine speed and stop level.

By simply establishing stop and efficiency parameters, the IPOS will monitor machine data over a given period of time. If the machine falls outside these parameters, the system automatically adjusts machine speed to optimize productivity; increasing production and improving fabric quality.

LoomBrowser

Just install the Itema LoomBrowser on the PC of your choice to monitor efficiency, change & download machine settings, create or download new weft and dobby patterns. Merely click on the machine of your choice within the machine layout to gain access to all machine information as if you were standing at the machine itself.

Remote diagnostics

With the constant connection of the R9500 to the mill network, use of the Remote Software Service is just a click away. If you need support, simply connect via internet to Itema’s World Wide Service Network for prompt diagnostic assistance.

State of the art technology

R9500 QRP

R9500 at a glance

Nominal Machine Width (cm)

- 170, 190, 210, 220, 230 (narrow machine)
- 260, 280, 300, 320, 340, 360, 380 (wide machine)

Shedding

- Staubli dobby 3060 or 2670 (up to 20 frames)
- Electronic Jacquard

Transfer System

- SK: guided rapiers “monorail” type hooks
- FPA: “free flying” on a felt covered race

Warp Beam

- Single or twin beams
- Diameter 800, 1000 or 1100 mm
- Upper beam: 800 or 1000 mm

Weft Insertion

- Electronic weft selector: 4, 8 or 12 colors
- Weft cutter type ROTOCUT
- *Programmable motorized weft cutter* *

Pick Density

- Standard: 4–84 picks/cm
- *1–20 and 8–150 picks/cm on request**
- Automatic weft density variation programmable in dobby pattern

Selvedge

- Motorized selvedge and leno device
- *Lateral and central pneumatic tuckers**
- *Selvedge thermo cut**

Warp Stop Motion

- Electric or electronic warp stop motion with 6 or 8 rows

Warp Let off

- Electronic controlled let off

Fabric Take up

- Electronic controlled take-up
- Cloth roller diameter: Up to 550 mm
- *External batching motion**

Connectivity

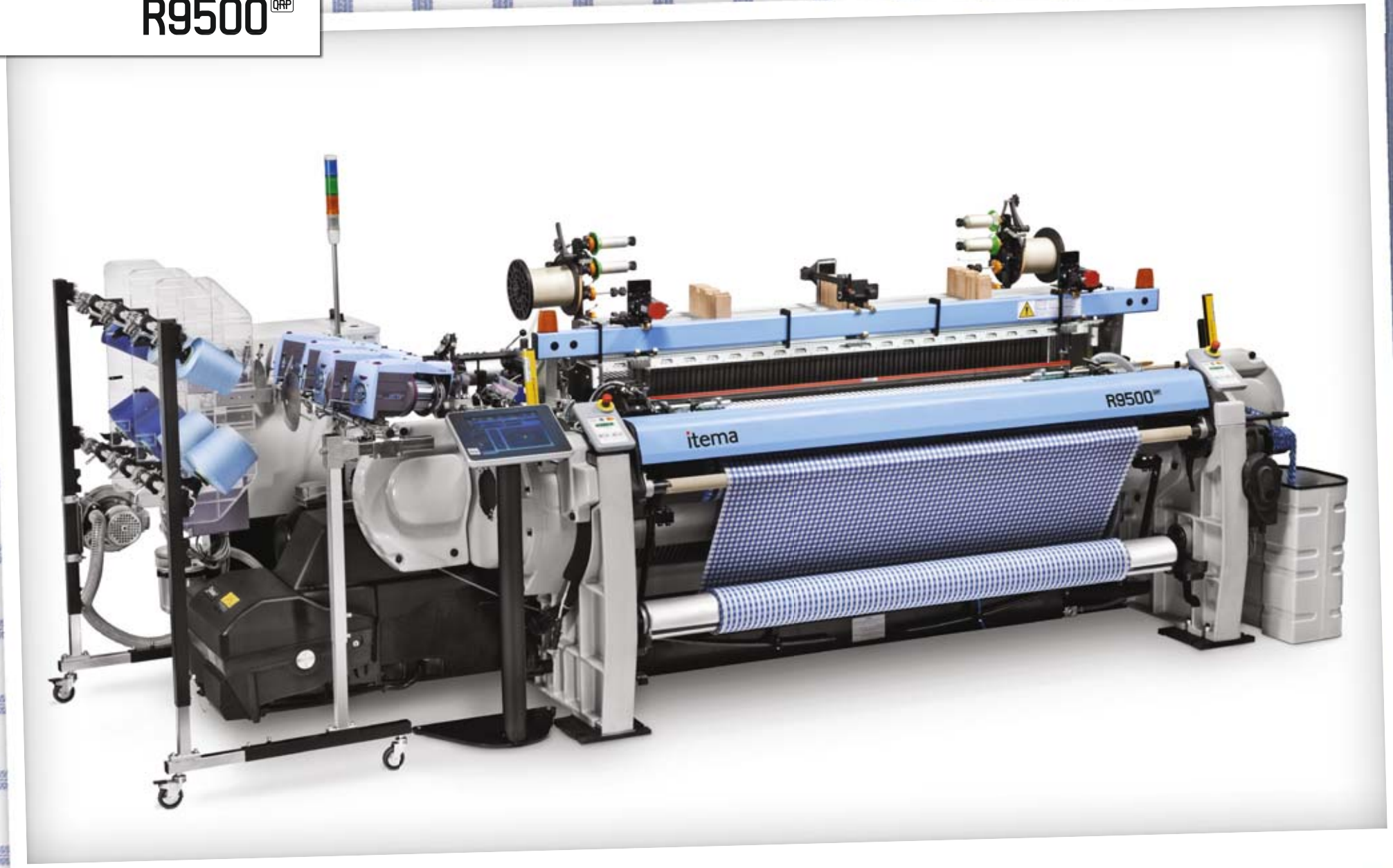
- Ethernet interface
- *Serial VDI interface: for bidirectional data transmission**
- *Parallel interface: for mono-directional data transmission**

Other Options*

- *Reed LED lamp*
- *Fabric inspection lamp*
- *Stronger rapier cleaning suction unit*
- *Power outlet on electrical panel (220V, 16A)*

** on request*

R9500 QRP



R9500 at a glance

R9500 190 D 4 S08

Nominal Weaving Width (cm)

170, 190, 210, 220, 230, 260, 280, 300, 320, 340, 360, 380

Shedding

D *Dobby*
J *Jacquard*

Weft Colors

4, 8, 12

Beam Arrangement

S08	*Single Beam 800*
S10	*Single Beam 1000*
S11	*Single Beam 1100*
D08	*Twin Beam 800*
D10	*Twin Beam 1000*
D11	*Twin Beam 1100*
S8S	*Top Beam 800*
S1S	*Top Beam 1000*

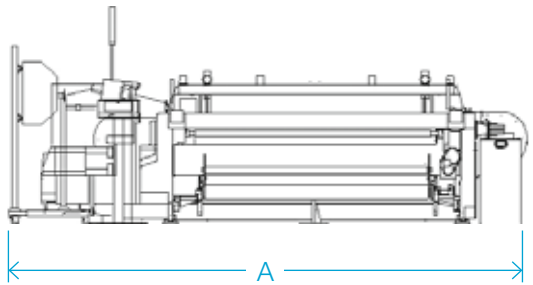
Dimensions (mm)

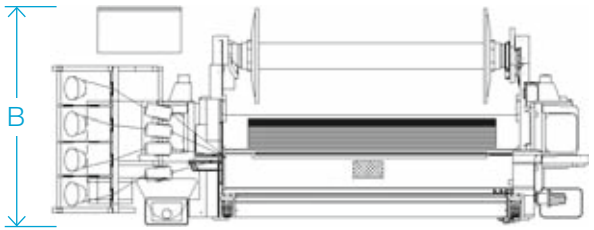
Weaving width	Machine width (A)
1700 mm	4300 mm
1900 mm	4500 mm
2100 mm	4700 mm
2200 mm	4800 mm
2300 mm	4900 mm
2600 mm	5200 mm
2800 mm	5400 mm
3000 mm	5660 mm
3200 mm	5860 mm
3400 mm	6060 mm
3600 mm	6260 mm
3800 mm	6460 mm

Overall depth (B)

with 800 mm warp beam	1824 mm**
with 1000 mm warp beam	2006 mm**
with 1100 mm warp beam	2055 mm**

*** foot boards excluded*





Because we believe

Because we believe *that change is necessary to realize our dreams and to transform ourselves into what we want to become in the future.*

Itema world wide

Itema is a leading producer of weaving machines with manufacturing operations in Italy, Switzerland and China. Our experienced team develops and manufactures state of the art weaving machinery. All our products are sold and serviced worldwide.

The Itema EDOSnet web based ordering system manages your spare parts in an efficient way for all generations and types of Itema weaving machines. With Itema EDOSnet you are online around the clock with Itema's modern and computerized spare parts distribution center in Switzerland.

www.itemagroup.com

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