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UNPARALLELED COST SAVINGS AND PERFORMANCES

SUPERIOR FABRIC QUALITY

OUTSTANDING USER-EXPERIENCE

Energy Saving

The machine **lubrication system and main mechanical components** have been optimized to guarantee a considerable energy consumption reduction.

2 Direct Drive Motor with Oil Cooling

The Itema R9500² is equipped in its standard configuration with a **direct drive motor with oil cooling** which ensures a double valuable advantage: reduced maintenance and energy saving.

3 Sturdy Machine Structure

The sturdy yet compact structure provides **maximum reliability** and **no vibrations** leading to superior machine performances.

4 Multiple Choice of Weft Cutters

Mechanical Weft Cutter

Traditional weft cutting system, reliable and effective.

Rotocut Weft Cutter

Featuring a rotary blade, it allows a perfect cutting time—at the same moment—of the filling yarns ensuring best results and optimal efficiency.

Motorized Weft Cutter

Ideal solution when weaving complex styles and/or multiple weft configurations, providing unbeatable versatility and textile efficiency.



6 SK Weft Transfer

Designed for high speed and versatility thanks to its exclusive streamlined and ceramic coated rapier heads.

High machine performances and superior fabric quality.

7 FPA—Free Positive Approach Weft Transfer

No guiding elements in the shed.

Ensuring a gentle treatment even of the most delicate warp yarns.

Optimized Design.

Outstanding versatility to weave the widest range of fancy, multifilament and monofilament yarns.

⁸ Unique Itema Shed Geometry

The Itema best-in-class shed geometry is worldwide renowned for its uniqueness. Featuring the smallest shed in its category, the Itema shed geometry guarantees zero stop marks thus leading to superior fabric quality and top fabric hand-feel even when running at the highest speeds.

Optimized Ergonomy

The R9500² features a **lowered front frame** to facilitate machine accessibility for the weaver when carrying out daily textile operations thus leading to an optimized machine ergonomy.

10 Latest Generation Console

The weaver has a complete machine control through the brand-new **latest** generation, high-performance, super sensitive console which guarantees the highest reactivity and maximum reliability.

11 New FPA Ergonomic Rapier Opener

Ensuring easy set-up operations

by allowing the weaver to carry out the necessary set-up operations in just a few, quick moves and without the need of additional tools.

12 iMANAGER

Monitoring the Itema weaving machines efficiency and performances has never been so easy. Thanks to the brandnew Itema plant management software iMANAGER, the plant manager can **easily control and access machines data and statistics** from computer or portable devices.

R9500² Rapier Weaving Machine

The Itema absolute best-seller, the rapier R9500, comes to the market in its Second Generation. The most successful rapier machine in recent history has been further optimized to guarantee superior performances and top textile quality.

Launched on the market in 2012, the Itema R9500 quickly established a new reference point in speed, versatility and user-friendliness. Market success has been outstanding, with an impressive number of machines installed in more than 60 countries on all five continents. Designed to guarantee best-in-class machine performances, the Itema rapier R9500 leveraged the well-known and worldwide recognized Itema know-how in developing in-house its rapiers to ensure unbeatable fabric quality when weaving the widest range of yarns and patterns. The best-in-class electronic platform—ensuring maximum reliability—and the sturdy machine structure—guaranteeing no vibrations—, are other success factors that made the R9500 one of the most highly reputed and successful rapier looms in the history of weaving.

Now in its second generation, the R9500² is ready to establish a new technological benchmark in rapier weaving by further improving key machine's functionalities.

Always working on improving our Customers' benefits and to make weavers' life easier, we focused in implementing on the Itema R9500² key advancements that now make this machine the most energy efficient rapier weaving machine on the market while ensuring best-in-class textile performances and fabric quality. Moreover, the R9500²—already renowned for its user-friendliness—has been further optimized to ensure the best user-experience ever.

Itema R9500²: no limit to the best.

QRP

Weaving has never been so easy, and now with the peace of mind of our QRP seal of Quality, Reliability and Performance. Itema's R9500² rapier proudly carries the prestigious QRP seal.

We strongly believe in our weaving machines, therefore, every QRP-certified Itema machine is guaranteed for a period of two years.

Itema is the only producer in the world to extend the warranty.

Our unyielding commitment to R&D, to innovation, and to our Customers inspires us to excel in our extensive product testing.

We are tireless in our search for ways to enable our Customers to meet and exceed their stringent expectations of product performance and solid investment return.

Look for the QRP mark—our testament to how we design, develop, lean manufacture and deliver our product, our unwavering confidence in our product and our guarantee to our Customers.







Sturdy, High Precision Machine Frame



Effective Centralized Lubrication



Considerable Energy Saving

The lubrication system and the main mechanical components, thanks to an extensive engineering study and to advanced machining equipment in our production plants, have been optimized to guarantee a significantly reduced power consumption, thus leading to substantial cost savings for the weaver.

Direct Drive Motor with Oil Cooling

Simple, reliable, maintenance free and energy efficient.

The R9500² features—as standard—a **direct drive motor with oil cooling** which ensures a double valuable advantage: reduced maintenance and energy saving. The oil cooling system helps the heat recovery by dissipating and reducing the motor temperature, thus leading to an extended component lifetime and to higher machine performances, including a reduced energy consumption.

Field measurements confirm that the R9500² provides **a considerable reduc-tion in energy consumption** compared to previous machine model, thus making the R9500² the most energy efficient rapier weaving machine on the market.

The motor is based on an electronic drive and brushless motor technology which provides easy machine speed adjustment through the machine console. Traditional gearing and mechanical parts are minimized ensuring reduced maintenance. Furthermore, thanks to a dedicated software, no tools are required to change harness crossing, it works simply by setting the desired parameters through the user interface.

Effective Centralized Lubrication

Machine components are lubricated by a Centralized Lubrication System—now optimized to ensure reduced power consumption, which provides oil from a main reservoir with double filter. Thanks to a special design and extensive testing of gearing and mechanical parts, the lubrication system promotes low oil temperatures leading to an extended mechanical components lifetime.

Maximum system reliability is further assured by the Electronic NCP—New Common Platform—which maintains pressure and temperature constantly monitored.

Sturdy, High Precision Machine Frame

The R9500² heavy-duty frames and global structure promote practically no vibrations even at the highest speeds. The solid drive, positioned in main lateral frames, is engineered for extensive control of moving masses to significantly process heavy patterns or unbalanced styles with minimal investment and maintenance costs.

The sley and back rest modules represent key machine's parts. The unique sley design ensures speed and versatility whilst the back rest module enables less warp tension and a cleaner shed.

The R9500² flexible structure is prepared to be equipped with fancy warp beam or jacquardette.









Sturdiness, efficiency and cost savings

The Most Compact and Streamlined Weaving Machine on the Market

R9500² features the most reduced footprint of the weaving industry. Choosing to install R9500² in the weaving mill gives our Customers the opportunity to maximize and optimize the available surface, gaining more space for the machine fleet.

The reduced machine dimensions, the minimal noise and vibrations and the best-in-class balance between consumption and performances are just a few of the reasons that make the Itema R9500² the most sought-after rapier loom on the market today.

Furthermore, the R9500² personifies simplicity. User-friendly, ergonomic, with few covers and latest advancements to allow easy access for daily operations and maintenance.

Improved and Optimized Ergonomy

The R9500² features a lowered front frame to facilitate machine accessibility for the weaver when carrying out daily textile operations thus leading to an optimized machine ergonomy.

Enhanced Beating Motion

The beating motion of R9500² is integrated in the main structure, with sley cams located below the fabric, guaranteeing stronger beat-up force and leading to the possibility to easily weave even the heaviest fabrics.

R9500



The Best Shed Geometry of its Category



The Innovative SK Weft Transfer



The Turboprop: a Unique Rapier Drive System



FPA Ergonomic Rapier Opener

The Best Shed Geometry of its Category

The unique Itema shed geometry has been designed to guarantee a smaller shed for maximum speed and superior textile quality. The Itema shed geometry, the smallest on the market, features two main fundamental aspects:

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

All elements have been studied and applied to guarantee a perfect fabric quality.

The Turboprop: a Unique Rapier Drive System

The R9500² leverages the prowess of the renowned Itema propeller drive system. Thanks to the Itema Turboprop, the drive remains compact with minimal moving parts for top reliability and reduced maintenance.

Additional device design features are:

- The mechanism is secured into the side frame to ensure stability and precision
- Carriage and swinging sliders are designed with aeronautical grade alloys,

ensuring a longer life span even at the machine highest speeds

 Standard direct lubrication of all sliding parts as well as dynamic lubrication are provided

Customary to the design, the Turboprop settings do not "drift" over time, eliminating the need for continuous settings and adjustments by maintenance personnel. With reliable, low cost, sizeable performances, the Turboprop embodies the true essence of the Itema R9500² Rapier Weaving Machine.

The Innovative SK Weft Transfer

The SK Transfer System with guided hooks 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 based on a permanent magnet integrated within the gripper, thus

coupling high resistance of the rapier with an easier weft release.

The Versatile FPA Weft Transfer

The FPA—*Free Positive Approach*—weft transfer combines the versatility of a positive rapier system with higher performances and efficiency, allowing our Customers to weave with endless creative possibilities even the most sophisticated and complex fabrics.

With the FPA System, thanks also to the combination with the motorized weft cutter, it is possible to weave the widest range of fancy, multifilament, metallic and monofilament yarns.

Moreover, the FPA Weft Transfer System, featuring a race board with no guiding elements in the shed, ensures a gentle treatment even of the most delicate warp yarns.

The FPA Transfer is the perfect solution also in case of technical textiles with the finest yarn or with high tenacity, multiple pick insertion fabric.

FPA Ergonomic Rapier Opener

The R9500² is equipped with an ergonomic rapier opener which allows the weaver to carry out the necessary set-up operations in just a few, quick moves and without the need of additional tools thus leading to easy set-up and adjustments.





Multiple Choice of Weft Cutters: Motorized Weft Cutter

Multiple Choice of Weft Cutters: Rotocut



Best-in-class Weft Insertion System

Multiple Choice of Weft Cutters

The R9500², in order to fit all the weaving needs, offers multiple weft cutter options:

Mechanical Weft Cutter

Traditional weft cutting system, reliable and effective with an essential operational movement.

Rotocut

The Itema Rotocut features a rotary blade which allows a perfect cutting time of the filling yarn. The device, after clamping the filling, cuts all the weft yarns at the same moment, due to the exceptional ease of movement ensuring best results and optimal efficiency.

Motorized Weft Cutter

The motorized weft cutter has been developed to satisfy even the most demanding style requirements. Available on request, it is the ideal solution to weave complex styles and/or multiple weft configurations. Based on innovative electronic technology and controlled by the microprocessor, the motorized weft cutter further ensures utmost versatility and textile efficiency, allowing the valuable possibility to set independent cutting times for each weft/color. A precise, advanced tool designed to increase efficiency, enhance versatility and minimize the waste.

Weft Yarn Selector

Available for 4, 8 or 12 colors configurations.

Designed to promote the maximum versatility and reliability, the device is maintenance free, driven and controlled by the microprocessor. Fine tuning the stroke of the selected finger promotes a gentle movement and works to eliminate interference with adjacent wefts. The compact design allows the selected weft to be presented in close proximity to the cutting position ensuring firm control.

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









The R9500² is born to be versatile. The machine offers a comprehensive range of configurations for numerous applications, ensuring the perfect solution to penetrate new markets while maximizing quality, speed and efficiency.

Enhanced Warp Let Off and Fabric Take Up

R9500² is equipped with electronic warp let-off and fabric take up. The gearing system is in an oil bath providing maximum reliability. Pick density can be adjusted directly through the machine console. Multiple beam applications are all electronically controlled.

The Leno and Auxiliary Selvedge Device-ISD

The R9500² weaving machine features a standard motion both for selvedges and leno binding.

The ISD provides independent setting of the auxiliary selvedges crossing and basic shedding patterns through the machine console. Other than routine cleaning operations, the brushless motors eliminate the need for maintenance and adjustments.

Superior Fabric Quality

The Itema unique shed geometry clearly facilitates maximum weaving speeds and superior fabric quality.

Worldwide weavers recognize to the R9500² the valuable advantage to eliminate stop marks leading to first quality fabric, benefit enabled by the exclusive Itema shed geometry. Moreover, Itema developed a dedicated software to prevent stop marks that can be easily modified to meet complex fabric construction demands. Quick machine start and stop with reed correct positioning is guaranteed, thanks to the direct drive motor.

Working in combination with the continuous monitoring of the let off and take up position done by the machine microprocessor, the shed geometry practically eliminates start marks. Without question, the R9500² is strategically designed to minimize off-quality fabric.

Quick Style Change

R9500² has been designed and intended to drastically reduce downtime for style changing. All machine's parts involved in the process have been developed specifically to allow an easy and quick style change and to reduce setting time:

- quick warp beam release and warp stop motion are standard on all machine's configurations
- DRC4 or DRC10 quick frame connection systems
- the temples—being mounted on a single support—can be easily moved on both sides drastically reducing the time required for style setting and width adjustments
- the warp beam is driven by the electronically controlled let-off system guaranteeing an easy warp beam fitting and cloth roll doffing







Selvedge Options: Pneumatic Tuck-In Device



Itema Electronic Weft Brake



The Useful LoomCooler



When Quality Goes Hand in Hand with User-friendliness

Many Valuable Selvedge Options

The R9500² features a wide range of options for selvedge formation. In addition to standard cutters, a melting device, as well as mechanical and pneumatic tuckers are available.

Pneumatic tuckers allow utmost fabric quality and the possibility to weave very narrow tucked-in selvedges leading to a substantial fabric waste reduction.

Multiple Electronic Weft Brake Options

Electronic weft tensioning devices are available on request and suggested to assist when processing weak yarns.

Programmable through the user interface, the electronic weft tensioning allows a separate braking control of each weft.

Besides the devices produced by different suppliers, Itema developed the Itema Electronic Weft Brake, specifically designed to ensure different braking areas during the weft insertion cycle.

The Useful LoomCooler

The R9500² comes with the option of a useful and reliable electronically controlled cooling system, the LoomCooler.

Initially designed to provide maximum heat dissipation in weaving looms, the LoomCooler has also proven an effective heat recovery enabling Customers to re-use thermal power that would have been wasted in other processes, resulting in overall cost savings and greener production.

Electronic Shed Crossing

The shed crossing time can be easily adjusted from the machine console ensuring superior fabric quality.



Latest Generation Touch Screen Console

The R9500² is equipped with a latest generation, super sensitive and extremely powerful console.

The Electronic NCP Platform reaches here the highest performance heights, due to the fast and immediate hardware's reaction to users' requests.

The full color touch-screen acts here as the user interface between the weaver and the machine, and the intuitive software encourages dialogue with weavers and technicians. The interactive machine symbols ensure an user-friendly experience by guiding personnel to the desired information.

State of the Art Technology

The machine utilizes "State of the Art" Microprocessor Technology with a PC Board running Linux to drive the user interface. Ethernet connectivity, in combination with one or more of Itema's interactive options, allows the R9500² 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 R9500² 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.

The Innovative iPOS

iPOS—Intelligent Production Optimizing System—is an 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.

iMANAGER—Your Itema Plant Management System

iMANAGER is the Itema latest mill management system that brings on a PC desktop all the relevant data and information about the weaving plant. iMANAGER provides an easy remote access to machine data via computer and mobile devices, such as tablets and smartphones.

Itema's innovative decision-enabling suite is made possible thanks to an embedded SIM card connection via a web server.

It is now possible for you to see in real time the actual status of your machines, the textile data and settings, as well as to view and download machine statistics on an Excel spreadsheet, giving you essential information about the operation of your weaving machine. Moreover, with iMANAGER you can easily monitor plant efficiency and access your machines' styles archive to quickly replicate designs on different looms.

R9500

MACHINE MAIN S	MACHINE MAIN SPECIFICATIONS				
Nominal Machine Widths	SK Transfer System	170-190-210-220-230- 260-280-300-320-340- 360-380-400-430-460- 540			
	FPA Transfer System	170-190-210-220-230- 260-280-300-320-340- 360			
Width Reduction	SK Transfer System	Standard 60 cm Optional 100 cm			
	FPA Transfer System	Standard 100 cm			
Yarn Range	Spun Yarns	Nm 200 – Nm 3 With FPA Transfer System up to Nm 1			
	Filament Yarns	22 dtex – 3,300 dtex With FPA Transfer System as fine as 8 dtex			
WEFT INSERTION					
Electronic Weft Selector	4, 8 or 12 colors				
Electronic Weft Tensioner	Itema Electronic Weft Brake	Optional			
	ROJ TEC Electronic Brake	Optional			
	LGL ATTIVO Electronic Brake	Optional			
Weft Detector	ROJ TE 500	Standard			
	DIGITAL	Optional			
	MAESTRO	Optional			
Weft Cutter	ROTOCUT	Standard			
	Mechanical Weft Cutter	Optional			
	Motorized Weft Cutter (programmable weft by weft)	Optional			
Boosted Suction Unit		Optional			

WARP LET-OFF Warp Beam 800, 1000 or 1100 mm Diameter Twin warp beam for wide looms Optional Top beam Optional Double lower beam 600 + 600 mm or Optional 500 + 700 mm Single Standard **Back-Rest Roller** Double Optional Reinforced double Optional back-rest roller for technical fabrics Warp tensioner Optional (Warp Beam 1000/1100) Warp Stop Motion 6 bar electrical 25 mm Standard or 30 mm pitch 8 bar electrical 16 mm pitch 12 bar 12 mm pitch Optional Mini warp stop motion Optional for waste selvedge **FABRIC TAKE-UP** Electronic Internal cloth roller up Standard **Controlled Take-Up** to 550 mm Prepared for external Optional batcher up to 1,500 mm Single press-roller Standard Double press-roller Optional Partially threaded Standard fabric deviating bar Smooth fabric Optional deviating bar Rotating bar for low Optional pick density **Fabric Inspection** LED lamp for reed area Optional Area LED lamp for fabric Optional inspection Pick Density 5-400 picks/cm Standard 1-20 picks/cm Optional



R9500² at a glance

MACHINE MAIN D	RIVE	
Main Motor	Direct main motor with oil cooling for dobby, cam motion and jacquard version	Standard
Shedding Motion	Heald frame connection DRC10	Standard
	Heald frame connection DRC10-QFC	Optional
	Heald frame connection DRC4	Optional
	Automatic crossing shed (standard)	Standard
	LoomCooler	Optional
Shedding Machine	Stäubli dobby model 3020 or 3060 (up to 20 shafts)	
	Stäubli dobby 3224 (up to 24 shafts)	
	Stäubli cam motion model 1692 (up to 8 shafts)	
	Prepared for electronic jacquard with cardan shaft	Standard
	Prepared for electronic jacquard with independent drive	Optional
	Prepared for name selvedge jacquard	Optional
Reed Drive	Conjugated cam units (2, 3 or 4 depending on machine width)	
Machine Control	Latest generation touch screen console with color display	Standard
Options	Power outlet on electrical panel 220V-16A	Optional
	Push-button on electrical cabinet for warp movement	Optional

SELVEDGE FORMATION				
ISD independent selvedge device	Optional			
Lateral and central pneumatic tuckers	Optional			
Lateral and central mechanical tuckers	Optional			
Thermo cutter	Optional			
Full-width temple	Optional			
ELD electronic leno device	Optional			
CONNECTIVITY				
On board diagnostic	Standard			
Parallel interface:	Optional			
for mono-directional data transmission				
Serial VDI interface:	Optional			
for birectional data transmission				
Ethernet interface for iMANAGER	Optional			
iPOS	Optional			

R9500



weaving width			
weaving whath	Meav	ind	width
	vvcav	IIIG	widti

1900 mm 2100 mm 2100 mm 2200 mm 2300 mm 2600 mm 3000 mm 3000 mm 3400 mm 3600 mm 3800 mm (*) 4000 mm (*) 4300 mm (*) 4600 mm (*) 4300 mm 4500 mm 4700 mm 4800 mm 5200 mm 5200 mm 5400 mm 5660 mm 6260 mm 6260 mm 6460 mm 6400 mm 7200 mm 8000 mm

Machine width (A)



(*) Machine width 3800 mm, 4000 mm, 4300 mm, 4600 mm, 5400 mm only with SK Weft Transfer System

Overall depth (B)

with 800 mm warp beam with 1000 mm warp beam with 1100 mm warp beam

1920 mm (**) 2062 mm (**) 2165 mm (**)

В

(**) foot boards excluded

Dimensions (mm)



R9500² 190 D 4 S08

Nominal Machine Width (cm)

170, 190, 210, 220, 230, 260, 280, 300, 320, 340, 360, 380, 400, 430, 460, 540

Shedding

- D Dobby
- C Cam Motion
- J Jacquard

Weft Colors

4, 8, 12

Beam Arrangement

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

(*) available in combination with Single or Twin Beams above

R9500

The most successful rapier weaving machine in recent history now in its Second Generation to further ensure **best-in-class energy savings, fabric quality** and **user-experience**.





2 Year Warranty





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We have **6** Itema Campus Locations:

Italy – Colzate China – Shanghai Japan – Osaka USA – Spartanburg India – Coimbatore Pakistan – Lahore

ITEMA CAMPUS TRAINING CENTER

We believe in a trusted and reliable partnership with our Customers, supporting them throughout the whole life cycle of the weaving machine. Our dedicated after sales market qualified team promptly satisfy in real time every Customer's request to ensure a win-win, long-term relationship.

The Itema skilled technicians and engineers provide:

- real time textile, electronic and mechanical assistance
- tailor-made upgrade kits
- analysis and consulting regarding machines performances, including running costs and fabric quality

We recently launched a brand-new training center concept designed to provide tailored and accurate courses in a highly technological and user-friendly location. The Itema Campus is a fully functional center equipped with the latest loom models to give our Customers a warm welcome and the right learning environment. A team of skilled Itema technicians is fully dedicated to train the most demanding technical staff on how to maximize the performance of your Itema machines.

An intensive course to acquire all the necessary technical and textile knowledge to get the most out of the Itema weaving machines.

To facilitate and make even easier our Customers' access to the Itema Campus Training Centers a dedicated online portal is available to easily and quickly book the desired technical trainings.

Discover more at www.itemagroup.com/training

WEAVING EXCELLENCE with the Itema R9500²

Our Customers, our Pride

Scan the QR Code and listen to our Customers excellence story



Itema worldwide

Itema is a leading global provider of advanced weaving solutions, including best-in-class weaving machines, spare parts and integrated services.

Our Company is the only manufacturer in the world to provide the top three weft insertion technologies: rapier, airjet and projectile, with an ample product portfolio and a commitment to continuous innovation and technological advancement of our weaving machines.

For more information about Itema, to contact our Sales Team in your country, to learn more about our weaving machines or to order spare parts, please visit our website **www.itemagroup.com**.

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