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# R9500 terry













#### **R9500terry Rapier Weaving Machine**

Breakthrough innovations. Technical superiority. Unmatched reliability.

The new Itema R9500*terry* has been developed to set a new benchmark in weaving terry, with the aim to provide the market with a weaving machine which finally combines utmost quality and versatility with efficiency and usability of the machine.

Itema the first and foremost rapier terry loom producer, carries on the excellence in terry weaving of historical brands, Sulzer and Vamatex.

Besides this strong inheritance, what makes R9500*terry* an extraordinary weaving machine for terry weavers are three exclusive key factors:

- R9500*terry* builds on the success of its predecessor Silver DT, the most popular rapier terry loom in recent years with more than 5.000 weaving machines running around the globe.
- The machine's sturdy structure and the advanced technology come from the Itema absolute best-seller, the rapier R9500, a market phenomenon now also for the benefit of terry weaving.
- Itema's cutting-edge R&D worked with the final goal to meet and exceed the exact requirements of Customers, both when it comes to current needs and future desires.

The beating heart of the R9500*terry* lies in its technological prowess which makes the machine the most advanced terry loom in the market by far. R9500's unique features have been implemented on R9500*terry* to maximize efficiency, speed and reliability, such as the Turboprop – the exclusive rapier drive system, the Direct Drive Motor – a unique motor for easy operations and settings, and the innovative SK rapiers.

The textile quality is enhanced due to a winning trio of innovative devices: the **new positive pile back-rest roller**, the **new pile formation unit** and the **new ground back-rest roller**.

If your target is an advanced, innovative, highly reliable terry weaving machine ready to unleash your designers' talent and creativity, the R9500*terry* is the right choice for your weaving mill.

Itema R9500terry, made for Weaving Terry Like Never Before.



Weaving has never been so easy, and now with the peace of mind of our QRP seal of Quality, Reliability and Performance. Itema's rapier R9500*terry* 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



The Turboprop: a Unique Rapier Drive System



The Innovative SK Weft Transfer

The R9500*terry* technology and structure is based on the Itema best-seller R9500, the most advance rapier machine in the playground launched in 2012 and already receiving overwhelming market acceptance.

## Sturdy, High Precision Machine Frame

The R9500*terry* benefits from heavy-duty frames, promoting a low vibration pattern at high speeds and enabling higher speed and weaving efficiency.

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

Compact and with few covers allowing easy access for maintenance, the R9500*terry* personifies simplicity and ease of use.

The best-in-class balance between consumption and performance and the minimal noise and vibrations are key elements resulting from the legacy of the rapier R9500.

## The Turboprop: a Unique Rapier Drive System

The R9500*terry* utilizes a completely redesigned version of the renowned propeller drive system. Due to the Turboprop, already famous and appreciated on R9500, the drive remains compact with minimal moving parts for increased reliability and less maintenance.

Additional design features are:

- the mechanism is secured into the side frame for higher stability and precision;
- new carriage and swinging sliders are designed with custom aeronauticalgrade alloys;
- direct lubrication of all sliding parts and dynamic lubrication are standard.

The Turboprop, a unique and exclusive mechanism, is the heart of the weft insertion system, with absolute dimensional precision, reliable and low-cost performance ensuring the highest speed and reduced wear and consumption.

#### The Innovative SK Weft Transfer

After the success gained weaving the most sophisticated fabrics on R9500, the SK Weft Transfer System is now available also for the benefit of terry weavers.

The 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 reduced 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 innovative SK rapiers provide the best possible protection against wear, leading to an excellent level of performance, ensuring the possibility to easily weave even the heaviest fabrics at higher speeds.









#### Direct Drive Motor



The NCP – New Common Platform: The Machine's Management Evolution

#### **Direct Drive Motor**

As for R9500, the main drive of the R9500*terry* is based on an electronic drive and brushless motor technology which provides easy touch-screen adjustment of the machine speed. Traditional gearing and mechanical parts have been minimized, providing added value by fewer spare parts and maintenance.

Simple, reliable, maintenance-free, with no cooling system required, the Direct Drive Motor ensures top performances over time and low cost operations.

Thanks to the dedicated software, changing the harness crossing is as easy as simply inputting the desired setting through the user interface.

#### The NCP – New Common Platform: The Machine's Management Evolution

R9500*terry* inherits from R9500 also the powerful NCP – New Common Platform, the electronic system which allows easy control of all technical parameters of the weaving machine.

The fully interactive color touch-screen console acts as an one-stop terminal to manage the full spectrum of the loom's functionalities. Easy and effective operations are guaranteed both for the weaver as well as for the maintenance technician involved.

All the Itema 9500 series of rapier and airjet models feature the unique NCP Electronic Platform, enabling full interchangeability of the electronic boards, which in turn leads to lower spare parts consumption and reduced maintenance costs.

Furthermore, reliability is ensured thanks to the constant control of system pressure and temperatures allowed by the NCP.



Best-in-class Loop Formation: New Positive Pile Back-Rest Roller



Best-in-class Loop Formation: New Ground Back-Rest Roller

Quality is the quintessential and differentiating point in fabric production, and especially so when it comes to weaving terry, where market demands are rapidly changing and success is determined by the ability to stand out due to unrivalled quality and flexibility to adapt to the latest trends. Itema worked on the design of the new R9500*terry* with this concept clear in mind and the new terry machine comes fully equipped with state-of-the-art innovations that significantly raise the bar and redefine the benchmark of terry quality.

#### Best-in-class Loop Formation: New Positive Pile Back-Rest Roller

The Pile Back-Rest Roller on R9500*terry* is positive, being operated through a single device, thus resulting in a consistent optimization of the pile warp tension. Benefits are strong and numerous, leading to a global improvement of the fabric quality thanks to the reduced tension on the pile warp.

Key advantage for the weaver is also the possibility to simply and precisely set the warp tension through the user interface. Moreover, different warp tension and pleated effect when weaving borders are possible, as well as the opportunity to work with a very low warp tension.

Moreover, the Pile Back-Rest Roller, also has a spring compensation eliminating pile peak tension, thus leading to an excellent tension compensation of the pile warp during the shed opening and the reed beat up.

The New Positive Back-Rest Roller ensures unmatched versatility and higher weaving efficiency.

#### Best-in-class Loop Formation: New Ground Back-Rest Roller

The New Ground Back-Rest Roller features light weight cylinders and a load cell to control the tension, thus producing less inertia and allowing a better compensation of the cylinders on the yarn. The new cylinders drive perfectly the yarn movement, reducing the ground tension and facilitating the shed formation, due to their lower mass and highly sensitive components.



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Excellent Terry Quality: New Pile Formation Unit



New Temples Position

#### Weaving terry like never before thanks to cutting-edge innovations

## Excellent Terry Quality: New Pile Formation Unit

Ultimate and innovative, the New Pile Formation Unit is a key development on the Itema R9500*terry*.

Driven by a single motor, the device is now more compact providing increased machine's reliability and lower operating costs.

The star feature of New Pile Formation Unit is the innovative fabric movement which allows a superior quality loop formation. The new fabric movement is generated by a series of rods, which are driven by the single motor. The series of rods also drive the positive pile whip roller to maintain a constant pile tension during the cloth displacement.

#### New Movable Fabric Support and New Temples Position

Between the breakthrough innovations implemented on R9500*terry*, key features are the New Movable Fabric Support and the New Temples Position.

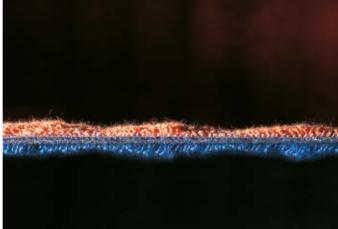
The New Movable Fabric Support allows a more constant control of the fabric fell during the pile formation and beat-up, facilitating the loop formation and resulting in an increased fabric quality.

The New Temples Position is a strategic solution to optimize the quality at fabric sides. In fact, on R9500*terry* the temples are positioned above the fabric, ensuring an optimized fabric sides tension thanks to the possibility to perfectly adjust the tension.



Effective, High-Precision Lateral Cutters





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**Endless Creative Possibilities** 

#### **Multiple Choice of Weft Cutters**

The R9500*terry* offers multiple options for the weft cutter to fill all the weaving needs.

Standard on the terry weaving machine are the mechanical weft cutter or the ROTOCUT, one of the most appreciated devices of R9500. Thanks to the Rotocut, the weft cutting is precise and optimized and, due to its reduced dimensions, ergonomics are improved allowing the operator to easily access the weaving machine.

Furthermore, available as an option, the motorized weft cutter enables to produce the most refined and elegant terry cloth, allowing to weave a mix of different types of wefts and counts and enabling imagination and creativity.

## Effective, High-Precision Lateral Cutters

R9500*terry* comes for the weaver as a fully equipped weaving machine ready to weave the most sophisticated terry cloth.

The weaver can choose between the technological advanced, high-precision Motorized Lateral Cutters and the Mechanical Lateral Cutters, reliable and effective even in the most demanding weaving conditions.

#### **New Weft Selector**

The R9500*terry* New Weft Selector incorporates core developments tested on our best-seller R9500.

The New Weft Selector, available up to 12 colors, stands out for its compactness, ensuring an ideal position and a precise cutting of the weft.

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.

#### **Endless Design Possibilities**

With our R9500*terry*, there are no limits to creativity offering the weaver the chance to design and produce quality towels, which exalt the originality of the terry cloth made with different height loops.

The loop formation system, entirely electronically driven, enables to change the height of the loop by simply setting the onboard keyboard.

Multiple pick terry fabrics can be easily woven thanks to the freely programmable terry pick repeat, thus resulting in endless creative and design possibilities. Whatever design you fancy, our R9500*terry* can weave, like no other, better and faster, to ensure your success.

#### Nominal Machine Width (cm)

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

#### **Loop Formation**

- Cloth displacement loop formation
- Freely programmable pile height and pick repeat

#### Shedding

- Electronic Jacquard
- Stäubli electronic dobby (up to 20 frames)

#### **Transfer System**

• SK: guided rapiers "monorail" type hooks

#### Warp Beam

- Ground beam diameter 800 or 1000 mm
- Loop beam diameter 800, 1000 or 1250 mm

#### Weft Insertion

• Electronic Weft Selector: 4, 8 or 12

#### Weft Cutter

- ROTOCUT filling cutter
- Mechanical filling cutter
- Motorized filling cutter\*

#### **Pick Density**

- Standard: 5–400 picks/cm
- Automatic weft density variation programmable in dobby and jacquard pattern

#### Selvedge

- Motorized auxiliary selvedge and leno device
- Mechanical auxiliary selvedge and leno device
- Mechanical tuckers\*

#### Warp Stop Motion

• Separate electronic warp stop motion with 4 (2+2) rows

#### Warp Let Off

• Electronic controlled let off

#### Fabric Take Up and Cloth Roller

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

#### Connectivity

- Ethernet interface (with LoomBrowser and/or ILMS)\*
- Serial VDI interface: for bidirectional data transmission\*
- Parallel interface: for mono-directional data transmission\*

#### **Other Options\***

- Reed LED Lamp
- Control of the pile consumption



\* on request

### R9500terry at a glance



#### Weaving width

1900 mm 2100 mm 2300 mm 2600 mm 2800 mm 3000 mm 3400 mm 3600 mm 3800 mm

#### Machine width (A) 4500 mm

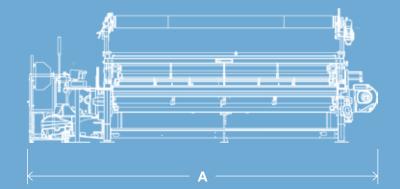
4700 mm 4900 mm 5200 mm 5400 mm 5600 mm 5800 mm 6200 mm 6400 mm

#### **Overall depth (B)**

with 800 mm warp beam with 1000 mm warp beam

2064 mm (\*)

(\*) foot boards excluded





Dimensions (mm)



## R9500*terry* 190 D 4 S08

#### Nominal Machine Width (cm)

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

#### Shedding ·

- D Dobby
- J Jacquard

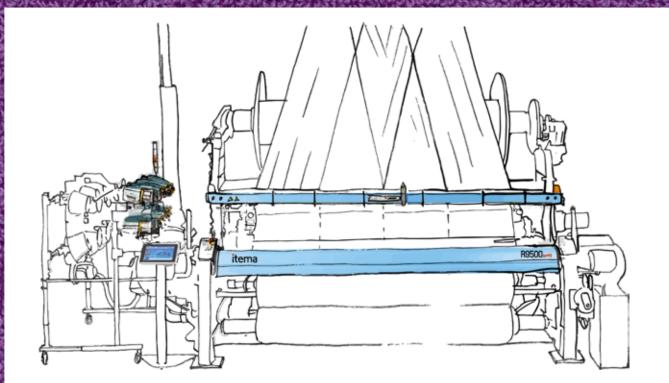
#### Weft Colors

4, 8, 12

#### Beam Arrangement

- S08 Single Beam 800 mm
- S10 Single Beam 1000 mm

Another perspective



#### 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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