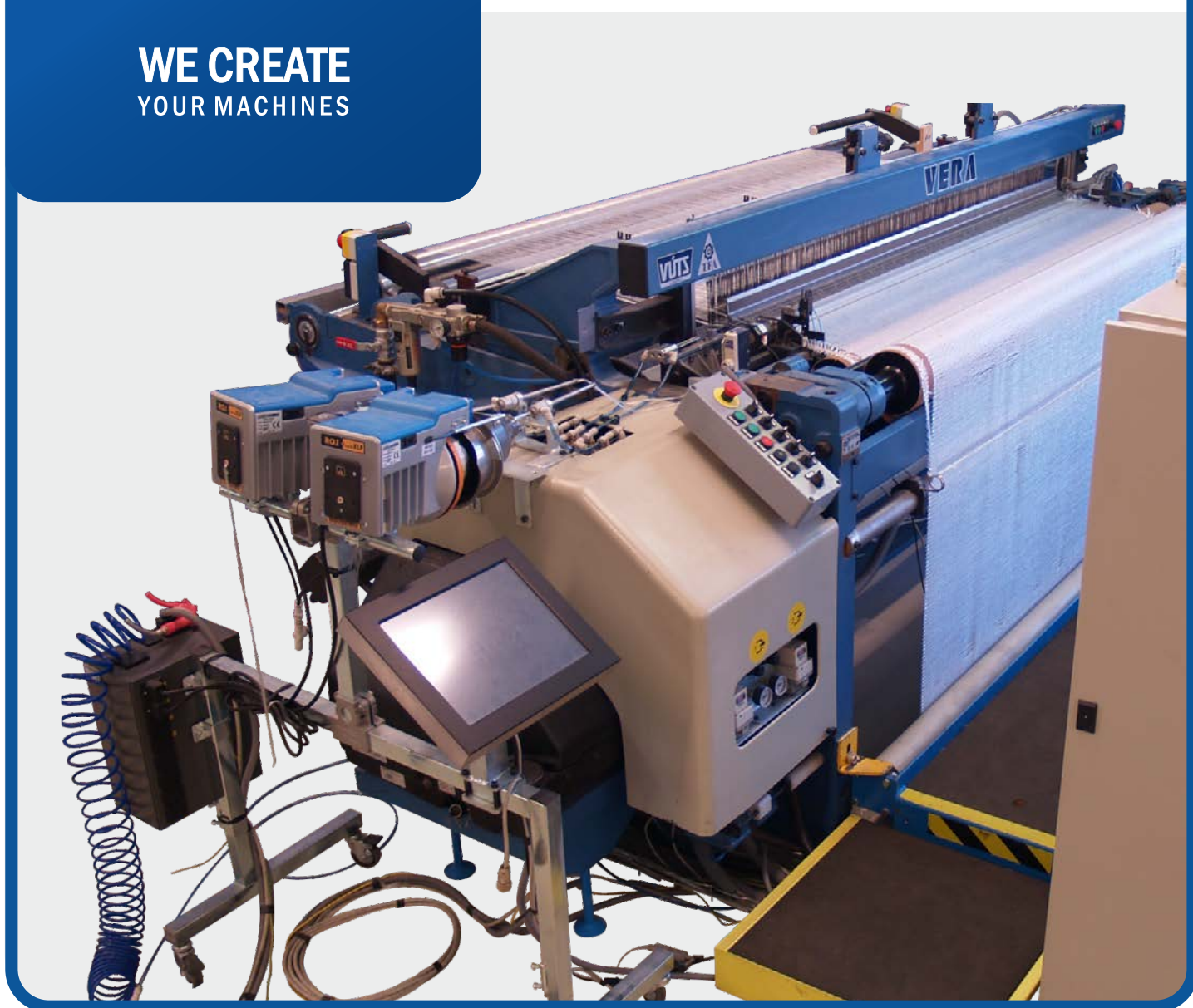
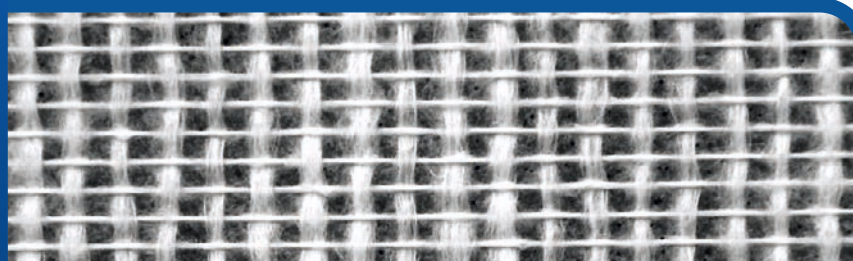


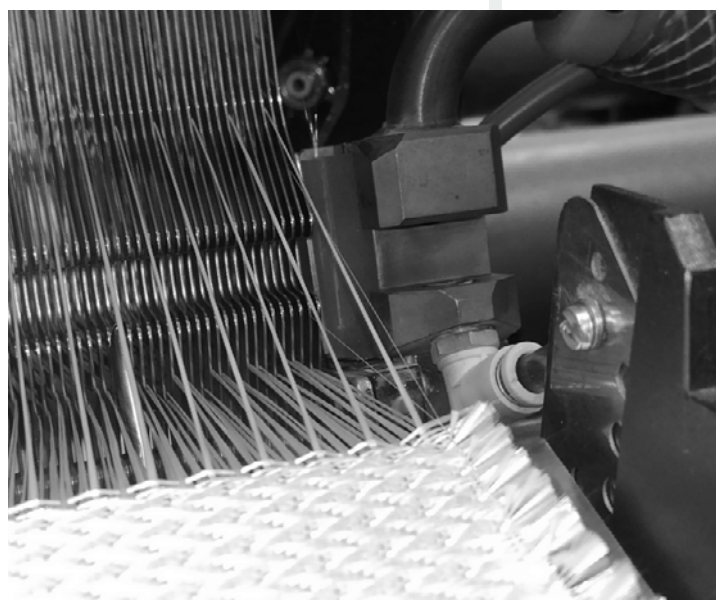


**WE CREATE
YOUR MACHINES**



VERA

**AIR-JET WEAVING MACHINE
FOR THE PRODUCTION
OF MEDIUM WEIGHT
TECHNICAL FABRICS**



VERA

the best solution for the production of medium weight technical fabrics

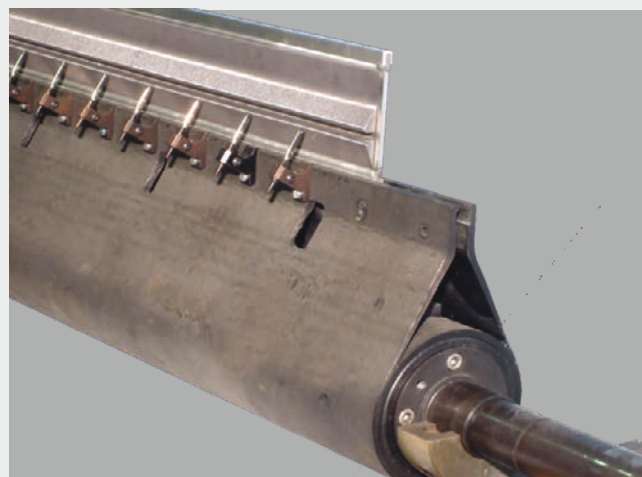
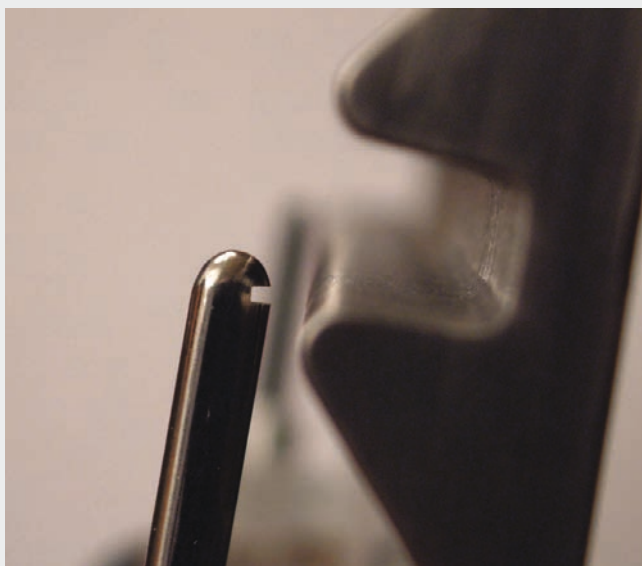
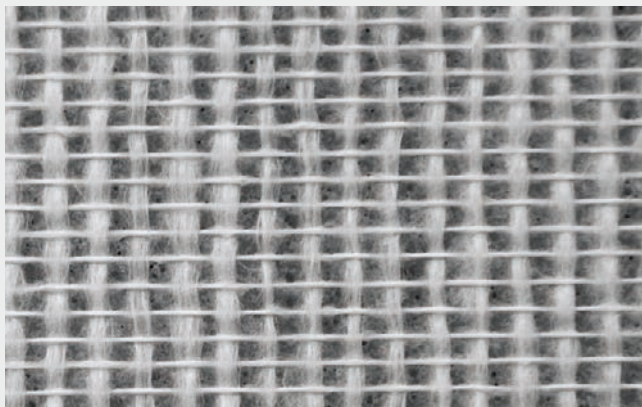
The air-jet weaving machine VERA for weaving medium weight technical fabrics in maximum reed width 220 cm. Several original solutions have been applied to the machine that allows to extend fabric range and to improve mechanical properties of the machine.

The VERA machine is able to weave technical fabrics that have been produced only on mechanical machines so far while this machine preserves all advantages of air-jet weaving machines: higher productivity, lower production costs, lower consumption of spare parts and lower level of noise.

EXTENDED RANGE OF WEFT MATERIALS ON AIR-JET WEAVING MACHINES

It is possible to use weft materials up to 600 tex together with high RPM and required fabric quality.

The machine can be equipped with electronically controlled weft brakes ABS or CWB in dependence on the weft yarn character. In addition, VERA machine can be equipped with tandem nozzles that together with sophisticated software for the weft insertion control allows to extend the range of weft materials from approx. 200 tex up to 600 tex and more.



COMPOSITE SLAY PROFILE

The slay design is created from the prismatic closed profile that is made from C/E composite material.

Its high rigidity guarantees good quality of weaving in the wide range of machine speeds. Due to significantly lower weight, the slay is perfectly balanced.

ELECTRONIC CONTROL OF SHEDDING MECHANISM DRIVE

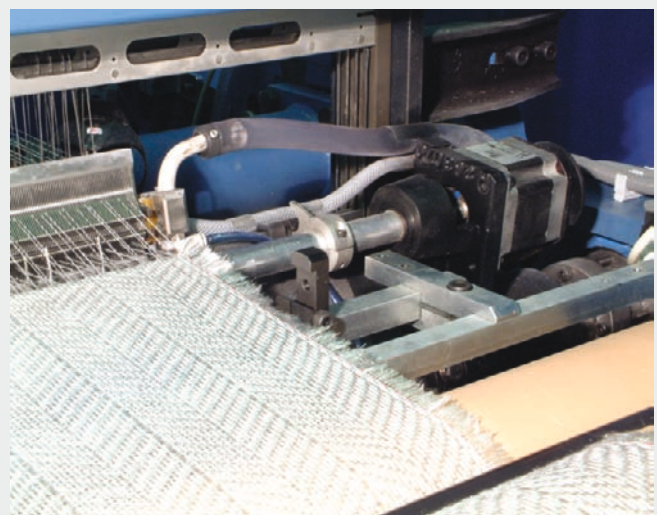
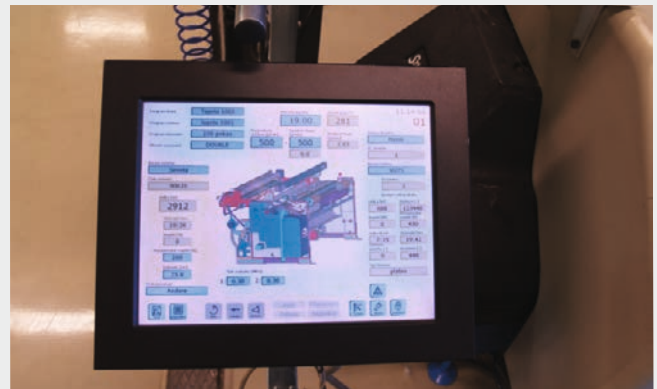
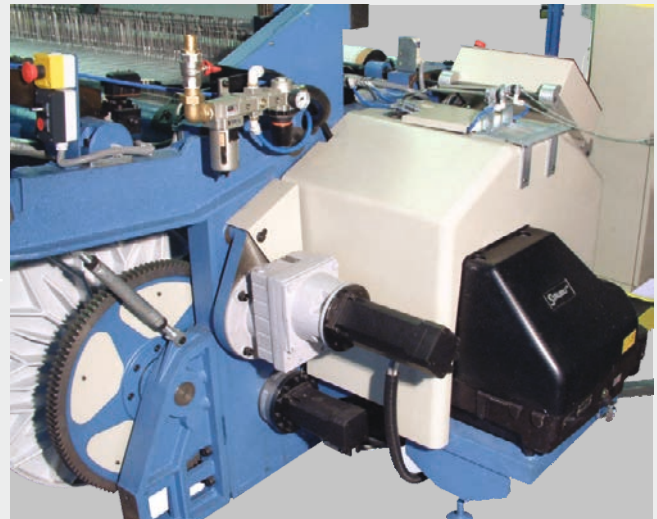
On the VERA machine the traditional synchronization of the beat-up and shedding mechanisms through the main shaft has been substituted by a new system of electronic control of both drives by a cascade-type regulator: master drive for beat-up mechanism and slave drive for shedding mechanism. This original solution significantly reduces machine vibrations and noise level.

CONTROL SYSTEM

Machine electronics consists of a control system, control panel and power section. The machine is equipped with highly flexible software that can be easily edited according to the weaving process requirements.

The control panel with a colour touch screen is used for communication between operator and machine. It enables to enter all operating and technological data and to monitor the machine operation.

The machine can be connected to the central data collection system via a communication cable.



TECHNICAL SPECIFICATION

Machine drive

- The direct drive of beat-up mechanism by means of asynchronous electromotor – master
- The direct drive of shedding mechanism by means of synchronous servomotor - slave
- Automatic stopping in positions
- Without brake and clutch

Weft picking

- Metering devices ROJ Super Elf G2 HD 3 mm
- Automatic braking system (ABS) of weft
- Tandem nozzles
- Main nozzles
- Electronic weft cutting L, with diamond blades
- Profile reed
- Relay nozzles
- Stretch nozzle
- Opto-electrical weft stop motion
- Passive weft cutting R, or electronic weft cutting R, with diamond blades
- Automatic air pressure control
- Automatic timing of relay nozzles
- Automatic filling repair

Warp let-off motion

- Electronic warp let-off motion
- Diameter of warp beam flanges 1000 mm

Back rest

- Active double-roller back rest
- Strain gauge sensor of warp tension

Warp stop motion

- Double-row, or four-row electrical

Shedding mechanism and beat-up

- Cam shedding mechanism Stäubli 1651 (8 heald shafts)
- Electronic rotary dobby Stäubli S3060 (12 heald shafts)
- Cam beat-up mechanism
- Composite slay profile

Cloth take-up motion

- Electronic cloth take-up motion

Selvalge devices

- Needle selvalge entangling devices K-glass of Gebr. Klöcker with group pneumatic drive
- Rotary selvalge entangling devices propeller leno of Gebr. Klöcker
- Cutting and taking-up of auxiliary selvage
- Central fabric splitting

Machine control

- Control of machine drives
- Control of fabric weaving technology system
- Control panel equipped with LCD colour touch screen
- Communication via Ethernet or RS 485
- Prevention of weft barriness under all modes of machine running
- Variable machine speed depending on weft flying range
- Display of cause of machine stopping

Reed width

- Nominal width 220 cm
- Minimum width 170 cm
- Range of yarns
- Glass fibers 34 – 600 tex
- PAD, PES, PP, Basalt, etc.

Warp sett

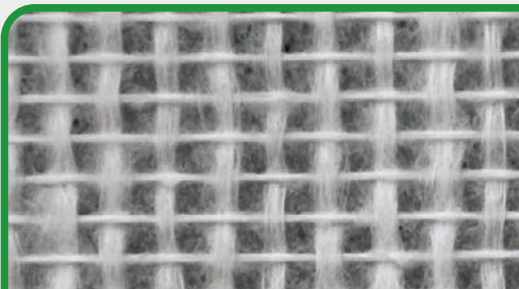
- 10 – 190 threads /10 cm

Number of colours in weft

- Two colours

Flanges of warp beams

- 1000 mm



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