

 **VANDEWIELE****ROJ**[®] [®]

**Our *new* ways to
create perfect fabric**

ROJ[®]





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brochure

We imagine, build and integrate innovative textile systems for flooring qualities, home linen, fashion fabrics and technical textiles.

Connectivity – for the future of the textile industry.

4.0 ready

 **VANDEWIELE** inspired by  Expertise

ZTF Zero Twist Feeder

The Zero Twist Feeder delivers a tape yarn or fibre tow to the weaving machine without any twist. It keeps the yarn constantly stretched to avoid the risk of any snarls or twisting of the tape.

The ZTF is designed for use with rapier machines. It can be installed on new CAN communication machines, or retrofit to older non-CAN communication machines using a specially designed conversion kit.

The ZTF is supplied as either a single channel unit, or as a weft mixing version.

HOW IT WORKS

The bobbin is rotated by a motor, allowing delivery of the yarn without twist at an average speed of the weaving machine.

A buffer arm, synchronised with the rapier movement, buffers the yarn being rolled off the bobbin at a continuous speed and delivers the exact amount to the weaving machine at the correct speed needed for the weft insertion.

A tension and sensor arm ensures that constant yarn tension is kept during the whole insertion cycle.



ADVANTAGES

- Delivers the tape yarn without any twist
- Handles Carbon fibre, Glass fibre, Aramid, Plastic tapes...
- Tape width up to 10 mm
- Bobbin weight up to 7 kg
- Insertion length up to 3.40 m
- Easy to exchange bobbins
- Works with mono-rapier or double-rapier weaving machines

Blue11 EasySet

The Blue11 is an airjet feeder equipped with “EasySet” stepless pick-length.

The evolution of previous airjet feeder models continues with Blue11, and includes the unique features of Blue22 EasySet.

The Blue11 EasySet is for installation on Picanol OMNIplus Summum airjet machines.

HOW IT WORKS

The EasySet system consists of a motor installed in the spool-body that adjusts the pick-length by moving the spool-body fingers in or out.

The fingers (both the spool-body and oscillating fingers) are synchronized to move together to create the required setting.

The setting is made on the loom panel and then transferred electronically to the spool-body of the feeder.



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ADVANTAGES

- The ability to set the pick-length in mm from the loom panel at the startup of a new style
- And the possibility to adjust the pick-length whilst running
- Reduced settings – automatically calculated
- Increased robustness
- Industry 4.0 ready

SUPER ELF S3

The Super Elf S3 continues the evolution of ROJ weft feeders for air and water-jet looms.

With the inclusion of the latest optical sensor technology, based on the principle of “signal reflection”, extremely accurate sensing of the yarn can be achieved – even in the most difficult working environments.

The Super Elf S3 can be installed on any type of air or water-jet loom equipped with CAN communication, with the exception of Picanol air-jet looms.

HOW IT WORKS

The innovative optical sensor system ensures perfect control of the following functions:

Accurate measurement of the weft insertion length, with a “double check” sensor for both Z and/or S winding direction.

Real-time control of the yarn “take-off” point by the reserve sensor ensures the yarn flight time is as fast and consistent as possible.

Input yarn break sensor for the detection of yarn breaks on the bobbin side.





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ADVANTAGES

- Stable reading of yarn signals in dirty and dusty environments
- Reliable reading of very fine yarns, as fine as 7 den
- IP 65 sealing protection for use in all weaving conditions
- New “high-speed” stopper magnet design
- For greater versatility, the updated user-friendly design allows fast and easy adjustment of the spool-body diameter
- Industry 4.0 ready

TED Tension Display

This innovative and unique product makes it possible to reproduce weft tension settings from one machine to another enabling a fast start up the next time the same article is woven.

TED is designed to be used in combination with the S-Flex tensioner on Luna X3 and Chrono X3 weft-feeders.

This accessory can be supplied for new installations, or retrofitted as an upgrade on existing X3 installations.

HOW IT WORKS

The position of the S-Flex Tensioner is constantly being monitored by an internal sensor, even if adjusted during power off.

The position is displayed digitally on an OLED display and can be easily transferred to the weaving machine.



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ADVANTAGES

- Reproducible and transferable settings
- Easy and intuitive handling
- Robust, energy-efficient system for optimal yarn tension
- Industry 4.0 ready

ATC-W Automatic Tension Control

The unique function of ATC-W is to automatically maintain consistent yarn tension at a pre-determined level unaffected by variable external factors such as bobbin size or yarn quality. The required tension is easily set and monitored on the ATC display. Once set, the system constantly regulates itself ensuring consistent yarn tension during the weaving process.

ATC is designed to be used with Luna X3, Chrono X3 and XD X3 weft-feeders for new installations, or to be retrofitted on existing installations as an upgrade option provided that the weaving machine is equipped with CAN communication.

HOW IT WORKS

The yarn tension is constantly and accurately measured by the ATC sensor unit, sending a signal to the ATC operator unit.

Inside the operator unit a motor and gearbox are controlled to automatically adjust the position of the flex-brake on the weft-feeder resulting in consistently stable yarn tension at the level required.



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ADVANTAGES

- Reproducible and transferable settings
- Yarns of all varying qualities can achieve high productivity with a controlled stable tension
- Yarn tension differences between bobbins is eliminated, resulting in high fabric quality
- Reduced production costs and increased machine efficiency
- Easy and intuitive handling
- Robust, energy-efficient system for stable yarn tension
- No longer any need to check yarn tension when bobbins are changed
- Easy to retrofit on existing X3 feeders
- Industry 4.0 ready

PosiFlex

The PosiFlex is a fast reacting, programmable weft tensioner system, which automatically adjusts to the optimal tension required for the complete weft insertion cycle. By the use of an integrated electromagnet a specially developed flex brake ensures the correct tension at all times.

The user-friendly settings are easy to program using the easily accessible integrated panel. The major advantage with this system is that there is only one setting for the weft tension. With a conventional “brush and brake” set-up, there are two settings that influence the weft tension.

PosiFlex is designed to be an integral part of both Chrono X3 and XD X3 weft-feeders and is currently for use on Picanol OptiMax-i rapier machines.



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ADVANTAGES

- Reproducible and transferable settings
- Very fast and precise operation
- Only one setting for weft tension
- Versatile, suitable for most yarn types
- Self-cleaning brake
- Compact design integrated into the weft feeder
- Reduced production costs and increased machine efficiency
- User-friendly intuitive handling
- Robust, energy-efficient system for optimal yarn tension
- Industry 4.0 ready

Wi-Feeder

Wi-Feeder is a wireless access point for mobile phones, tablets and PC to allow customers to be able to connect to IRO/ROJ X3 feeders.

It is a useful tool for troubleshooting and maintenance, and a very easy way to access key information and data during the weaving process.



HOW IT WORKS

The Wi-Feeder can be connected either to a single feeder, or to one of the ports of the weft-feeder control box on the loom.

It activates a “point to point” Wi-Fi signal to which it is possible to connect with your portable device, simply by creating a new Wi-Fi connection by selecting “Wi-Feeder”. Full operating instructions and access password are supplied with each device.



ADVANTAGES

- User-friendly and intuitive App available (Android and iOS)
- Monitoring of feeder data, for better understanding of the weaving process
- Check and set the working parameters of any IRO/ROJ intelligent accessories in use
- Accurate measurement of the yarn consumption of each colour during a weaving cycle, including any waste yarn
- Alarms / warning messages for easy trouble-shooting and maintenance
- Download and install latest up-to-date feeder SW releases

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www.vandewiele.com



We imagine, build and integrate innovative textile systems for flooring qualities, home linen, fashion fabrics and technical textiles.

Sharing inspiration and expertise with our customers worldwide, we shape the textile industry of the future.

Creating success for them all, from yarn to finished product.

inspired by Expertise

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