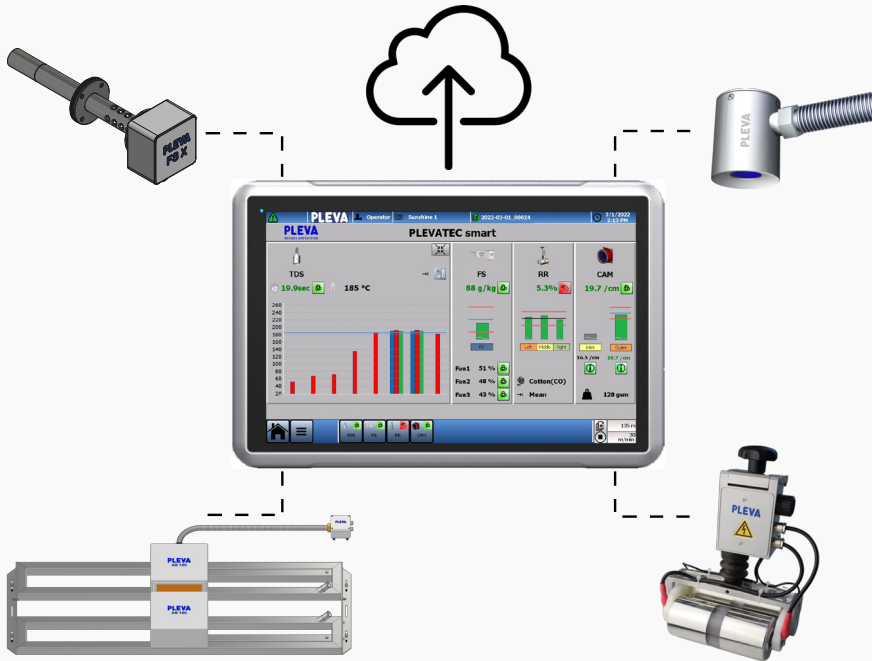


# NEWS AND HIGHLIGHTS 2025/26

**PLEVA**  
Sensors and Controls



## Modular PLEVATEC smart & pro

- Visualization and optional control of standard and advanced processes
- Energy-efficiency upgrade for existing machinery
- Central integration of all PLEVA sensor and control systems
- Interfaces for data acquisition, analyses and industry 4.0 connectivity

## High-performance camera technology CAM

- Unbeatable, high performance structure analyses, pick/course density measurement
- Quality improvement and reporting
- Retrofitting of old systems possible

## Contactless microwave moisture measurement

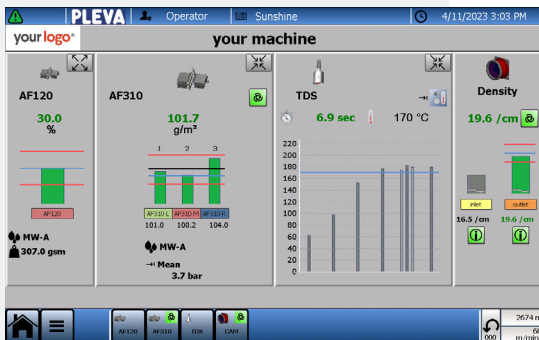
- Continuous, online measurement of water-based coating, application, add-on and pick-up
- Enhanced protection of measuring heads for robust use in even harshest conditions



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### The smart way of weft-straightening

The weft-straightening machine SL smart is designed particularly for knitted and woven fabrics with a maximum fabric width of 3.2m with a plurality of new design solutions. The heart of the SL smart system is the well-established advanced traversing camera technology which is unique in weft-straightening. The universal high-resolution camera captures more than 20 measuring points per meter of fabric width. Advanced evaluation algorithm enable an ultra-precise distortion analysis for perfect straightening results in a blink of time.

### The all seeing eye – CAM series 400

For the assessment of quality parameters but also weft-straightening, precise detection and advanced image processing is the most important aspect. The brand new CAM offers cutting-edge technology with many novelties for best results: Completely new lighting with increased brightness and special lighting possibilities allow a detection of all kinds of fabric independent from density or color with possibility of weft and warp evaluation.

This in combination with a four times higher calculation power, higher resolution with five-times more pixels and revised algorithms for calculation of distortion and pick/course density makes it the leading technology in the area. On top, it is also designed as a retrofit for existing PLEVA systems with easy connectors and is fitted for even the harshest conditions thanks to an improved housing design.

### Easy operation at complex processes with new process control system

The advanced process control system PLEVATEC pro allows an integration of a huge variety of process critical data with all information at one glance and optimal controls. It is designed to enhance and simplify operation even at complex production lines with different modules. In addition, tolerances can be set as well as parameters saved and loaded within the integrated recipe management system. The customizable system provides solutions to a huge range of different processes, e.g. production line with foulard, vacuum, predryer, coating and dryers (stenter frames, ovens, etc.).

An integration of the following devices is possible:

- Exhaust humidity FS X
- Fabric temperature TDS
- Residual moisture RR, RF/AF
- Application moisture/coating AF
- Pick/course density CAM

### Versatile applications across industries

While our technologies are firmly rooted in the textile industry, their versatile functionality enables use in a wide range of other industrial sectors, including

- Abrasives (contactless material moisture, exhaust humidity)
- Building materials (exhaust humidity, material moisture)
- Corrugated paper (material moisture)
- Foils (fabric/air temperature, material moisture)
- Food (moisture measurement at casings)
- Leather (residual moisture measurement)
- Paper (exhaust humidity, material moisture, coating application, residual moisture)
- Steel (exhaust humidity)
- Tissue (exhaust humidity, material/application moisture, residual moisture)
- Wood (exhaust humidity, material moisture)

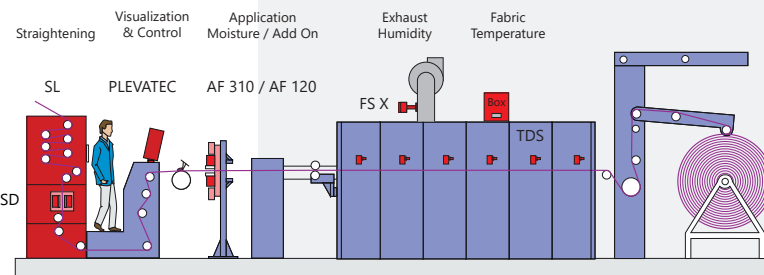
Contact us to explore how our sensor and control solutions can optimize your industrial process.



## Stenter frame with coating (water-based)

In energy-intensive processes like coating and subsequent drying or heat-setting, a modular sensor system enables maximum efficiency and quality right from the start of the line.

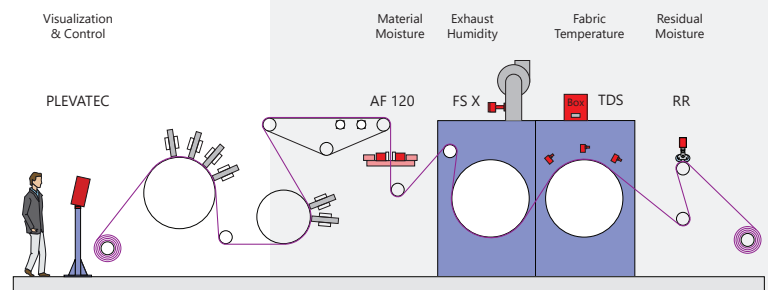
The SL weft-straightener ensures optimal fabric alignment and quality prior to coating – a key factor for uniform application. The AF application moisture sensor provides real-time monitoring of pick-up directly after the padder or coating unit, ensuring consistent add-on and helping to reduce the consumption of coating chemicals. TDS sensors measure fabric and air temperature to support precise control of the drying process and help prevent defects such as blistering. The FS X air humidity sensor enables targeted control of ventilation and thus, energy-savings.



## Nonwovens / spunlace production

For best energy management at spunlace/nonwoven production, a measurement and control concept is required.

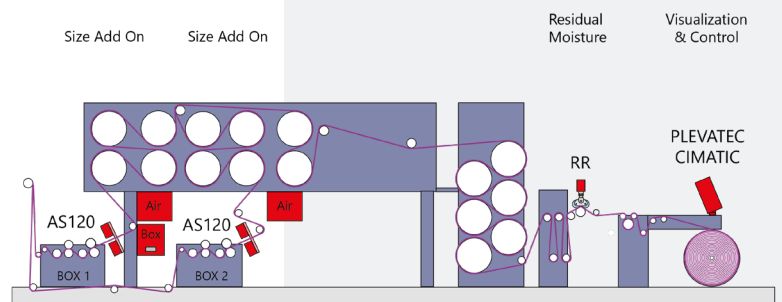
After the spunlace process, a contactless microwave moisture measurement AF 120 is used to determine the water content. Inside of the drum dryer, the fabric temperature is monitored with TDS sensors. This ensures that the quality of the spunlace nonwoven is not affected by overheating. The exhaust air humidity in the screen drum dryer is monitored by the FS X air humidity sensor and can be regulated in the production process via an exhaust control. For measuring the low residual moisture after the drum dryer and thus for controlling the fiber-dependent drying temperature, an RR sensor is used.



## Size application

Uniform size pick-up on warps increases the efficiency of the sizing looms crucially. The desired degree of size pick-up is controlled by a combined pressure setting and control system varying the pressure of the squeezing rollers in size box 1 and size box 2 individually.

The result is an increase and stabilization of weaving efficiency from 1.5 up to 4 % as well as reducing the amount of applied size by 10 up to 25 %. By this, wastewater load is reduced and only the required sizing agents used which is great for sustainability.



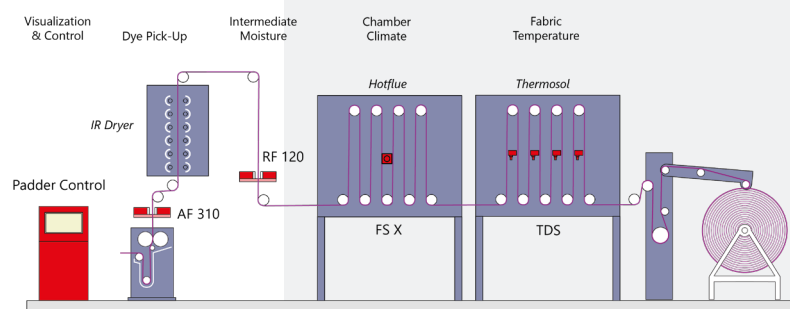
## Continuous dyeing

The uniform dye pick-up over the length and width of the fabric is essential for a perfect dyeing result on continuous dyeing processes Pad-Dry / Pad-Steam and ColdPad-Batch.

**The brand new AF 310** with a lot of improvements measures the dye pick-up and the Padder Control CIMATIC if required controls the pressure for left side, right side and center on dye padder.

Supervision of predrying after infrared dryer and control of thermofixation can be integrated as an option.

**These optimizations can be implemented not only in new production lines but also in existing lines as a retrofit.**



... further solutions, applications and options are always possible.

## PPB, MWB | Evaluation electronic



All of the PLEVA evaluation electronic boxes, which are used for the installation of the sensors TDS, FS, RR, OS (PLEVA Process Box PPB) and the microwave sensors AS/AF/RF (Microwave Box MWB), can be equipped with latest interfaces such as CAN-Bus and Profinet. This ensures the perfect integration of your process to enhance flexibility and transparency.

At the new MWB a connection of up to 2 sensors of AF 120, AS 120 or RF 120 is now possible.

## TDS | Fabric and air temperature



Fabric temperature sensors TDS are used to supervise a heat treatment process e.g. drying, heat-setting, curing, vulcanisation, shrinking, ageing and cross linking of textiles, carpet, paper, fibreboard, plastics and much more. TDS can be used in the hot zone inside dryers and ovens.

For special application in Ex-zones, TDS sensors with a special PLEVA Process Box can be supplied as well.

## FS | Air humidity



The air humidity measurement FS is used to minimize the energy consumption of drying processes in dryers and stenter. The maintenance-free exhaust humidity sensors type FS X measures the humidity of the process air to control the exhaust air rate for an economic efficiency on drying process. It can be used in processes up to 600 °C.

## RR | Residual moisture



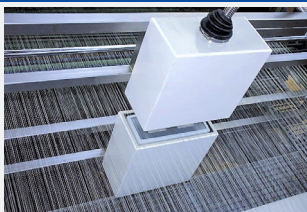
The measuring device RR and RR W measures the residual moisture of planiform fabrics. The type RR tandem roller is used for lower moisture values or the measurement of synthetics or mixed fibres with synthetics. The type RR W measures the residual moisture over the full fabric width on two rollers at knitted fabric or at surface sensitive fabrics.

## OS | Oxygen content



The oxygen sensor OS continuously measures the oxygen content and steam saturation in textile steamers. The content of oxygen has a direct impact on color fixation and reaction processes. Accordingly, the reliable oxygen measurement increases the production safety and allows considerable savings of steam.

## AS | Size application



Sizing is the key aspect for a high warp quality and high weaving-efficiency. The AS 120, which is based on microwave technology, measures the size application reliably and continuously. A special construction with integrated protection against steam vapours and high temperatures ensures a reliable and consistent measurement.

Improved measuring heads with higher sensitivity combined with a new, easy-to-mount construction enhance the usability of the AS 120.

## AF, RF | Material moisture



The application moisture measurement is based on microwave technology for contactless online measurement of moisture application, coating, continuous dyeing and residual moisture in planiform webs. The types AF 120 and RF 120 are single head measurements, the type AF 310 has 3 heads to measure left side, center, right side.

**The latest version AF310 features easy adjustment of the side heads and a robust construction for even harshest conditions.**