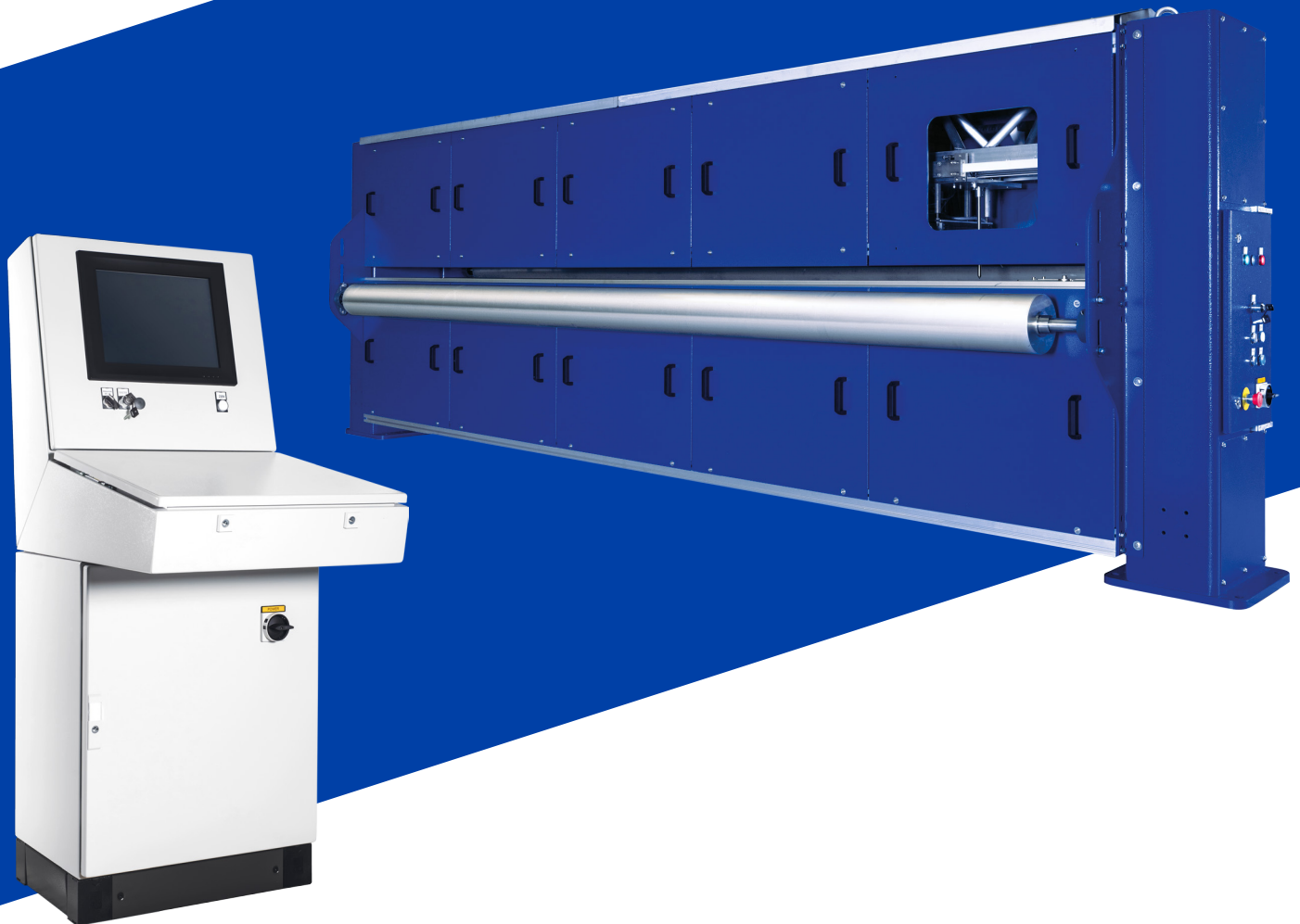




SEREL

Regulation & control
of nonwoven



STRC

OUTPUT CHECK

Checking the quality of
textile products at line
output.

ABOUT

In-line and continuous measurement of your textile cloth.

The STRC (Serel Travelling Regularity Control) has been designed to continuously measure the transverse and longitudinal uniformity of a textile (or other) product. It enables the checking of fine and light cloths as well as dense and thick products.

The X-ray generator is chosen for this particular application in order to ensure optimal levels of accuracy.

KEY POINTS



No radioactivity

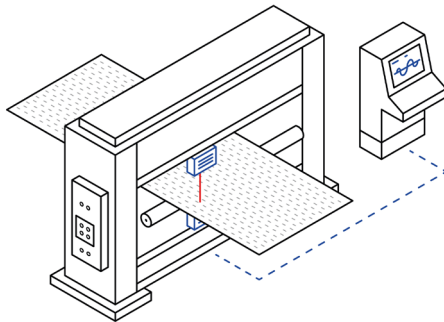
The system uses an X-ray generator and not a radioactive source. Therefore, it is totally safe when it is switched off.



Compton scattering

By combining the measurements of absorption and Compton scattering, the STRC makes it possible to measure highly heterogeneous blends of fibers such as glass and PP fibers. Indeed, this method is sensitive to both light and heavy materials in a blend.

OPERATION

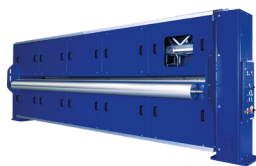


The measurement is carried out on a vertical basis across the cloth by an X-ray transceiver on a carriage that continuously moves from one extreme of the cloth to the other extreme.

The measured values are then collected and displayed in the form of a curve on the control PC and from there are saved for statistical analysis and quality control.

Moreover, the system is capable of generating a series of visual and/or audible alarms based on client criteria. In addition, it can even stop the line if there is a serious bias detected.

STRC UNIT



Travelling bridge

The STRC bridge is available in widths up to 7 m of product in steps of 25 cm.



X-ray generator

Depending on the characteristics of the final product for inspection, several X-ray generators of different energy levels can be used.



X-ray receiver

Similarly, the X-ray receiver can be adapted to suit the product and therefore the specific type of generator used.



Electrical cabinet

The electrical cabinet can be located either to the left or right of the STRC. Furthermore, it contains all of the system intelligence and in particular the gauge controller, which is the dedicated automatic device that has been developed by engineers at Serel.



Monitoring console

The monitoring console enables the display and recording of curves as well as access to all system functions.

OPTIONS



Thickness measurement

Either in addition to or in place of the X-ray density measurement system, the STRC can be fitted with a system for ensuring the thickness of the cloth, which is based on laser technology. Similar to the measurement of density, the measurement of thickness is continuous across the entire width of the cloth and it is displayed in the form of curves on the monitoring PC



Entry and/or output rollers

Height adjustable rollers for the travelling bridge are available as an option for integration into an existing production line. They can be matched accordingly in order to suit the most efficient progress of the textile.



Close loop

The STRC enables the automatic regulation of the quantity of material that enters the card in order to attain the target weight at the end of the line. However, this option is only available if the automatic operation of the STRC is coupled to the regulation of density at the entry to the card (SLDC).

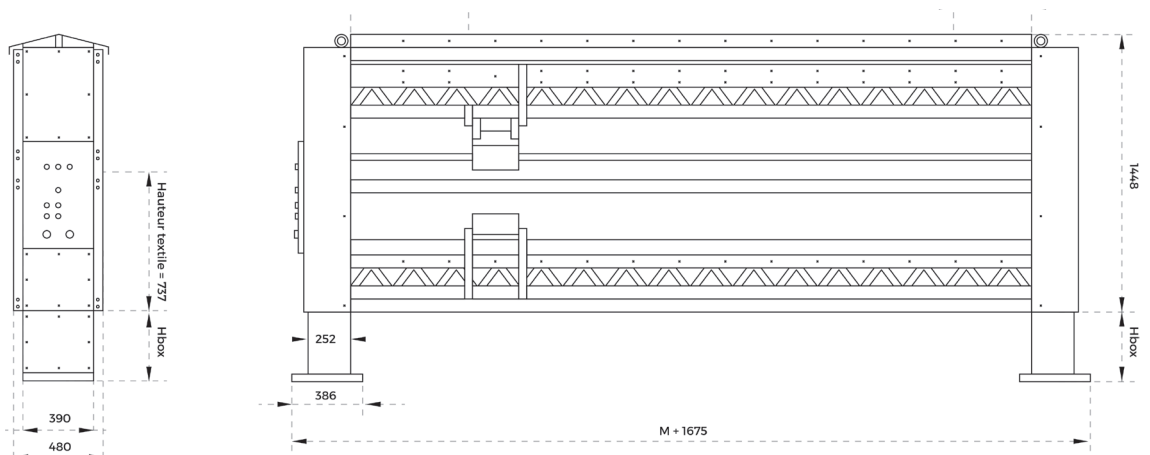
The STRC can also be connected to a PC of any kind via a Profinet or Profibus connection that permits the transfer of composite curves and curves which display information regarding the status of the STRC.



Remote maintenance

The presence of the PC or STRC enable Serel's engineers to access equipment extremely quickly and thereby minimize any production downtime.

TECHNICAL FEATURES



**DETAILS
OF THE UNIT**

Bridge	Cloth width	N (max : +/- 7 m)
	Dimensions	N+1800) x 790 x 1510 mm ³
	Color	RAL 7016 + RAL 5002
	Main electrical cabinet	Integrated into a panel
	Power supply	230 VAC / 10 A
	Available controls	Main circuit breaker X-ray ON/OFF Warning signal Drive activation Return parking Scan activation Others as required
Measurement gauge	Transmitter	X-ray generator
	Receiver	Scintillator with integrated cleaning brush
	Measurement range	Select between: Absorption method: 20 g/m ² to 3000 g/m ² Compton method: up to 3000 g/m ²
	Radiation energy	Absorption method: 4 to 10 keV Compton method: 50 keV
	Measurement frequency	Continuous measurement
	Measurement correction	Mechanical and zero compensation
	Operating temperature	5 à 50 °C
	Calibration	Automatic with self-learning
Gauge positioning	Type of motor	Siemens AC 0.37 kW drive
	Guides	High precision rails
	Maximum displacement speed	30 m/min
	Edge detection	Automatic
Console with user interface	Type	PC
	Dimensions	600 (L) x 1520 (H) x 807 (D) mm ³
	Color	RAL 7035
	Screen	LCD 15" TFT
	PC	Heavy duty PC - Windows
	Power supply	230 VAC with UPS
	Ethernet connections	2 x RJ45
	Connection with electrical cabinet	CAN OPEN
Alarms	8 configurable inputs and outputs	
Rollers	Positioning	Entry and/or output height adjustable
Remote maintenance	Type	Remote session access
Thickness measurement	Technology	Laser
	Sensor accuracy	up to 5 µm

**DETAILS
OF OPTIONS**