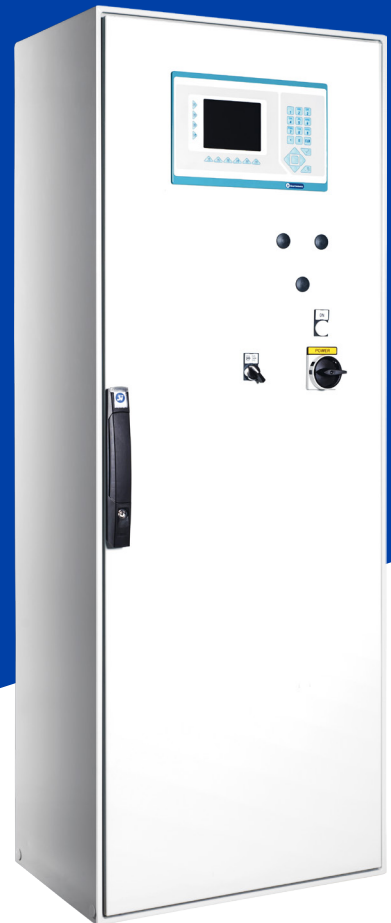
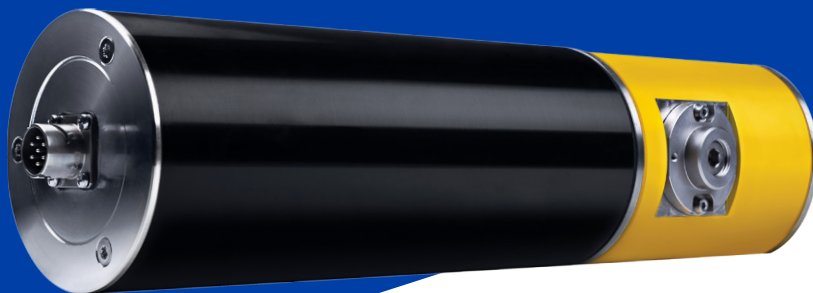




SEREL

Regulation & control
of nonwoven



SLDC

ENTRY REGULATION

Intended to adjust
the intake of textile fiber
at the entry to the line.

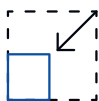
ABOUT

Developed by Serel at the request of manufacturers of textile lines.

The SLDC GC (Serel Lap Density Control Gauge Controller) is a measurement gauge that uses X-rays in order to adjust the material at the entry point of the textile production line. This results in a considerable improvement in its quality.

Thanks to the density measurement of the material that feeds the card and which is measured by the receiver, the SLDC GC can modulate the speed of the motors at the entry to the card and as a consequence increase the regularity of the product while reducing fiber consumption.

KEY POINTS



Compact

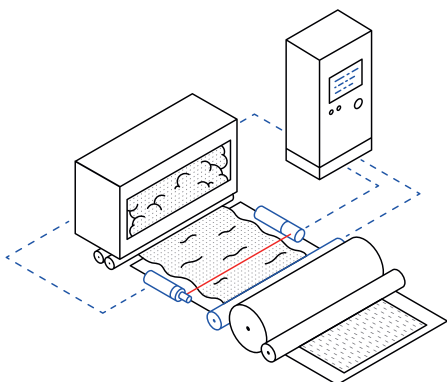
As the transceiver is very compact, the SLDC GC can be mounted on most installations, regardless of whether these installations are either new or existing.



No radioactivity

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

OPERATION



1. Emission of X-rays: Mounted between the loader and the entrance cylinders to the card, the X-ray generator emits radiation across the material

2. Measurement : Mounted opposite the generator and on the other side of the textile web, the receiver measures the residual radiation across the material.

3. Calculation : Absorption by the material is directly proportional to its quantity. This ensures that the SLDC GC can calculate the speed correction required for the motor at the entrance to the card.

4. Action : This adaptation of the speed of the entrance motor in real time enables the system to guarantee a constant feed of the carded fiber.

SLDC ASSEMBLY



X-ray generator

The generator produces radiation across the material.



X-ray receiver

The scintillator measures the residual radiation following absorption by the material.



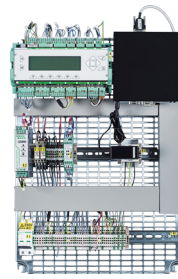
Electrical cabinet

The electrical cabinet contains all of the intelligence of the SLDC GC as well as that of the optional variator.



Electrical cabinet

In order to get the best out of your configuration, Serel provides various different versions of standard electrical cabinets. These are either to measure or are more specific to the needs of the client.



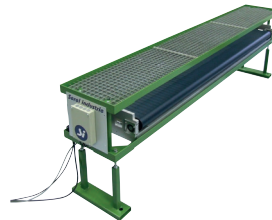
Maximum integration

Serel can also supply the SLDC only as an electrical panel for integration into your own installation.



Motorization of feeders

As an option, Serel can supply a variator as well as a geared motor for the controlling of the feeder cylinders. In this instance, the SLDC GC becomes an "SLDC GC internal drive".



Weighing table

The X-ray solution can be replaced by a weighing bridge with dimensions designed to suit requirements. It integrates the weighing module that is developed by Serel, high precision scales and a brushless geared feed motor of the table, which is operated by the variator located in the control cabinet.



Monitoring console

The SLDC GC can also be coupled to a monitoring console that provides a wide range of information and settings:

- Graph of measurements and speeds
 - Product database
 - Events history
 - Configurable alarm levels
 - Statistics
 - Report printing
 - Links to other computers
-



Remote maintenance

The installation of a remote maintenance PC enables Serel's engineers to access equipment extremely quickly and thereby minimize any production down-time.

**DETAILS
OF THE UNIT**

| | | |
|---------------------------|-------------------------|--|
| Electrical cabinet | Choice of cabinet | Box Box on feet Console Cabinet Electrics room |
| | Choice of power supply | 24 VDC 120 VAC 230 VAC 380 VAC |
| X-ray generator | Clear measurement width | up to 4.5 m |
| | Power supply | 24 VDC |
| | Energy | 30 or 50 keV |
| X-ray receiver | Accuracy | Up to 0.5% |
| | Temperature range | 5 - 50°C |

**DETAILS
OF OPTIONS**

| | | |
|--------------------------------|------------------------------------|--|
| Alternative measurement | Type | Weighing table |
| | Power supply | 230 VDC |
| | Clear width | up to 4,5 m |
| | Dimensions (example) | 3000 (L) x 440 (w) x 760 (H) |
| | Color | RAL 7035 |
| Motorization of feeders | Kit | Variator Motor Reduction gear |
| | 230 VAC with UPS | |
| | Power supplies | Variator: 24 VDC Motor: Three-phase 200-480 VAC |
| Monitoring console | Type | PC in Rittal console |
| | Dimensions (example of console) | 600 (L) x 1520 (H) x 807 (D) mm ³ |
| | Screen | LCD 15" TFT touchscreen |
| | PC | Industrial PC |
| | Power supply | 230 VAC with UPS |
| | Ethernet connection | 2 x RJ45 |
| | Connection with electrical cabinet | CAN OPEN |
| Remote maintenance | Type | PC with remote intervention software |
| | Power supply | 230 VAC with UPS |
| | Connection | Ethernet |

Non-binding document. Please note that technical features are subject to change without notification