

# LASER Series 6000

High-end diameter measurement for hose and tube extrusion lines





### LASER Series 6000

High-end diameter measurement for hose and tube extrusion lines



### LASER Series 6000 for high-end diameter measurement in the area Non Destructive Testing (NDT)

The innovative LASER Series 6000 opens up a new era of precision diameter measurement. The LASER Series 6000 devices expand SIKORA's current range of intelligent diameter gauges with three high-end models. They unify the intelligent design with the highest precision and reliability.

The LASER Series 6000 is versatile in its use and measures transparent as well as non-transparent products.

Up to 5,000 measurements per second and axis, all with extremely high single value precision, enable an optimum line control, provide reliable statistical data, and allow the detection of lumps and neckdowns at the same time. The SIKORA gauge heads measure the diameter of hoses and tubes with impressive precision and repeatability. Three gauge head models cover product diameters from 0.2 to 78 mm.

#### Typical features

- Innovative CCD line sensor technology combined with pulse controlled laser diodes
- Measures transparent and non-transparent products with impressive precision
- Up to 5,000 measurements per second/axis
- Integrated lump detection function
- Integrated LCD display
- Universal interface module for all connections
- Optimum installation and protection of connection cables
- Two-year warranty



#### Integrated display in the gauge head

The devices include an integrated LCD display that provides the operator with diameter values at one glance, directly at the measuring device.

#### Lump detector function

The high measuring rate of the diameter measuring devices also permits the detection of lumps and neckdowns. With the two-in-one system, investment costs are reduced. In addition, there is more space in the line as only one gauge head has to be installed.

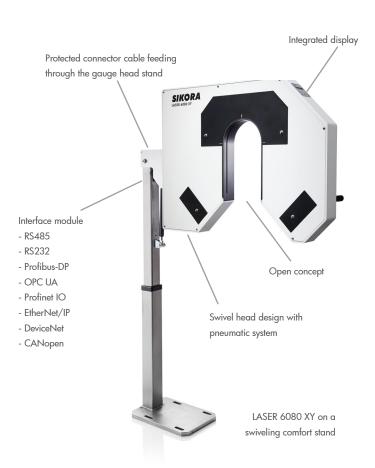
#### Functional design in perfection

A special feature of the LASER Series 6000 is the swivel type gauge head. It allows for the gauge head to be easily moved up and out of the extrusion line. The measuring heads are open at the bottom to prevent dirt and water from falling into the measuring plane. The feeding of the connection cables to the interface module is protected against water, dirt and mechanical influences, directly in the gauge head stand.

The opening range of the gauge is twice as large as the measuring range, for an easy and safe passage of the product and possible joints.

#### Interfaces + Industry 4.0

A universal interface module is directly integrated into the gauge head for any connections such as RS485, RS232, Profibus-DP or alternatively an industrial fieldbus such as Profinet IO, EtherNet/IP, CANopen, DeviceNet or OPC UA. With these interfaces, the device series is best equipped under the aspect of "Industry 4.0".



## LASER Series 6000



High-end diameter measurement for hose and tube extrusion lines

### Technical Data LASER Series 6000

Product Name	Product Diameter	Accuracy*	Repeatability	Exposure Time	Dimensions
LASER 6020 XY	0.2 - 18 mm	± 0.2 µm	± 0.1 µm	0.2 μs	345 x 200 x 65 mm
LASER 6040 XY	0.5 - 38 mm	± 0.5 µm	± 0.2 µm	0.2 µs	420 x 290 x 65 mm
LASER 6080 XY	1.0 - 78 mm	± 1.0 µm	± 0.5 µm	0.2 µs	535 x 705 x 65 mm

#### Measuring Rate

2,500 measurements/sec/axis

5,000 measurements/sec/axis for LASER 6020 XY (optional)

#### Interfaces

RS485, RS232, LAN

Optional: Analog output or alternatively industrial fieldbus (e.g. Profinet IO, EtherNet/IP, Profibus-DP, CANopen, DeviceNet, OPC UA)

#### **Power Supply**

100 - 240 V AC  $\pm$  10 %, 50/60 Hz, 30 VA

Technical data is subject to change

SIKORA AG (Headquarters) BRAZIL Bruchweide 2 28307 Bremen Germany

Ph.: +49 421 48900 0 email: sales@sikora.net

www.sikora.net

sales@sikora-brazil.com

CHINA sales@sikora-china.com

FRANCE sales@sikora-france.com sales@sikora-india.com

sales@sikora-japan.com

ITALY

sales@sikora-italia.com

MALAYSIA

sales@sikora-korea.com

KORFA

sales@sikora-sea.com **MEXICO** 

sales@sikora-mexico.com

TURKEY sales@sikora-turkey.com UNITED ARAB EMIRATES

sales@sikora-uae.com

**POLAND** USA sales@sikora-poland.com

sales@sikora-usa.com

<sup>\*</sup>  $\pm$  0.01 % of measuring value