

Multi-Strip Measurement

Overview

SCAN-A-LINE™ measurement systems can be configured to provide the simultaneous measurement of up to four strips with a single sensor. This option can be of benefit in applications such as multiple extrusions, the monitoring of strip width and presence prior to the joining of components, multiple slitting operations, and other similar applications. Multi-Strip Measurement can be done with any standard SCAN-A-LINE™ 10XAS-Series measurement sensor.

The **Model MPX Measurement System** can be configured for one to four widths. Up to four strips can be monitored and charted on the data screen. Each strip can be of a different width. The number of strips can vary as long as there are no more than four strips in total. The narrowest strip measurable is 1" [25mm]. A gap of 0.5" [12.7mm] is required between strips and at the beginning and end of scan window.

Calibration

Calibration of the sensor system is the same as with any standard SCAN-A-LINE™ measurement system. Typically a wide and a narrow strip of known width are used for calibration, a single object on the emitter at a time. Once calibrated, the system will provide measurement data for multiple strips throughout the active range of the sensor.

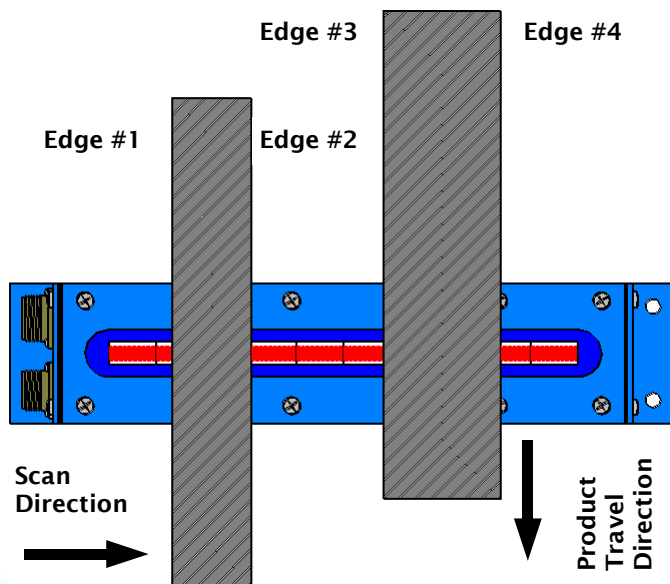


Figure 1: Multi-Strip Measurement on Single 10XAS-Series Sensor

Features

- Four analog outputs representing absolute width, deviation, position, or guiding
- Outputs are scaleable.
- Easy to calibrate, the same as a single sensor system.
- Independent high and low limit for each strip.
- RS-232 output (ASCII) with selectable decimal point.
- Display (local or remote) of measurements or graphs (with Model MPX 3 or 4).
- Versatile – up to 4 strips at once.

Multi-Strip Measurement with Model MPX

The Multi-Strip Measurement can be configured as follows:

MPX1.0 Sends a string of "raw counts" representing the Widths. choice of RS232 or RS485.

MPX2.0 Sends a string of "raw counts" representing the Widths. choice of RS232 or RS485. Choice of 3 or 6 Analog Outputs.

MPX3.0 Computer Interface (Windows). Real-time Data display, Reports, and Data File Storage. Optional Remote Display.

MPX4.0 Computer Interface (Windows). Real-time Data display, Reports, and Data File Storage. Optional Remote Display. Optional Touchscreen Interface.

SCAN-A-LINE™ Multi-Strip Measurement System Components

- SCAN-A-LINE™ 10XAS-Series Single Sensor
- Application-oriented processing unit – Model MPX - all levels
- Application-oriented software – Multi-Strip Measurement for up to 4 strips
- Optional remote display of Width
- Additional configurations combining width measurement, deviation analogs, and edge position analogs are available with special engineering.

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