Width measurement of sheet or strip products is crucial to modern manufacturers. Tight profit margins and the demand for quality make it imperative that processes operate efficiently. Statistical process control (SPC) procedures and ISO-9000 standards require reliable measurement documentation. Measurement of products ranging from extruded shapes to flat objects moving at high speeds present problems that other width measurement systems are unable to solve. The cost of classic width measurement system can also be prohibitive.

SCAN-A-LINE™ Width Measurement Systems (WMS Systems) assist with the management of difficult width measurement problems. They provide low maintenance and easy-to-operate width measurement systems utilizing patented SCAN-A-LINE™ non-contact measurement sensors. From blown film to high-speed coil processing lines, these systems are versatile enough for the most demanding measurement environment. With an actual linearity of 0.024 inch [0.61mm] @ 2-sigma, SCAN-A-LINE™ WMS systems meet the accuracy requirements of virtually any measurement application.

- Linearity of 0.024 inch [0.61mm] 2-sigma
- Patented Scanned LED Technology
- NO MOVING PARTS
- Solid State Reliability
- No Light Sources to Replace
- High, Low and Target Limit Relays
- Multiple Analog Outputs Available
- Sensor FAULT Output
- Serial I/O for Data Output to Computer, Data Logger or Printer (optional)
- Several Customer Interfaces Available
- Centerline Position Output Available
- Custom Software Available
SCAN-A-LINE™ Width Measurement System Components:

- 10XAAS-Series Single- or Dual-Sensor System.
- Multi-Purpose Processing Unit – Model MPPU.
- Up to 50 linear feet [6.1m] of cabling.

The WMS System utilizes a single-or dual SCAN-A-LINE™ Auto-Sync 10XAAS-Series sensor system consisting of an emitter with one receiver each and interconnection cabling of 15 feet [4.6m] standard. The receiver interprets the scans from the emitter to produce edge detection signals. The Model MPPU then translates these edge position signals into width values with a proven linearity of 0.024 inches [0.61mm] @ 2 sigma.

Multi-Purpose Processing Unit – Model MPPU Features:

- Microprocessor with up to eight integrated co-processors.
- 32K of programmable battery-backed RAM plus a customized EPROM.
- Two serial communication ports (one available for data output, the second for optional custom input/output).
- One deviation & One absolute measurement analog output included
- Tachometer input standard; other digital inputs optional.
- Statistical reporting options available.
- Various customer interfaces available.
- Remote display options available.

All mathematical operations are performed using IEEE floating point to ensure calculation precision. The serial and analog outputs can be formatted for a variety of Programmable Logic Controller (PLC) protocols or computer interfaces. The customer interface may be located on the processing unit or remotely mounted.

Customer Interfaces for Model MPPU:

- Model MPPU Level 1: RS-232 Communications Customer Interface
- Model MPPU Level 2: RS-232 Windows® Customer Interface
- Model MPPU Level 3: LED Display/Keypad Customer Interface
- Model MPPU Level 4: LCD Touchscreen Customer Interface

SCAN-A-LINE™ Auto-Sync Sensor – 10XAAS-Series Sensor Features:

- Unique SCAN-A-LINE™ Light Emitting Diode (LED) scanning technology provides the reliability of a 275-year mean-time-between-failure (MTBF) light source.
- LED light sources scan electronically up to 2000 inches [50.8m] per second.
- Standard System Employs 40 inch [1016mm] sensors for best overall product length variability.
- SCAN-A-LINE™ 10XAAS-Series sensors are quartz-crystal controlled and never drift out of adjustment.
- Optional ULTRA-TOUGH™ enclosures for sensors – the ultimate in crash protection.

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