



## AccuScan Thickness Profile Gauge

- **Ideal for cross transfer installations and cross machine scanning applications to 24" width.**
- **Open ended scanner frame maintains dimensional stability during temperature fluctuations.**
- **Non contact, Non intrusive, Non nuclear measurement.**
- **Accurate, reliable, proven technology kept current since 1974. Numerous systems in operation over 20 years.**
- **Hundreds of on-line installations in heavy industrial environments. Millions of equipment on line hours in instrumentation and closed loop control applications.**
- **Automatically self calibrating. Robust design and construction. Performance guaranteed.**



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## Features of the AccuScan C-frame Thickness Profile System

- Thermoelectrically cooled lasers for long life and trouble free operation.
- Computer calibrates laser measurements to NIST traceable standards.
- All traversing mechanism components are located overhead, out of process residues. Vee rails and wheels are case hardened for long life.
- Differential laser heads are protected from startup conditions and residues by scanner retract signalled by the plant PLC.
- Industrial grade computers are used throughout the system. There are no custom circuit boards in the computers and the boards used are multisourced. Computers are provided with extra cooling fans.
- Operator interface may be located remotely, coupled to the system scanners by optical fiber.
- The AccuScan System is a complete, turn key system, including scanner frames, scanner drives and logic and industrial packaging, and software, not just a kit of sensors and logic to make them make numbers.
- Laser heads are a unique, patented design that provides inherent linearity, not computer guesses at what the true measurement should be. Lenses are precision glass instead of plastic and the mounts are ½" bolts. The laser heads are designed, developed and manufactured by Automation Industries.
- All AccuScan scanning frame types are designed to eliminate measurement error due to expansion and contraction of the frame materials. Purchaser is provided with manufacturer and manufacturers part numbers for out sourced components such as motors, motor controllers, computers, etc.
- Antifungal, antihumidity coating on system circuit boards.
- The AccuScan C-frame utilizes a unique, patented design and construction that eliminates the thermal instability that is inherent in other cantilevered C-frames. There are two versions available, one that provides cross machine scanning with a stepper motor drive, the second is used in cross machine transfer sections where the cross machine profile is presented to the scanner by the motion of the material on the conveyor. These systems incorporate a simple ball screw drive for retract and calibrate purposes only.

### Specifications

- System Supply Voltage: Computer grade supplies for system electronics, 120 VAC, 60 Hz, single phase standard, others available on special order. Draw is approximately 5A each @ 120VAC for the Cross Machine Profile scanner electronics and the Operator Interface. These should be supplied by a UPS. The Cross Machine Profile scanner motor controller requires a separate 120 VAC supply, 20A circuit.
- Cross Machine traversing rate: Programmable, up to 10 inches/second with programmable accelerate and decelerate ramps.
- Thermal Measurement Drift: Negligible over a range of 0 degrees F to 130 degrees F ambient temperature.
- In Process Accuracy: +/- 0.0025" over a 2 ½" product thickness range and supported by system acceptance proof of performance procedures. Specified in this manner assures that the specified accuracy is realized accuracy and encompasses the sensor heads, system electronics, scanning frame and plant environment. Realized accuracy is the only specification that delivers the results to the plants bottom line.
- Also available for a 6 ½" product thickness range, accuracy over the range is +/- 0.004".
- Profile Sensor Resolution: 0.001"
- Electronics Enclosures: NEMA 12, gasketed enclosures.
- Scanner Frame Materials: Steel structural tubing, fabricated steel, with case hardened, precision Vee track.
- Coatings: Primed, followed by cover and texture coats of polyurethane enamel.