

Tackle Web Guiding and Edge Control with CrossCheck™

Bytewise Measurement Systems explains why [CrossCheck™ Laser Profile Sensors](#) are perfectly suited to monitor and control web based materials and extrusions. One or two laser profile sensors can be used to measure web width and thickness as well as provide height based feature tracking and edge guiding. CrossCheck™ will drastically improve the precision of operators using Micrometer snap gages to measure thickness online. The line laser based technology measures flat sheet and extruded products like rubber, plastic, wood, composite materials, PVC and metal. It requires no reflective tape, LED arrays or back lighting, like camera based systems that require cleaning and maintenance to keep operational. The system can also measure shape-based parameters like thickness, step height, width, angle, radius, location, gap and depth. The affordable CrossCheck™ 3D laser measurement system is used by R&D, Engineering, Production, Quality and Maintenance personnel to validate product dimensions and tolerances. Academia and R&D facilities use CrossCheck™ for product development and material studies like soft material and parts with profiles that can't be effectively measured by hand calipers.

([Vocus/PRWEB](#)) November 19, 2009 -- Extrusions and flat web based materials must be measured to control the process, save material cost, insure product tolerance and quality. Width and thickness are as critical to multi layered fabrics as edge guiding is to windup and/or splicing operations. Bytewise Measurement Systems explains why the affordable [CrossCheck™ Laser Profile Sensors](#) are perfectly suited to monitor and control web based and extruded materials. One or two laser profile sensors can be used to measure web width and thickness as well as provide height based feature tracking and edge guiding. The line laser based technology measures flat sheet and extruded products like rubber, plastic, wood, composite materials, PVC and metal.

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It requires no back lighting like camera based systems. Cameras need an LED array, reflective tape or back light to distinguish and contrast the edge of the material, which leads to dirt and material buildup on the light source underneath the material line. Operators must often clean and maintain the system. The CrossCheck™ pre-calibrated 3D laser measurement sensors mount over the material to profile the edge of the product. The built in laser line illuminates the surface of the material to accurately measure the edge width and thickness to greater than 0.030mm (0.0018”). The physical geometry is also measured and can be used for height based feature tracking as well and edge guiding for windup or splicing applications.

The fact that the CrossCheck™ Measurement System is non-contact insures a stable reading every time. The sensors can be mounted over a precision roller to track, measure or calculate thickness of the edge while at the same time auto-zeroing to the roller surface for precise gauge

control or monitoring. Operations that manually use Micrometer snap gages and measuring tapes can drastically improve the repeatability and precision of product thickness and width. If the material is ridged or cannot be guided over a precision roller the sensors can be mounted on a C-Frame or O-Frame with one sensor on top and one the bottom to calculate thickness and for edge guiding. This also compensates for vibration or pass-line movement of material passing through the measurement station.

The CrossCheck Software Viewer displays real-time product width, thickness and geometric dimensions. The CrossCheck™ laser sensors are the primary measurement device while the CrossCheck™ Software provides users with simple to use “shape tools” that act as virtual micrometers. Set up of the shape tools is simple and intuitive. [Shape Tools](#) are used to fit data to a Circle, Rectangle, Vertex, Line, Gap, Bump or Step Change. Shape Tools are used to set up tolerances and calculate dimensions to control thickness, width, radius, diameter, height, angle, gap, depth and location of key features. The unique Auto-Anchor and Data Leveling cancel out and stabilize the profiles displayed on screen. Bytewise also designed the CrossCheck™ product line for a wide variety of factory automation applications including process control, part inspection, robotic guidance, and shape check for industries including; automotive, aerospace, rubber, plastics, wood, metal and building materials.

“CrossCheck™ pre-calibrated sensors are easy to use and perfect for a variety of process gauging applications. Extrusion and Web based inspection as well as component part features can be measured with high repeatability and precision” says Mike Snow, Product Manager.

The entire organization now benefits from the CrossCheck™ high resolution, low cost 3D laser measurement system. R&D, Engineering, Production, Quality and Maintenance personnel use CrossCheck™ to validate product dimensional quality. An Ecommerce Online Store is now open for users to purchase [CrossCheck™ Laser Profile Sensors](#). Purchase a starter kit for \$9950.00 or build a system starting at \$9490.00. The CrossCheck™ software can set up Pass/Fail trigger alerts and output two analog feedback control loops for direct machine control. Data can be collected and stored to a file and custom software solutions can be written to utilize the raw X-Y coordinates over Ethernet. The product is backed by a 30 Day No Risk Evaluation period and one year manufactures warranty.

About Bytewise Company- Bytewise is a premier supplier of non-contact, profile measurement systems since 1989. Located in Columbus, Georgia, specializes in measurement solutions for the tire, extrusion, roll forming, forging, casting, and web process industries.
www.Bytewise.com

CrossCheck™ 3D line laser sensors solve everyday measurement problems. To purchase or get more information on the [CrossCheck™ Laser Profile Sensor](#) contact Michael Snow at Bytewise 1150 Brookstone Centre Parkway, Columbus GA, 31904. Telephone (678) 807-8400, FAX (706) 323-0178. www.BytewiseSensors.com



CROSS CHECK
LASER PROFILE SENSOR

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