

Exact Metrology Introduces PolyScan XL



PolyScan XL scanning a car door

Exact Metrology, a comprehensive 3D metrology service provider and hardware sales company, now offers PolyScan XL. Part of the Polyrix PolyScan Surround 3D Scanner family, these scanners are motionless by design during the inspection.

"Their unique calibration avoids the need for data alignment or sticker targets, and multiple baselines increase accuracy when measuring points," said a company spokesperson.

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Forest City Gear Adds Zeiss Accura CMM

Forest City Gear has expanded the capabilities of its Quality Assurance Department with the addition of a Zeiss ACCURA Coordinate Measuring Machine (CMM).

The next-generation bridge-type Zeiss is Forest City Gear's fourth CNC inspection system, and is particularly suited for very fast, complete analytical inspection of all types of high precision fine- and medium-pitch cylindrical gears. A variety of interchangeable Zeiss sensors provide a high degree of flexibility and faster calibration, approach and scanning for lead, involute, pitch, surface finish and other critical features across a wide size range.

The system also features a particularly compact and ergonomic design,

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Kitamura Machinery Announces Distributor Partnership with Next Industries

Kitamura Machinery, a manufacturer of precision horizontal, vertical and 5-axis machining centers, has announced a new strategic distributor partnership with Next Industries, a provider of machine tool sales, services and shop floor solutions, with its headquarters in Shelby Township, MI, and a facility in Henderson, KY. The partnership includes exclusive distribution of Kitamura's vertical, horizontal and 5-axis machining centers, accessories,

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Smith Metal Products Adds 3D Binder-Jet Metal Printing Capability

Smith Metal Products has added 3D Binder-Jet Metal Printing capability so customers can evaluate and verify their product run utilizing a MIM-like process without the cost of building a test mold.

"Smith Metal's 3D Binder Jetting is the only form of metal powder 3D printing where a part is fully formed before thermal energy is used to sinter

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Byron Products Adds Complete Tube Bending Assembly to Its Offerings

Byron Products, a thermal processing provider, has added tube bending manufacturing to its list of offerings. Tube bending is the metalforming process used to form pipes and tubing permanently. The in-house process incorporates brazing and welded fittings for complete tube assemblies used in a number of industries, as well as for hydraulic and compressor line assembly.

Aircraft tube assembly is a specialty area for Byron, with flared fitting

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■ See Pg. 10

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■ See Page 36

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New series of motor spindles with high power density.

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Fast LM Guide



"With speeds reaching 15 m/s, THK's Type FHS is the fastest LM guide available on the market today. The performance of the Type FHS makes it ideal for applications requiring the fastest motion, including robot

transfer devices and laser cutters," said a company spokesperson.

The Type FHS can be installed in horizontal, vertical, inverted and wall-mounted orientations. Four-way equal load rating in all directions (radial, reverse radial, right and left directions) helps ensure high rigidity. In addition, The FHS is constructed with components designed to provide stability during extremely high rates of speed.

The Type FHS is available in four sizes with LM rail widths ranging from 34 mm to 63 mm in standard or long block types.

For more information contact:
THK America, Inc.
200 E. Commerce Drive
Schaumburg, IL 60173
800-763-5459
www.thk.com

Custom Miniature Thrust Ball Bearings in Screwdriving Spindles

Auburn Bearing & Manufacturing recently assisted a customer application involving custom screwdriving spindles. The thrust bearings were located on shafts that are parallel to each other on 0.750" center lines.

"The customer had been purchasing a standard-sized miniature thrust bearing from a large bearing manufacturer for many years," said an Auburn spokesperson. "The three-piece bearing was being used in a fairly high volume (20 to 30 bearings per month) in

the custom screw driving equipment and was being replaced on a regular basis.

"Because of the bearing's open style, it is subject to all sorts of contaminants and hard to keep grease in. The bearings needed to be completely taken apart and lubricated on a weekly basis. With this weekly maintenance, the typical life of each bearing was three months, and at the end of its life, you could see significant wear on all components of the bearing."

The spokesperson continued, "The customer came to us frustrated by the loss of time and productivity they were experiencing from replacing a significant amount of prematurely failing miniature thrust ball bearings. They were looking for a new solution that would extend the bearing's life by keeping lubrication in and keeping debris out as well as reduce the downtime and inconsistencies caused by these bearing failures."

Auburn Bearing proposed a one-piece banded thrust ball bearing that would utilize a special lubricant. This custom design would serve to protect the bearing from debris and other contaminants as well as contain the grease inside the bearing. "After a three-month trial run using this new solution, the customer found that the bearing race and balls remained in great condition without having to perform any maintenance on them," said the spokesperson.

According to Auburn Bearing, the solution increased the life of each bearing by over 200%; improved machine consistency by reducing bearing contamination and bearing failure; and re-



duced the cost of labor and downtime by eliminating the need to clean and re-lubricate bearings, previously performed on a weekly basis.

For more information contact:
Auburn Bearing & Manufacturing
4 Route 350
Macedon, NY 14502
315-986-7600
sales@auburnbearing.com
www.auburnbearing.com

Laser Flash Lamps and Arc Lamps



"Our series of lamps operate at high power providing for high efficiency, stability, long lifetimes and low cost per hour of operation," said a company spokesperson. Typical performances include precision marking, engraving, cutting, drilling, welding and annealing in many industrial and automotive applications. All lamps are guaranteed to meet the original manufacturer's specifications."

REFLEX Analytical offers standard high quality DC pulsed flash lamp replacements (Xenon, Krypton), Q-switched replacement lamps for Nd:YAG lasers and CW laser arc lamp replacements for solid-state lasers.

For more information contact:
REFLEX Analytical Corporation
P.O. Box 119
Ridgewood, NJ 07451
reflexusa@att.net
www.reflexusa.com

Electromechanical Equipment Optimized for Design and Manufacturability

Aved Electronics has introduced custom electromechanical box build assemblies that are fully optimized for design and manufacturability (DFM) to provide a complete connectorized and 100% tested solution, supplied as a single product with one SKU.

Aved Electromechanical Box Build Assemblies provide multiple OEM benefits including DFM, component selection and sourcing, documentation, 3D modeling, manufacturing and 100% operational testing. Featuring one SKU which simplifies inventory control, these assemblies can also incorporate fully connectorized front-to-back panels.

Aved Electromechanical Box Build Assemblies are suited for OEMs, integrators of industrial controls, large scale security systems, power distribution panels, and industrial and medical robotics—offering a solution with regard to back engineering, real-world sourcing experience, dock-to-stock efficiency, Kan-



Ban and inventory management systems. Aved is ISO 9001, ISO 13485, and ITAR registered.

For more information contact:
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