

PG-Series Bore Gages

MOUNT DIRECTLY TO MACHINES

With no need for electrical or air connections, Sunnen's PG-Series bore gages can be mounted directly to machining stations, making them immune to fluctuations in line voltage or air pressure. The unique fixtures enable a two-minute setup, eliminating the need for plug gages, mikes, Jo blocks, master rings or micrometers.

According to the company's press release, the PG-Series bore gages remove complexity, skill and "feel" from the measurement process, allowing machine operators to confirm part size with a visually intuitive analog scale. The speedometer-type scale provides readouts down to 0.000050" for inspection of machining operations or fast sampling of large vendor lots.

The gages are available for shops of all sizes and can be purchased outright or leased on a monthly basis directly from Sunnen. The lease program includes maintenance and system updates. Models are available for gaging IDs from 0.090" to 4.310". Metric models cover IDs from 2.0–109.47 mm.

The PG-Series bore gages can examine the entire bore for diameter, taper, barrel, bell mouth, out-of-round and lobbing. A sliding faceplate with adjustable stops permits end-to-end examination of bores. Stops can be set to examine particular sections of the bore.

Accuracy is not affected by temperature, moisture, air pressure or vibration. The floating reed system



helps to eliminate friction and wear to maintain repeatability and linearity, no matter the gage's age or amount of use. A PC-Series bore gage system comes standard with everything needed to measure any bore size in its range. Accessories are available for special requirements.

For more information:

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St. Louis, MO 63143
Phone: (314) 781-2110
Fax: (314) 781-2268
bdavis@sunnen.com
www.sunnen.com

VMC Infimatic Control

COMPATIBLE
WITH
STANDARD
G CODES
AND PART
PROGRAMS

MAG Fadal recently announced its FX series will be available April 2008 with the Infimatic Freedom NC2000, a digital control for metal-cutting machine tool applications. The control is compatible with standard G codes as well as part programs created for Fadal CNC controls.

According to the company's press release, the operator pendant offers a full keyboard, integrated mouse and LED-ringed pushbuttons. VeriCode, the system's color-coded editor, boasts real-time syntax and semantic verification. It also has the ability to facilitate background editing during the machining process.

Special editions of both the VMC 3016 FX and the VMC 4020 FX are being offered on a limited basis prior to the April 2008 release. These machines include a 10,000 rpm air/oil 40-taper spindle, coolant thru-spindle feature, dual-arm tool changers with 24-tool capacity on the 4020 and 20-tool capacity on the 3016.



Both versions feature box-way construction with integral flame-hardened ways complemented by Steinmeyer ETA+ dual-mounted ball screws. Rapid traverse is 1,000 inches per minute with a cutting feed rate up to 800 inches per minute.

For more information:

Fadal Machining Centers, LLC
20701 Plummer Street
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ALL GEARED UP

FA Advance Wire EDM Series

EXTRACTS DATA DIRECTLY
WITHIN CONTROL



MC Machinery Systems, Inc. introduces its new FA Advance Wire EDM series featuring an M700 series control. The Windows-based system with a 15" LCD screen provides a menu for easy navigation, according to the company's press release.

The 3D CAD feature can now import Parasolid files, extract 3D model contours and create NC data directly within the control. 2D CAM helps import DXF and IGES files, revise geometry or define additional paths. The series has the world's first 3D-adaptive EDM control and onboard support is now standard on the machine. A cost/save mode reduces consumable and electrical costs, and a self-cleaning device feature helps reduce maintenance times.

For more information:

MC Machinery Systems, Inc./
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Helix Wiper Geometries

REDUCE VIBRATIONS AND INCREASE TOOL LIFE

Seco Tools Inc. recently unveiled Helix wiper geometries for operations in high-feed machining of case hardened steels where standard wipers cannot be used. According to the company's press release, the Helix concept is designed to reduce vibrations, increase tool life and increase the number of parts produced per cutting edge. It has wipers on both sides of the corner radii that are standard, but the protection chamfer is twisted from negative to positive or positive to negative.

Seco's wiper geometries enable the operator to obtain a smooth surface by lessening the effect of the workpiece feed pattern created during conventional turning. Helix wipers are available in brazed format CBN050C or a coated low-CBN grade.

"Reduction in production time along with the near doubling of tool life equates directly to significant savings in total production costs," says Henrik Sandqvist, Seco Tools Inc. product manager of advanced materials. "The result is better than that of conventional case-hardened steel finishing where slower speeds and feeds

are typical and additional grinding processes are often required."

For more information:

Seco Tools
11177 East Eight Mile Rd.
Warren, MI 48089

Phone: (586) 497-5000
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secotools.us@secotools.com
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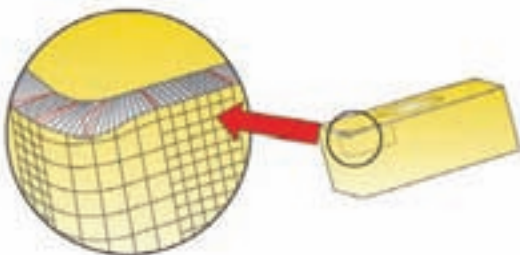
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The Digimar 817 CLM height measuring instrument from Mahr Federal will be featured at WESTEC 2008 from March 31–April 3. The gage offers three distinct ways to initiate measurement. Along with normal keypad initiation, the quick mode feature allows the cycle to be initiated by simply pushing the carriage in the direction of the object. Speed keys allow the operator to move the carriage to the desired position to start a measurement. Combined with the teach-in mode, these features can reduce inspection time for a miniseries consisting of only a few test pieces.

According to the company's press release, the gage offers an air bearing system facilitating smooth movement for positioning. It boasts an optical incremental measuring system with a double reader head that's insensitive to dirt. The probing system provides high repeatability, and a stainless steel guide column with precision ball bearings tracks the measuring head.

The Digimar 817 CLM can func-

tion in both 1D and optional 2D, including dynamic measurement functions with analog display such as max, min and max/min. Data can be printed via a USB-connected printer and saved on integrated USB memory or output using a RS232-interface. Mahr Federal's MarCator 1081 digital indicator and MarCator 1088 digital indicator will also be on display at WESTEC 2008.

For more information:

Mahr Federal Inc.
1144 Eddy Street
Providence, RI 02905
Phone: (401) 784-3100
Fax: (401) 784-3246
information@mahr.com
www.mahr.com

SafeTap Plus

PROVIDES SAFE AND
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ENVIRONMENT



ITW Rocol recently unveiled a new water-based tapping fluid with a custom blend of synthetic additives that provide cooling properties with the viscosity of a straight oil. According to the company's press release, SafeTap Plus gives higher viscosity and lubricity than

many oil-based products while also providing rust protection. This, in turn, creates a potentially safer and cleaner working environment for employees. The fluid contains no mineral oils or solvents and leaves no oily residue on work pieces. SafeTap Plus is available

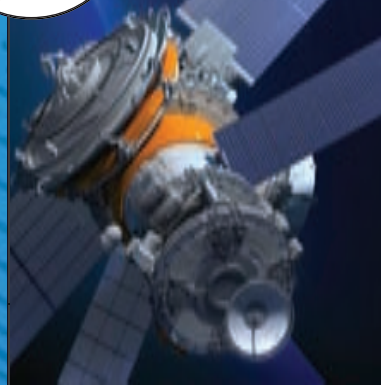
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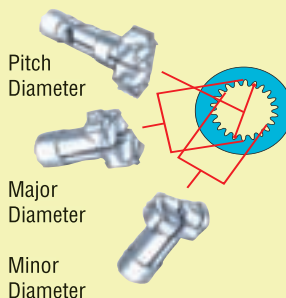
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NovaTech, Inc. has introduced an LED light ring for laser and micro-welding microscopes that provides illumination without heat or fiber optic cables. According to the company's press release, the universal ring light features 60 LEDs and includes a 110 VAC power supply with variable brightness. The lamp's color temperature is 6400K with a rated lamp life of 17,000 hours. An adaptor that fits most Olympus SZ and Nikon SMZ fixed microscope heads is supplied.



For more information:

NovaTech, Inc.
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alpha & Wittenstein

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New sensor technology from alpha & Wittenstein integrates torque and force sensors into the housing of servo gear reducers, enabling measurements to be more precise. The alphaIQ loads sensors to the gearbox, which allows all mechanical loads to be processed; this includes torques, shear forces, speed, thermal loads, wear and backlash. Computer software comes with the product, so the variables can be displayed on a PC.

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INTERNAL GEARS	
Workpiece diameter	230 - 950 mm
Face width	280 mm
Grinding wheel diameter	200 - 110 mm
Grinding wheel width	30 mm



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VAC-U-MAX Vacuum Cleaning System

EXTRACTS FLUID AND SOLIDS

Powered by compressed air, the VAC-U-MAX 55MW filters liquids and removes metal chips from coolant in order to increase coolant life and

extend machine tool filtration systems. Operators determine where and when fluid comes out; as a result, according to the company's press release, there is less exposure to bacteria and dermatitis that can result from emptying machine tool sumps, machining beds, oil/water separators, parts washers, rinse tanks and cleaning up liquid spills. The 55MW is 26" wide, allowing the unit to be up close to machine tools, minimizing vacuum hose lengths. The hoses are designed to prevent accumulation of liquids and chips, and the cart base has slotted holes to avoid pooling of fluid.

For more information:

VAC-U-MAX
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Bodine Motors

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AND GEARHEAD



Bodine Electric Company expands the INTEGRAMotor product line to integrate electronic and mechanical motors into the same unit. Combining a

speed control, brushless DC motor and gearhead into one product lowers engineering time and assembly costs while simplifying the wiring complexity and reducing panel space and the risks of electromagnetic interference, according to the company's press release.

The new INTEGRAMotor gearmotors have a larger frame size that can be operated from a regulated 24V DC power supply, as well as an on-board PWM (pulse width modulation) control accepting inputs from an external motion controller or programmable logic controller (PLC). The control also has amplifier enable, direction input and dynamic braking. Bodine developed the new line for office equipment, packaging machines, conveyor systems, medical equipment, printing machinery and factory automation applications.

The company is responding to a growing industry demand for manufacturers to consolidate product designs and minimize the component parts. "Our experience with custom engineered control and gearmotor solutions helped us a great deal when we looked at integrating motor and control elements into one enclosure. We already knew how to work within tight limits of power consumption and thermal performance," says Mike Marhoefer, manager of brushless DC technology and control development.

For more information:

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info@Bodine-Electric.com
www.bodine-electric.com

N.A. Woodworth's Gear Chucks

CHANGE QUICKLY

The Quick-Pitch Diaphragm PLD chucks from N.A. Woodworth include quick-change, precision top jaw tooling sets. The new product is designed for gear manufacturing, grinding and hard-part processing where low- to medium-volume runs are typical.

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The chucks offer 60-second changeovers for part-to-part changeovers and can be used in applications with sun, ring, pinion and output gears with spur and helical gear tooth forms, according to the company's press release. Four chuck units are available among three-jaw versions with pitch diameter capac-

ities of 25–100 mm, 100–170 mm, 170–245 mm, or six-jaw units with 245–350 mm gear pitch diameter range.

The Quick-Pitch Diaphragm chuck uses a locating wedge pin design, so every pin set in a jaw snaps into place, locating the individual pins' locations relative to the master jaw set. Two



clamp screws hold the jaw in place, allowing the chucks to be changed over without any adjustments. The operating system has a pull-back action to fixed stops, so workpiece position is more accurate and repeatable, and a centrifugal force compensation feature sustains gripping force for safety and accuracy and negates the effects of running at higher machining speeds. The chucks are designed with weight-saving engineering ideas to reduce any potential damage to machine tool and grinding system spindles and bearings.

A sealed design is used in the Quick-Pitch Diaphragm chucks to prevent contamination from harsh work environments where grinding sludge and coolants can be harmful. With the diaphragm component, the need for sliding parts that are easily polluted is eliminated. Both these features result in less maintenance for the chucks. Auto-load options are available using synchronizing pins available from N.A. Woodworth.

For more information:

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