Band Saw

The DC1420HA-C is an automatic, double-column band saw that is designed for accuracy and durability. The saw uses a 1-1/4" x 17'8" x 0.042" blade powered by a 7.5 hp motor. With a 14" round x 20" flat cutting capacity, the saw features a system that is developed to monitor the cuts for squareness. The automatic bar-feed has a 0" – 24" feed stroke capable of multiple indexes. Other features include adjustable blade speed, adjustable clamping pressure, hold down fixtures and a built-in coolant system. HE&M Saw, Inc.

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Circle 157 for more information
See them in Booth #B-6836

CNC Software

Machine control OpenCNC® Version 6.6 is designed with improved programming flexibility and speed, part program simulation and updated graphical user interface. The software is developed to be used with machining centers, lathes, grinders, die cast machines and CNC retrofits. OpenCNC® is designed to provide a lower cost, higher performance and reliable control solution that is easy to upgrade. Manufacturing Data Systems, Inc.

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See them in Booth #D-4315

HMC And Flexible Manufacturing Cell

Designed for long runs with stable specifications, the nbh 5+ HMC provides X-Y-Z working capacity of 890 mm x 900 mm x 900 mm with an 800 kg pallet load capability. The spindle produces 24 hp at 15,000 rpm. The HMC also features a B-axis rotary table and a choice of tools using HSK-A63 or HSK-100 adapters. Rapid traverse rates are 50 m/min with 6 m/sec² on all linear axes. Standard features include a 500 mm x 500 mm pallet changer. Hüller Hille

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Circle 158 for more information
See them in Booth #A-8218

Table Concept Workholding

Lifl ex flexible transfer cells are designed as universal 2-axis planetary tables that permit part positioning in all possible orientations. Developed to provide the basic building block for modular flexible systems, the table concept offers the basis for 5-axis machining in one clamping. The four or six spindle Lifl ex CNC machining modules are designed for production of aluminum, cast iron and steel plants. The A and B table axes are mounted at 45° to one another. Parts may be mounted directly on the table or on a table-mounted fixture. Lindenmaier Machine Tool

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See them in Booth #A-9210

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www.rsleads.com/608mn-160 or
Circle 160 for more information
See them in Booth #A-9210
Vertical Grinding And Machining Center

The V160 vertical grinding and machining center is developed to combine ID/OD grinding, auto loading, rough machining and in-process gauging. Designed with a self-loading inverted spindle, the system includes a rigid cast iron machine bed, large linear guideways and stiff spindle design. For OD grinding, a new flexible grinding spindle accepts wheels up to 400 mm. For ID grinding, various types of high precision spindles are available with speeds ranging from 40,000 – 100,000 rpm.

Index Corporation

www.rsleads.com/608mn-161 or Circle 161 for more information
See them in Booth #A-8358

Ball Nose Endmills

The FinishBall line of ball nose endmills is designed to offer stable and accurate clamping due to the wide prism clamping surface, maximizing contact between the carbide and the steel. The line is also intended to provide improved repeatability and minimal runout. The system features a radius tolerance of ± 5 microns and is suited for both semi-finishing and finishing applications. The family is available in several styles, including the Top-On and integral straight shanks in both steel and tungsten carbide. Diameter sizes range from 0.500” – 1.25”.

Ingersoll Cutting Tools

www.rsleads.com/608mn-234 or Circle 234 for more information
See them in Booth #E-2327

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CAD/CAM Software

ESPRIT 2007 features new functionalities for milling, turning and wire EDM programming. The software package includes ESPRIT FX™, a CAD to CAM feature exchange. The program is designed to allow users to automatically capture the original design intent, clearly define what the user is machining and program parts quicker and more accurately. The technology provides portions of the original CAD feature tree directly inside the ESPRIT user interface, including the complete features, tolerances, material properties, surface finishes and administrative data.

Motion Control Products

On display will be a variety of motion control products. The IndraMotion for Handling is a scalable gantry system with up to three linear axes and three rotary axes, and includes all hardware and software components with predefined motion function blocks. The HACD-1 is a digital controller card for hydraulic and electro-hydraulic drives that is designed to program pressure, flow and positional functions in closed loop applications. The eLINE Ball Rail® System couples an aluminum design with roller bearing steel raceways and is available with single piece rail lengths up to 2,000 mm.

Circular Saw

The CLM 350 semi-automatic circular saw has a rigid column design that allows cutting up to 4" of solid steel. Features include hydraulic down stroke and upstroke, built-in hydraulic feed pressure reducing valve, hydraulic material clamping and miter cutting capability of 45°. The CLM 350 also has a flood coolant system with a separate coolant reservoir and a chip collection drawer, among other features. Scotchman Industries, Inc.

Waterjet Cutting System

The Byjet 3015 waterjet cutting system offers up to four HPT cutting heads. The Bypump APC intensifier is developed to create a consistent and variable pressure without the use of a pressure attenuator. The system is intended to produce parts with minimal kerf angles without the need for tilting heads to compensate for taper. Available options include a shuttle table and swing arm loader, as well as a rotary axis. Also showcased will be the PR Series press brake with electro-hydraulic sheet supports and Integrated Process Control technology, as well as the Buyssoft 6.7 software that offers advanced synchronization of press brake, laser and waterjet processes. Bystronic, Inc.
Multi-Axis Toolpaths

Advanced Mastercam X Art and multi-axis toolpaths are among the features that have been added to Mastercam X Maintenance Release 2. The advanced toolpaths are designed to streamline the interface to specific applications by displaying only applicable parameters. The Art Manager function is designed to provide easy access to all of the art commands, such as the Art tool that allows users to wrap art around a cylinder and cut it. In addition, a new, high-speed machining toolpath is intended to provide support for multiple operations.

Automated Storage And Retrieval Systems

The Shuttle XP vertical lift module (VLM) and vertical carousel system are designed to maximize overhead space and deliver parts and material to an ergonomic work height. The system is used to store and retrieve small parts, tools, dies, fixtures, cutter grind, fasteners and raw materials. The VLM is designed to increase floor space and enhance picking accuracy while reducing man-hours and inventory. A selection of configurations are offered.

Turning Center

The Generation E Series of turning centers is designed for turning, boring, milling and tapping in one setup for mid and high volume production. Configured with one or two spindles with full C-axis, live tools and a Y-axis, the E series has an improved linear way guide system for rigidity. Other features include a 27.55" swing, 23.62" maximum cutting length, 12.6" cutting diameter and a distance between spindle faces of 41.26". The footprint measures 145.67" x 74.80".

Washing System

The U-Jet III water washing system is designed to clean up to six sides of components. The triple pump produces pressure up to 1,015 psi and a flow of 13.0 gpm. This semi-flexible system can be adapted to handle a variety of parts, such as machined aluminum cylinder heads, engine blocks, hydraulic manifolds and other critical components. The U-Jet is developed to clean chips and contaminations from machined parts to 0.001 mg contaminate level. The standard work area can accommodate parts measuring 20" x 10" x 8" and weighing up to 22 lb.

CNC Software

www.rsleads.com/608mn-166 or
Circle 166 for more information
See them in Booth #D-3024

Remstar International

www.rsleads.com/608mn-172 or
Circle 172 for more information
See them in Booth #E-2731

Romi Machine Tools, Ltd.

www.rsleads.com/608mn-167 or
Circle 167 for more information
See them in Booth #A-8343

Sugino Corp.

www.rsleads.com/608mn-171 or
Circle 171 for more information
See them in Booth #A-8009
Indexable Cutting Tools

The IASR/ASR multi-indexable cutting tools feature inserts coated with JX—a PVD coating that incorporates particles with self-lubricating characteristics. The coating is designed for hardness, heat-resistance and chipping resistance. These tools are intended to perform well at feed rates higher than 787 ipm. Available in straight shank, modular and face mill styles, the sizes range from 3/8” – 2-1/2” (16 mm – 66 mm). One insert is intended to fit all diameters and styles.

Hitachi Metals America, Ltd

See them in Booth #E-2182

Parts Cleaning System

The Lean-Jet™ RB-2 is designed as a water-based parts cleaning system for use within lean or cellular manufacturing processes. Developed with a compact footprint, the system features an easy to service configuration capable of handling individual parts or multiple parts in a basket. The RB-2 system is designed with a multi-stage rotational cleaning, rinsing and drying common chamber that eliminates the need for part transfers.

Ransohoff, Inc.

See them in Booth #D-4658

Gaging Devices

An automatic measuring system with an integrated part-handling robot will be exhibited. In operation, the robot will take an automotive piston part to six different gaging devices, each measuring different features. Areas, such as pin bore, the OD for size and roundness, the groove thickness and groove location, will be measured using air, electronic, vision and match gaging technologies. The system’s Windows®-based software is designed to provide a variety of statistical process control functions and data management options.

Edmunds Gages

See them in Booth #D-4338

Jig Borer And Machining Centers

Several machines will be exhibited, including the 6CN jig borer with an X-, Y- and Z-axes envelope of 1,020 mm x 760 mm x 300 mm. Also showcased will be the HU63A-5X HMC that features a work envelope of 900 mm x 800 mm x 800 mm. The machine is developed to hold 0.00012” true position through all linear axes and 0.001° resolution on B- and C- rotary axes. In addition, the Vertex 550-5X will be featured, which is designed to provide 5-axis machining for complex workpieces that require rigidity and accuracy.

Mitsui Seiki USA, Inc.

See them in Booth #A-8018
Compact Machining Center
The C 20 U compact 5-axis precision machine is designed for small to medium parts that require tight tolerances. The modified gantry design provides three linear axes in the tool and two rotary axes in the trunion. Axis travels in the X-, Y- and Z-axes are 600 mm x 450 mm x 450 mm. The linear axis rapid traverse rate is 45 m/min., with A- and C-axes at 25 rpm. The standard spindle speed is 10,000 rpm, with options for 16,000 rpm and 40,000 rpm. Hermle Machine Company
www.rsleads.com/608mn-177 or Circle 177 for more information
See them in Booth #A-8161

Grinding Machine
The WAC 735 Centro is a compact, 5-axis CNC machine with hydrostatic bearings that support the grinding spindle. The C-force clamping system is intended to allow complete grinding of geometrically complex tool inserts in a single clamping. The grinding wheel diameter is 400 mm; tool inserts range in size from 4 mm – 50 mm. Kompensa 3D, an automatic measuring system, provides pre-process gauging of insert blanks and precision post-process gauging of finished inserts. Wendt Diacraft
www.rsleads.com/608mn-175 or Circle 175 for more information
See them in Booth #B-7349

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Optical Inspection System

The Mantis Compact and Elite optical inspection systems are designed to combine the viewing ease of a bench mark magnifier with the high resolution of a microscope. The systems offer optical magnification for 3D stereo images, large viewing areas for maximum comfort and bright white color-corrected lighting. The Compact version is more economical and provides lower magnification (4X or 6X). The Elite version features a more powerful magnification (4X, 6X, 8X, 10X or 15X), a larger field of view and tilt adjustment from +5° to –20° for increased viewing flexibility. Gesswein

www.rsleads.com/608mn-100 or Circle 100 for more information
See them in Booth #B-7132

Cold-Forming Taps

The Innoform series of cold-forming taps are designed to provide a solution for the chip-less production of internal threads in a range of applications. The polygon shape and various forming wedges are intended to produce an effective thread profile for the properties of the work material. Thirty different tap designs and shapes are available to thread different material groups, such as regular steel, soft steels, hardened steels, wrought aluminum alloys, non-ferrous metals, among others. Metric sizes include course thread DIN 13 M3 through M16, and fine thread DIN 13 MF 8 x 1 through 16 x 1.5. Emuge Corp.

www.rsleads.com/608mn-103 or Circle 103 for more information
See them in Booth #E-2745

Swiss-Type Turning Center

The Deco 20s Swiss-type turning center is designed to produce moderately complex precision parts that measure up to 20 mm in diameter. The machine has almost an equal number of tools available for both the main and counter spindle. The tool systems have three fully independent axes, for a total of six axes. The Deco 20s features a counter spindle as powerful as the main spindle. A total of 22 tool positions are available. The “live” tooling is designed to perform milling and drilling operations in addition to turning, allowing many parts to be produced in one setup. Tornos Technologies

www.rsleads.com/608mn-101 or Circle 101 for more information
See them in Booth #A-8140

Digital Readout System

The Quadra-Check 300 (QC300) digital readout system combines multiple video measuring functions in a compact display unit. The system has a large, high-resolution LCD monitor, 2D measurements and controls, as well as integrated direct camera input that provides live feed video displays. In addition, the QC300 features alpha-numeric program naming, user messages and an arrow to target stage directions. Automated video edge detection is also offered. With touch screen functions and icons, the system is designed to be easy to use. Metronics Inc.

www.rsleads.com/608mn-102 or Circle 102 for more information
See them in Booth #D-4530
Three-Turret Turning Center

The Super NTY® multitasking turning center features three turrets – each with a Y-axis – and a footprint of 109.45" width x 77.6" diameter. Each turret holds 12 driven or 24 stationary tools, for a maximum of 72 tool stations. With three 6,000 rpm motors, the machine offers multi-point machining with process integration, combining turning and milling capabilities. Up to 29/20 hp is available for shaft/work turning with synchronized spindles. Featuring a Fanuc 3iA CNC control, the machine has a maximum turning diameter of 6.89", a maximum turning length of 23.5" and a bar capacity of 1.65". Methods Machine Tools, Inc.

Machining Centers

The ProdMed line of machining centers is suited for the manufacturing of medical implants, including dental, orthopedic and medical equipment. The system includes a high capacity tool changer of up to 220 tools, a pallet changing device, a control system and smart machining modules for advanced monitoring levels. The 5-axis HSM 400 ProdMed with 30,000 rpm is suited for machining titanium or high-alloyed steel. For Co-Cr alloys and other difficult to machine steel alloys, the UCP 600 Vario ProdMed 5-axis, 20,000 rpm system is suited for machining work that requires a high level of material removal. Mikron

Grinding Machine

The CNC-controlled 255CL centerless grinding machine is designed for high precision grinding of parts with diameters between 0.5 mm – 15 mm and lengths of up to 125 mm. The grinding and control spindles form equivalent NC axes that are freely-programmable. For cylindrical plunge grinding, a grinding width of 127 mm is available, while the width for angular infeed grinding is 90 mm. The 255 CL has a stable machine bed that utilizes a welded structure partly filled with Hyropol® concrete for improved rigidity. The machine is equipped for single, dual- and triple-track grinding. Agathon Machine Tools, Inc.

Wireless Data Collection System

DataSure is a wireless data collection system that interfaces with most brands of electronic measuring tools and software. The system automates data collection to improve speed and accuracy compared to manual recording. The DataSure consists of three elements: miniature radios that connect to the data output ports of electronic tools, a gateway that connects to a PC via the USB or serial port and signal routers to extend the system range in 100’ increments. With the virtual multiplexer, the system is developed to handle up to 100 tools. L.S. Starrett Company

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Horizontal Turning Centers

The PTC line of horizontal turning centers includes four models featuring linear guide ways on all feed axes designed to optimize responsiveness. The PTC150-G is an entry-level machine with a 6" chuck and a gang-type slide with space for up to six tool blocks, while the PTC150 is a 6" chuck machine with a 12-position turret. Featuring an 8" chuck and a 12-position turret, the PTC200 version has an option of a powered turret. The largest machine in the line is the PTC250, which has a standard 10" chuck. Fadal Machining Centers

www.rsleads.com/608mn-107 or Circle 107 for more information
See them in Booth #A-8218

Lathe

The TRAK TRL 2460SX lathe has a 4.09" spindle through-hole and a geared head designed to improve performance at low and high speeds. Other features include a two-speed tailstock, P5 tapered roller bearings and digital servo motors. The lathe may be used manually with assists from the CNC to do tapers and radii. The TRAKing™ option allows the operator to run the part program by controlling the CNC feed through one of the handwheels. Also included are Spreadsheet Editing™, informative graphics, networking capability and optional DXF-file converters. Southwestern Industries, Inc.

www.rsleads.com/608mn-222 or Circle 222 for more information
See them in Booth #A-8031

Expansion Clamp

The Side-Loc Xpansion clamp is developed to hold parts on the bore when the tapered screw cannot be accessed. The clamp is actuated by turning a socket head cam, which moves a tapered plunger to expand the clamp. The locking ring is designed to provide accurate preset diameter and rigidity for machining. The Side-Loc clamp also has a dead length feature for close tolerance dimensions. Two styles are available, one size for each model. The mill clamp can be machined from 1.120" – 0.710", while the turning version can be machined from 2.09" – 0.710" and has straight mounting shanks of 1". Mitee-Bite Products Inc.

www.rsleads.com/608mn-223 or Circle 223 for more information
See them in Booth #E-2637

Fixturing System For Welding

The modular fixturing system features five-sided tables made from high tensile strength steel. The components, such as angles, spacer blocks, clamps and clamping bolts, are designed to be assembled into a ready-to-use welding fixture in a matter of hours. The system is suited for prototypes, spares and other short-run jobs. Bluco Corporation

www.rsleads.com/608mn-224 or Circle 224 for more information
See them in Booths #B-6309 and #E-2301