PTG

REVISES MAINTENANCE AND SUPPORT SERVICES

U.K.-based Precision Technologies Group (PTG) has revised its range of machine tool maintenance and support services, to provide what it believes to be one of the most comprehensive and cost-effective customer care packages available for machine tool users globally. Under the name of Absolute Care, the company has created a suite of tailored maintenance solutions for users of its Holroyd ultra-precise milling and grinding machines. A similar range of Absolute Care services is available for owners of PTG Heavy Industries' Powerstir friction stir welders, and Binns & Berry/Crawford Swift heavy-duty lathes, roll lathes, deep hole boring machines and roll grinding machines.

In addition, extensive repair, refurbishment and upgrade services, as well as CNC repair and upgrade solutions, are available for lathes and machine tools from a wide range of other manufacturers. "At Precision Technologies Group, we have always strived to offer the highest levels of machine tool maintenance," comments Customer Care General Manager, Alan Mead. "In creating our menu of Absolute Care services," he continues, "we have made it simpler than ever for our customers to select the precise maintenance solutions they require, and ensure their PTG machine tools provide a long and reliable working life. Additionally, by developing a bespoke range of services for owners of other machine tools, we provide the option of having their equipment maintained to the uncompromisingly high standards that Precision Technologies Group is renowned for."

The Absolute Care services offered by Precision Technologies Group include emergency U.K., EU and worldwide engineer response, remote machine support and fault diagnosis, Planned Preventative Maintenance (PPM), process enhancements, CNC repairs and upgrades, machine refurbishment and reengineering, OEM parts, and a brand new dedicated machine tool care plan.

For more information:
PTG Holroyd Precision
Phone: +(44) 1706 507 831
www.holroyd.com

Vomat

OFFERS FILTRATION TECHNOLOGY FOR METAL COOLANTS AND LUBRICANTS

In tool grinding all individual processing steps are part of a coherent value chain. Therefore it is important that the filtration process of metal coolants is integrated seamlessly in this value chain. When operational requirements or technical improvements cause changes and flexibility is needed, your filtration system should meet those new needs. The filtration specialist Vomat meets these challenges with a line-up of high-tech systems. From stand alone to large industrial central filtration systems Vomat's offerings are of modular design and can be adapted quickly and easily to changing shop and production requirements.

Stephan Hecht of oelheld U.S., Inc., Vomat's general agent in Elgin, Illinois, states: "By design the stand alone Vomat-FA-series models have a flow capacity of 120 to 960 liters per minute. In addition, we provide our customers with a number of add-on modules which can be easily integrated, when the need arises. The array of modules includes

displays for the complete visualization of the filtration process in real time, frequency controlled pumps, internal and external pre-filters and various cooling solutions.

In close cooperation with the customer, Vomat tailors a filtration solution to individual production conditions, which can be can be altered in case requirements change. Hecht adds, "If our client implements technological improvements in his production process, Vomat can help to make sure that the filtration system will meet the new requirements."

Besides the modular expandability of Vomat systems, it is mainly the innovative filter technology that provides Vomat customers with economic benefits: Vomat systems filter in full flow stream and separate dirty from clean oil 100%, thanks to high capacity precoated filters. The results are lubricants, which meet NAS 7/8 or 3-5 microns in terms of purity and cleanliness. Clean oil is decisive for dimensional accuracy and surface quality of the finished work piece.

In addition, Vomat systems adapt intelligently to changing volumes of sludge and automatically initiate the backflush cycle depending filter contamination. Each Vomat machine is equipped with enough filters, that during the backflush cycle the operator always has full oil flow. This allows for energy efficient, time optimized operation in sync with the customer's grinding machine. The Vomat FA 120 through 420 series machines with dimensions of $1 \times 1 \times 1.6$ meters are also significantly smaller than comparable filtration systems on the market. This keeps transportation costs low, possibly reduces facility alterations and provides the client with more floor space.

For more information:
Vomat (Distributed by Oelheld)
Phone: (847) 531 8501
www.vomat.de

Krebs & Riedel

OFFER INNOVATIVE GRINDING TECHNOLOGY

Krebs and Riedel is a family-owned company and has been in operation in Bad Karlshafen Germany since 1895. With over 190 dedicated employees and an annual turnover of €21 million is one of Germany's leading manufacturers of advanced grinding wheels. An export share of approximately 40 percent demonstrates the international orientation of the company with exports being a major part of their sales program.

Products include conventional grinding and cutting wheels using corundum and silicon carbide abrasives. Super abrasive (CBN and diamond) tools with a vitrified bond have been manufactured with ever rapidly growing sales since 1985. The production of grinding wheels takes place on modern machinery and profiling of the grinding wheels on the CNC machines PM280T & PM550TC with automatic tool change manufactured by M/s Burri Werkzeugmaschinen with the very latest profiling techniques.

The grinding wheel compounds are based on the innovative Multo vitrified bond system and, in conjunction with the grinding media used (high-grade aluminium oxide, micro-crystalline sintered aluminium oxide and the new aluminium oxynitride), guarantee low thermal effects on the workpiece, good retention of profile, and cutting ability with high dressing cycle speeds and high efficiency.

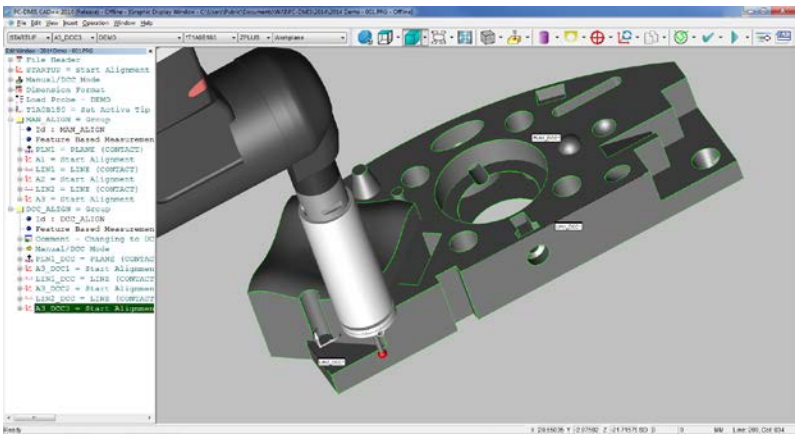
The company is certified in accordance with ISO 9001:2008 and produces the grinding tools in accordance with the internationally valid standards EN, ANSI and JIS. Krebs and Riedel is a member of the Gear Research Circle of the Laboratory for Machine Tools and Production Engineering (WZL) at RWTH Aachen University (Germany).

The range held in stock includes grinding wheels in white high-grade aluminium oxide and sintered aluminum oxide. Due to their selective porosity and grain compound, the grinding wheels guarantee a cool grind with high profile and abrasion resistance. Most recently, the application of dressable vitrified CBN grinding wheels to gear grinding has also intensified. For this purpose, Krebs and Riedel can also offer a product program that is continuously developing.

For more information:
Krebs and Riedel
Phone: +(49) 5672 1840
www.krebs-riedel.com

Hexagon Metrology

LAUNCHES PC-DMIS 2014



Hexagon Metrology recently launched *PC-DMIS 2014*, a major release of its measurement software used for the collection, evaluation, management and presentation of manufacturing data. *PC-DMIS 2014* introduces tools and technologies that will help measurement devices perform better than ever, increase the effectiveness of inspection planning time, and make it easier to complete complex inspection routines. Hexagon Metrology will demonstrate *PC-DMIS 2014* with over 17 major and 81 minor software enhancements in Booth 5202 at IMTS 2014. The new software includes a number of productivity advancements to improve speed of common programming tasks and to improve the overall user experience. "*PC-DMIS 2014* delivers new and improved capabilities based on real-world user feedback from the *PC-DMIS* forum and our technical support teams," said Ken Woodbine, president of Hexagon Metrology software division. "This release is focused on productivity, and sets the stage for future user experience enhancements already in the planning stage and moving forward."

Highlights of *PC-DMIS 2014* include a new 1-click "QuickFeature" feature creation from CAD models, where users can also create Quick Features by hovering their mouse over a CAD model to highlight CAD elements. Contact auto features are created from a single click on the CAD model without using any menu options or dialog boxes.

There is also a 1-click "QuickAlign" capability where users can now select valid combinations of one, two, or three features to create a quick alignment. The QuickAlign feature will also initiate manual and DCC alignments when used at the beginning of a part program. These new productivity tools are packaged in a new QuickMeasure toolbar giving drop-down access to common measurement features, giving more screen real estate to the graphics and the measurement routine. The new software version also includes Copy Parameters and Paste Parameters functions, which copy parameters from one feature or dimension, and paste them to another feature(s) or dimension(s) in the Edit window, making block changes much faster.

PC-DMIS 2014 also rolls out a new Mini Routines feature which can be used to mea-

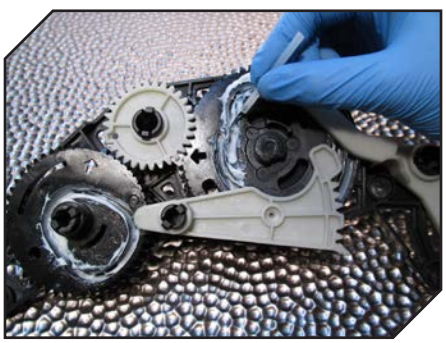
sure a selected dimension or group of dimensions from a long part program. Mini routines offer characteristic-based measurement and the ability to measure a part of a complete measurement routine. *PC-DMIS* is the flagship software package for Hexagon Metrology measurement devices and a wide range of other measurement equipment in the marketplace.

For more information:
Hexagon Metrology
Phone: (847) 931-0100
www.hexagonmetrology.us

Solid Technical Solutions

OFFERS TEC-FLON LUBRICANTS

Solid Technical Solutions recently introduced its product line of high-tech lubricant materials, Tec-Flon (GM-approved). The Tec-Flon family of non-hydrocarbon, non-silicone, fluorinated oils and greases is designed specifically for use with plastics, in paint shops where silicones are not permitted, or in vacuum environments. The products remain effective when used for high-performance applications, even in high temperature settings. Solid Technical Solutions' Tec-Flon materials meet or exceed the performance requirements of General Motors; and are well-suited for use in electronics, optics, aerospace, cleanrooms, and general assembly applications.



For more information:
Solid Technical Solutions/Tectorius
Phone: (586) 232-3999
www.tectorius.com

Grieve

OFFERS TWO-COMPARTMENT OVEN

No. 978 is a 500°F, electrically-heated, two-compartment universal style oven from Grieve, currently used for various machine shop operations at the customer's facility. Workspace dimensions of this oven measure 30" W × 36" D × 36" H in each of the two heating zones. 6.6 KW per zone (13.2 KW total) are installed in Nichrome wire elements to heat the oven chamber, while a 600 CFM, ½ HP recirculating blower provides front-to-rear universal airflow to the workload. This Grieve universal oven features 4" insulated walls, aluminized steel exterior, Type 304, 2B finish stainless steel interior, double doors and an integral leg stand. Controls on No. 978 include a digital indicating temperature controller in each compartment of the oven, manual reset excess temperature controllers with separate contactors, recirculating blower airflow safety switches and a 10" diameter circular chart recorder, one per compartment, to record part temperatures.

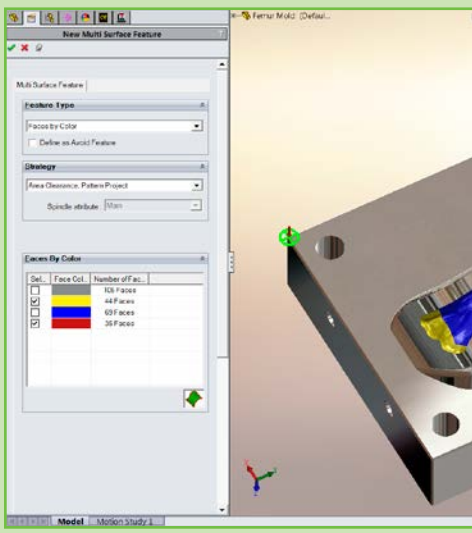
For more information:
Grieve Corporation
Phone: (847) 546-8225
www.grievecorp.com

Geometric

SET TO PREVIEW CAMWORKS 2015

Geometric will preview its latest release of CNC programming automation solution, *CAMWorks 2015*, in Booth E-3320, IMTS 2014 in Chicago. In today's environment, manufacturers need to be able to do more with less - less design time, program time, setup time and machining time. *CAMWorks 2015* focuses on making the entire design to part cycle shorter.

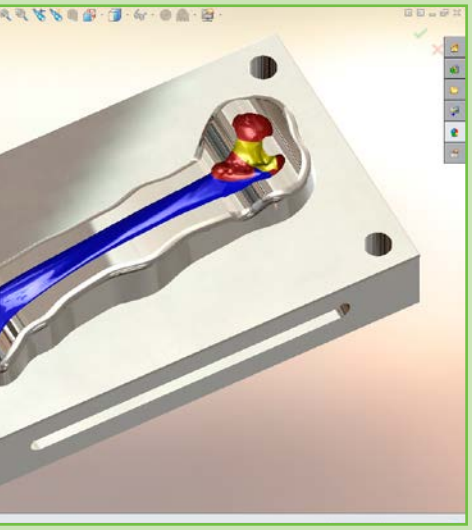
CAMWorks 2015 has over a dozen enhancements focused on shortening the programming time. One example is the color based identification of complex surfaces making it easier and quicker to define features by avoiding the traditional chains and profiles methodology. *CAMWorks 2015* has bolstered its ability to interpret non-prismatic surfaces on solid models as machinable entities automatically. This enhanced ability to leverage feature-based machining for complex requirements in combination with *Intelligent Knowledge Base* (TechDB) allows end users to eliminate the routine elements in CNC programming and focus on their core expertise.



For a job shop, setup time is critical. With an integrated true G-code simulation, *CAMWorks Virtual Machine*, users can make sure that the costly process of dry-runs on the shop floor are minimized with one-click verification. The use of G-code for verification is absolutely critical if you are dealing with sub-programs, macros, sub-spindle transfers, tail-stocks and steady rests.

On the other hand, for production shops, machining time is the key. Users need to makes sure that what they are machining is not only correct but most efficient. The ultra-high performance tool paths from *CAMWorks VoluMill*, has enhanced capability to handle more complex geometries like multi-step irregular islands, that can be very difficult to address with trochoidal tool paths which a number of other systems try to use to address this critical challenge.

For more information:
Geometric
Phone: (248) 404-3500
www.geometricglobal.com



Fanuc America

OFFERS LATEST MACHINING IMPROVEMENTS

Fanuc America Corporation introduces CNC innovations that improve machining performance, ease of use and maintenance at IMTS 2014 Booth #S-8919. These include: introduction of the new Series 0i-F CNC with new commonality of design and 15" display option, a new CNC platform with built in Bluetooth technology and digital servo adapter with new EtherCAT interface.

Fanuc's new Series 0i-F CNC is the latest generation of the Series 0i CNC that now has commonality of design to the versatile Series 30i CNC and a 15" display option. The Series 0i-F boasts common operability, maintainability and networking options as the Series 30i CNC along with having a highly compat-

ible PMC ladder. This translates to easier operation and maintenance across the plant floor. The seamless combination of using the same motors, amplifiers, peripheral devices (safety machine operator's panel, I/O module/unit, iPendant, interface unit for handy machine operator's panel) as the Series 30i further simplifies the ease of use and maintenance of the Series 0i-F. Seamless and common PMC functions among both the 0i-F and 30i-B CNCs include: multi-path PMC, ladder dividing management, function block, multi-language comment and I/O Link i. With an increased axis number of 9 total controlled axes for a 1 path system for both 0i-MD (milling) and 0i-TD (turning) and a 2 path system now available on the 0i-MF with 11 total controlled axes, the Series 0i-F is more versatile to improve machining performance. Additional new features on the Series 0i-F include: 15" display, I/O Link i, FSSB high speed rigid tapping, function for loader control, tolerance control, axis name expansion, program folder management, quick program restart, flexible path axis assignment, multi-path PMC function, ladder dividing management, EtherNet/IP and Profinet.

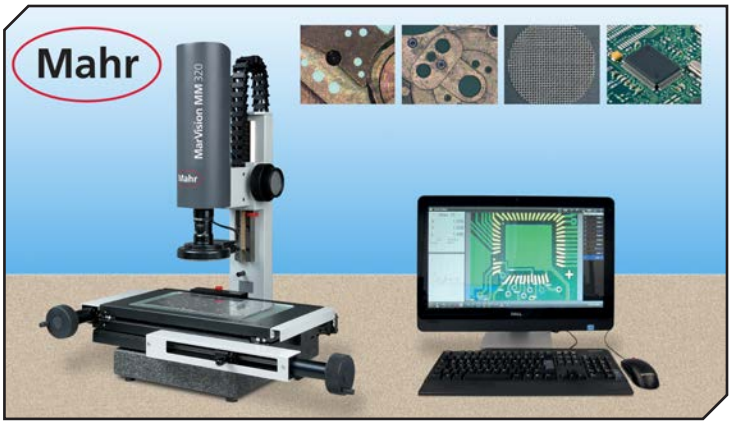
Fanuc's new standard CNC platform allows for enhanced CNC functionality using PC technology. Built in Bluetooth on the CNC allows for the use of wireless technology that can operate a CNC by keyboard or mouse. So, via remote desktop it is possible to transfer data between a tablet and CNC. Advanced PC applications such as CAD/CAM or NCGuide are now available on the CNC remotely without leaving the machine. This improves functionality and use of the CNC. Other new features of Fanuc's new standard CNC platform include: enhanced 3-D graphics with Manual Guide i, new data server with larger storage and use of peripheral devices such as keyboard and mouse.

Fanuc's Digital Servo Adapter with new EtherCAT interface adds more power to applications needing high-speed and high-accuracy. The Digital Servo Adapter allows for Fanuc servo motors to be run from a separate controller over EtherCat. From 1 to 8 axes can be controlled, including a spindle interface and multiple large servo motors - up to 3 large servo motors at a time for industrial machines. The Digital Servo Adapter can replace hydraulic and other brand servo drives with high accuracy and high performance Fanuc servo motors. The EtherCat interface is ideal for industrial machines such as: servo press machines, wire saw machines and electric injection molding machines.

For more information:
Fanuc America
Phone: (888) 326-8287
www.fanucamerica.com

Mahr Federal

INTRODUCES MARVISION MM 320



Mahr Federal will feature the MarVision MM 320, a new video measuring microscope with image processing capability, the flagship product for a new line of Mahr optical measuring instruments, at Booth #E5242 during IMTS. Designed for the measurement and/or dimensioning of geometric elements, the MarVision MM 320 incorporates an integrated CCD color camera with zoom lens, a 23" touchscreen PC with keyboard and mouse, and easy to use Windows 7-based *M3* software. Automatic edge detection allows even low contrast features to be measured, and a Multi Touch function provides quick and continuous variable magnification using either touchscreen or mouse.

"MarVision optical measuring instruments offer a quick and reliable solution to many different 2-D measurement and inspection tasks," said George Schuetz, director precision gages for Mahr Federal. "Applications range from cutting tools and precision products for manufacturing, plastics, and medical technology, to miniaturized electronic components. These extremely precise measuring instruments are designed to meet the highest quality and production requirements."

The MarVision MM 320 rests on a robust hardened granite base with a precision mounted XY table. An optical incremental measuring system assures quick and fine adjustment of the axis, and a laser pointer assists with part positioning. The CCD camera and Navitar Zoom lens with 0.7-4.5× magnification are mounted on a stable Z-column with 200 mm vertical movement. Coarse and fine height adjustment knobs are mounted on both sides for precise focusing. Illumination is provided by a quadrant LED ring top light with four individually controlled segments, and table mounted Telecentric LED transmitted light for more focused measurement of rotationally symmetric parts.

For more information:
Mahr Federal Inc.
Phone: (401) 784-3100
www.mahr.com

TDM Systems

FOCUSES ON TOOL LIFECYCLE MANAGEMENT SOFTWARE

By realigning its strategy towards Tool Lifecycle Management, TDM Systems, a software manufacturer and process consultant, is putting comprehensive customer benefit first. TDM Systems is a leader in electronic management of tools and production equipment. The Schaumberg-based company will exhibit at IMTS 14 Booth No. E-3264, showing how the *TDM 4.7* software package for Tool Lifecycle Management makes life easier for machining companies. The package will also be presented in the Walter (W-1700) and Parlec (W-2300) Booths.

"By refocusing on Tool Lifecycle Management (TLM), we purposely put the overall process front and center," says Managing Director Peter Schneck. "We want to make sure that not only we, but especially our existing and future customers have a clear idea of the distinct advantages of TLM for the entire production process – from defining the tools to using them in planning to ensuring a seamless transfer to and use in production. In particular, a new feature is that the information from the individual process steps is fed back directly from production, ensuring continuous improvement of the data."

However, TDM Systems does not limit its view to the processes within a closed production unit. Global networking is and will remain one of the trends of the future: Machining industry 4.0. Not only companies with international production have to be networked to ensure transparent implementation of in-house production standards. Suppliers, partners and customers also have to build electronic bridges connecting each other.

So will there also be a Tool Lifecycle Management 4.0 in the future? "TDM Systems is currently developing cloud services so that information is available on the local level at all times on the Internet," says Managing Director Schneck. "Our highest priority, however, is on continuous further development of interfaces – such as those for connecting CAM systems and machine control systems – but on the planning and MES level as well. In this area, we are advocating for international standardization. That is the only way to implement Tool Lifecycle Management with maximum customer benefit."

For more information:
TDM Systems
Phone: (847) 605-1269
www.tdmsystems.com