

Mastercam Previews Swiss Expert and Mastercam X7 at PMTS 2013

"PMTS 2013 attendees will receive a sneak peek at the most powerful Mastercam machining software yet. Stop by booth # 437 at the Greater Columbus Convention Center in Columbus, OH, April 16-18, for a look at Swiss Expert 2012 as well as Mastercam X7, the latest Mastercam release, which is due out Q2 2013. Mastercam X7 introduces many significant new capabilities, including the new Mill-Turn product and much more," said a Mastercam spokesperson.

Mastercam Swiss Expert is designed to program Swiss-style NC machines, and suited for watch-making, medical device, dental, automotive and electronics companies, industries where extremely small but very precise parts are a requirement. Mastercam Swiss Expert is developed in the same region of Switzerland where Swiss-style machines were invented. It is known for supporting an unlimited number of axes and channels, and for realistic simulation of the entire machine and its tools. Mastercam Swiss Expert reduces startup time significantly, is ideal for optimizing cycle times, and supports all types of tooling.

"Mastercam's Mill-Turn product makes machining on today's high-powered turning centers and full-function machining centers simpler and easier than before. Mastercam Mill-Turn streamlines the programming process with intelligent job setups that are keyed to the exact machine in your shop. Intelligent work plane selection makes it easy to select the proper spindle and turret, and program your part with Mastercam's proven milling and lathe toolpaths," said the spokesperson.

Mastercam X7 integrates Renishaw's Productivity+ for in-process gauging. This uses a measuring probe on a machine tool to determine fixture offsets, orientation and critical dimensions. Probing eliminates the need for tool presetters, expensive fixtures and manual settings with dial indicators. It allows for machine offsets to be automatically adjusted, even during the machining process.

Also available in Mastercam X7:

- The new Tool Manager, providing a whole new way to create and organize your tooling.
- Improved Backplot and Verify utilities that offer a more efficient workflow, better analysis tools and more comprehensive toolpath support.
- Dynamic and OptiRough toolpaths with more efficient tool motion, including enhanced cut orders and faster calculation times.
- Multi-threading support extended to most 2D high speed toolpaths, resulting in faster toolpath processing.
- Oscillate motion for Curve and Swarf 5-axis toolpaths, improving your tool life by not always machining with the same area of the tool.

For more information contact:
Michelle Nemeth
CNC Software, Inc.
671 Old Post Road

Tolland, CT 06084
860-875-5006
info@mastercam.com
www.mastercam.com

Automatic Robotic Machine Tending System

"In keeping with the Precision Machining Technology Show (PMTS) theme of 'Machining Technology,' Ganesh will show its new multitasking machines with a robotic machine tending system on the main floor of the PMTS-2013, April 16-18, 2013, Booth #263. The Ganesh Cyclone Series with a fully robotic system are suited for manufacturers that are seeking ways to remain competitive by both getting the part machined in one handling and having ample tooling flexibility to have multiple jobs set up on the machines at one time," said a Ganesh spokesperson.

The Ganesh Cyclone-32 GT: A dedicated pneumatic part loading system will demonstrate the high speed, small part loading capability of the Ganesh Cyclone-32 GT 3-axis precision heavy-duty gang tool lathe. The loading system provides a solution for small component manufacturers. The Cyclone-32 GT is designed for 1-3/8" bar work, 2nd operation machining and 5" chucking work. The lathe has a 6,000-RPM spindle up to 10 HP, hydraulic clamping, 1" ballscrews and a heavy cast iron bed with C-axis, rigid tapping and toolholders.

Gang tool lathe benefits include fast chip-to-chip time, tooling flexibility, 8-position quick-change tooling plates, hydraulic clamping for a secure no-slip grip, rigid tapping, polygon turning and a C-axis with 0.001 resolution.

CYCLONE 52-TTMY: At PMTS-2013 the Ganesh standard robotic machine tending system will be integrated to a Ganesh Cyclone-52 TTM botic system is a fully automatic solution that utilizes a Motoman robot, and a flexible feed / outfeed system that can be configured to accommodate a wide variety of parts and be installed in a matter of hours. The CYCLONE 52-TTMY is an 8-axis machine with dual 16 station turrets. The mill/turn center has 32 live tools with Y-axis on upper turret, full C-axis on main and sub-spindle with 51 mm (2") bar capability and MITUBISHI M-720 CNC control. The machine features full bar, chuck and shaft machining capability, with 6" chucks. The



integral main and integral sub-spindles both feature 6,000 RPM capability for fine surface finishes, as well as a C-axis so that milling and drilling operations can be completed all in one operation on the front and back-side of the work piece. The dual spindle, dual turret machine is suited for complicated parts.

CYCLONE 32-CS: The 7-axis machine with 27-tools and 11-live tools will also be cutting parts showing its capabilities for machining 1.375" diameter (36 mm) bars. The sliding head-stock CNC lathe has no guide bushing. A 10-HP Mitsubishi spindle motor drives the 6,000-RPM spindle. Both the main and sub-spindle use 32 mm Traub A-32 collets for easy part transfer and complete machining in one setup including all radial, end-working and Y-axis live tooling work on both the front and backside of the part.

VFM-4024: The VFM-4024 Express vertical machining center is built with meehanite machine construction and weighs 13,228 lbs., with a 43.3" X 19.68" table size, is capable of 24-station arm type ATC, 1,000 PSI thru-spindle coolant ready, 1.7 second tool-to-tool change time, 2.1 second chip-to-chip, rapid rates up to 1,417 inch/min and is equipped with 12,000 RPM direct drive spindle. The X-, Y- and Z-axes provide strokes up to 39.37", 23.62" and 22.12". 4th and 5th axis wiring is included. The Mitsubishi M720 CNC control offers high-speed buffered look-ahead and 64 bit processor speed. Ganesh also builds full 5-axis versions of its VFM's series.

For more information contact:
Ganesh Machinery, Inc.
20869 Plummer St.
Chatsworth, CA 91311
888-542-6374 / 818-349-9166
info@ganeshmachinery.com
www.ganeshmachinery.com
PMTS-2013 Booth #263

877-233-8938
sales@texasmachines.com
www.texasmachines.com

NM

Troy Kattenhorn
Foothills Machinery
6855 West 116th Ave. #A
Broomfield, CO 80020
303-466-3777
troy@foothillsmachinery.com
www.foothillsmachinery.com

Programmable, Variable Pressure Coolant



PowerStream VP from LNS America is a high-pressure coolant system that enables users to program variable pressure outlets to deliver up to 2,000 PSI of filtered coolant to the precise cutting area.

The system can be pre-programmed to adjust the coolant pressure at various times throughout the machining cycle, or similarly responds to signals from the machine tool. This is particularly effective when machining exotic alloys and other difficult materials.

PowerStream VP is LNS e-Connect capable for real-time data communications with the CNC machine control. "It employs a unique design scheme for the coolant transfer pump, speed control, canister filter and on-board coolant tank for optimum performance, reliability and energy efficiency. Options include 8-port coolant delivery and dual canister filters," said an LNS spokesperson.

For more information contact:
LNS America, Inc.
4621 East Tech Drive
Cincinnati, OH 45245
513-528-5674
sales@lnsameric.com

Reality-Check to Avoid Collision

ZOLLER's newly developed software module »tool realityCheck« is designed to allow a fast and precise collision check to determine whether the scanned tool matches the tool originally used for the simulation. The tool's real, actual contour is recorded while being rotated, thus simulating the actual machining process.

The user enters the start and end point of the requested tool contour. The measuring program will then automatically position the camera at the starting point and measure the contour during rotation. Afterwards, an actual/nominal comparison along with the results of the collision check are displayed on the screen. A green light means "go" - the machining process can be performed, and red stands for "Attention: collision!"

For more information contact:
ZOLLER Inc.
3753 Plaza Drive, Ste. 1
Ann Arbor, MI 48108
734-332-4851
sales@zoller-usa.com
www.zoller-usa.com