

WHEN WEEKS ARE JUST TOO LONG...

WE SHIP IN AS FEW AS 5 DAYS

By combining the latest in ring rolling technology with experienced people, McInnes delivers the best value in carbon, alloy and stainless steel rolled rings.



can provide the low-speed torque it takes for cutting tough materials like iron and steel as well as higher speeds for machining lighter alloys. There is no other machine in its market segment that offers this capability," said Trampus. With its machine design, Heller has also minimized positioning times. Instead of extremely high rapid traverse and acceleration rates, Heller focussed on realistic dynamic rates.

The H 4500 offers a wide range of basic equipment, so each machine can be customized for each user's application. This includes 50/100/150 pocket chain-type magazines for tool lengths of up to 600 mm, tool break monitoring with reference measurement and cleaning of the tool cartridges and holders. Workpiece management is equally flexible. The rotary pallet table has a maximum loading capacity of 1,400 kg.

Chip disposal is efficient. In particular, the H 4500 is designed for free chip fall below the spindle and between the rotary table and pallet changer, with steep chip chutes in the work area and at the loading station and with a 600 mm wide scraping or flat belt design chip conveyor over the complete Z-stroke.

To accommodate the end user, the machines are available with either Siemens Sinumerik 840D or Fanuc 31i-B CNC. Heller's industry exclusive NC controlled out-facing head option is available on the H 4500 for performing turning operations on the machine. A measuring probe for on-machine part checking, and instant tool breakage monitoring are also available. The machines, consistent with efficient cell operation, may be loaded with a robot or other automated loading systems.

For more information:

Phone: (248) 288-5000 www.heller-us.com



Mitutoyo

OFFERS SALES AND SUPPORT FOR RENISHAW PROBE

Mitutovo America Corporation is pleased to announce sales and support of the Renishaw PH20 probe system with the Crysta-Apex S500/700/900 series Coordinate Measuring Machines by Mitutoyo. The Crysta-Apex CMM line offers durability and high accuracy at an affordable price. It supports

a wide range of inspections solutions including laser scanning, optical, and surface roughness inspection. With the addition of the high-speed scanning capabilities of the PH20 the Crysta-Apex CMM becomes the ideal solution for just about any part inspection, in the quality lab or on the shop floor.

Affolter Technologies

HOBBING MACHINETAILORED FOR MICRO MOTOR **INDUSTRIES**

Affolter Technologies SA presents its most recent innovation. "The GEAR AF110 sets a new benchmark in regards to flexibility, high precision and stiffness. It is tailored to the needs of all micro motor industries, such as automotive, aircraft, dental and medical equipment and watchmaking," states Marc-Alain Affolter, managing director of the Swiss family enterprise. The AF110 complements the existing gear product line towards the realization of larger parts with diameters of up to 40 mm and a module of up to 1.0 mm.

In 2010, the Affolter R&D team in Switzerland started to design the AF110. "Compared to the AF100, we doubled the clamping force to 1,000 newton. Torque and stiffness of the spindles were increased, the Y-axis is more robust and there is only one clamping axis moving, optimizing the overall rigidity and minimizing vibrations,"

explains Affolter. The AF110 is very compact, using the same base and volume as the AF100.

Flexibility a plus: worm milling

The Affolter experts are currently developing the add-on "Unit 90." After a quick changeover, the AF110 will be able to perform worm milling operations. Affolter explains, "We will intro-



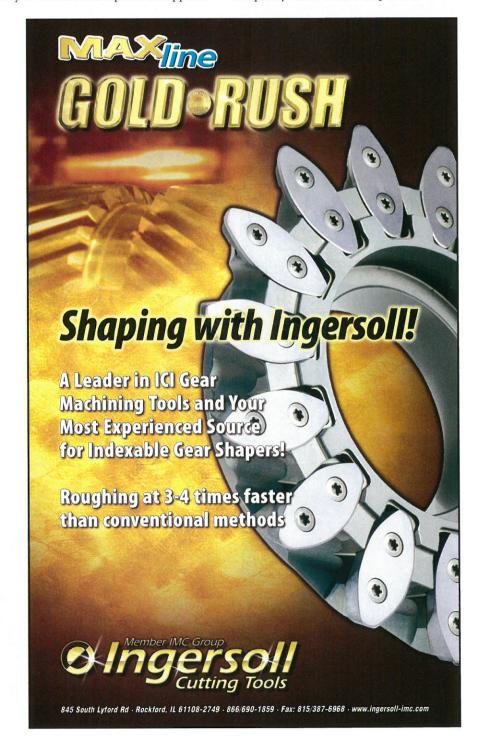
duce this optional feature in the second part of 2014. The AF110 will be the most flexible machine for gear cutting and worm milling on the market."

Short cycle times: optimizing productivity

The Affolter engineers aimed to reduce cycle times to make the machine as productive as possible. The AF110 is equipped with the user-friendly, internally developed CNC Leste control, making communication with the micro gear hobbing center easy and quick. The compact design and the improved rigidity are other key features that guarantee short cycle times and highest efficiency. The distributor of Affolter Technologies SA in the United States, Canada and Mexico is Parker Industries Inc., based in Bohemia, New York,

For more information:

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[www.geartechnology.com]