



High-speed spindles for milling, drilling, grinding or routing

Air Turbine Technology will demonstrate its latest generation of precision high-speed spindles at Austech. A series of constant governed high-speed spindles with power up to 1.4HP for milling, drilling, grinding, and routing with no duty cycle will be on display and in operation to show reduced cycle times on CNC machines and turnkey automation systems that use small tools.

Air Turbine Spindles TM patented solution is claimed to enable every CNC machine to operate at high speeds 24/7 and cut cycle times at affordable prices from \$2000 to \$5000.

Automatically loaded Air Turbine Spindles TM upgrade CNCs for constant governed high-speed milling, drilling, pre machining, profiling and engraving in to your main spindle with ultra-low vibration and direct drive.

With only two moving parts (governor controlled turbine and air cooled ceramic bearings) Air Turbine Spindles TM are precise and reliable with no maintenance, the company claims.

Pictured: Air Turbine Spindles TM 650X CT40 with patent pending automatic tool changer option (TMA), milling an RC52 steel shoe mould, reducing production time by hours with a super finish at governed constant 40,000 rpm on a small frame 40 taper VMC.

Air Turbine Tools, Inc. - Stand 570 www.airturbinetools.com

Quality all round

Quality Machine Tools (QMT) will be exhibiting a wide range of high quality, precision machine tools at this year's Austech show. These include the 'Vantage MCY' Multi-axis CNC slant bed lathe from its proven and popular range of Ace Designers.

For the past 18 years, QMT have been the trusted suppliers of high quality conventional and CNC machine tools to the Australian manufacturing Industry. The machines have all been carefully sourced from highly reputable manufacturers around the world, complimenting the company's mantra to provide precision machinery, backed by efficient after sales service and comprehensive training programmes.

The range of products includes the ACE slant-bed and vertical CNC lathes, with up to 6-axis, which are available in 20 different sizes. Machining centres include: Ultra-fast drill tap machines, high-speed five-face machines, and large double column machines with up to 10000 X 5000 X 2000mm travel. CNC and conventional lathes are available with up to 2000mm swing and 12000mm between centres.

QMT's range further extends to 5-axis machines from Jyoti Huron, leaders in high precision 5-axis machines for the Aero Space, medical and precision engineering sectors. These 5-axis machines are offered in multiple configurations to suit any application. QMT also offer a range of Wire EDM machines up to 6 axis, EDM die-sinkers and cylindrical/surface grinders.

Quality Machine Tools - Stand 784 www.qualitymachinetools.com.au



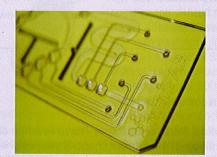
Superior surface protection

From concept design and definition, to prototyping, right through to manufacturing, MiniFAB offers expertise at every stage of product development. At Austech, MiniFAB showcases its capabilities which are adaptable to a range of industries, from medical devices and diagnostics, to packaging and laboratory instrumentation.

For complex structures that require a superior guard from outside environments, MiniFAB

uses Parylene to provide maximum barrier protection. Besides the increased scratch resistivity, this optically clear coat reduces surface friction, is chemically resistant and inert. It is often used on circuit boards to help protect them from the harsh environments they are subjected to, but more importantly it provides a strong dielectric layer.

"The greatest advantage of parylene is its adaptability," explains Erol Harvey, CEO, MiniFAB. "It can provide a fully conformal, pinhole-free coating to a wide range of materials including polymers, silicon, metals.



elastomers, paper and glass. This method ensures that no matter the object, the true angles and geometrics are preserved."

According to Harvey, using traditional coatings on medical components and diagnostic devices can be problematic; but parylene is ideal because its inert nature means that it is biocompatible, meeting USP Class VI requirements. It can also act as a lock-down, decreasing the risk of particulate contamination. "By adding a

parylene layer you are protecting your medical device from damage, increasing its durability and prolonging its life," he says. "The easy adaptability of parylene means that it can be used to coat almost any product in a time and cost efficient way, from the highly technical to the everyday components."

MiniFAB (AUST) Pty Ltd - Stand MS0 www.minifab.com.au