



For Immediate Release

News From: Absolute Machine Tools, Inc.

7420 Industrial Parkway, Lorain, OH 44053

Courtney Ortner 800-852-7825

Media Contact: Lynn Gorman Communications, lynn@gorcomm.com, 352-489-4788

With Art: Automation Cell image

AccuteX EDM Spotlighted in Live Demonstration Machining Cell at IMTS 2014

Absolute Machine Tools/AccuteX Booth E-5225

[MASON, OH – June 12, 2014] IMTS visitors can watch and learn more about how a die sinker EDM, a machining center, and a robot can be integrated into an automated machining cell. At IMTS in Absolute Machine Tools booth E-5225, which is displaying the AccuteX brand of wire and sinker EDMs, the cell will be producing multiple cavity and core components for the mold and die industry. According to the company, the live demonstration will showcase electrode management, robotic part handling, and advanced control intelligence, along with the production machinery.

In the demonstration at IMTS, a Fanuc M-20iA robot will tend a manufacturing cell consisting of a Tongtai TMV-510G machining center and an AccuteX DS-550CM die sinker EDM. The EDM has an X,Y, Z working capacity is 20 in. x 16 in. x 14 in. (500mm x 400mm x 355mm). The work table size is 32 in. x 18 in. (813mm x 457mm). Maximum workpiece size is 47 in. x 27 in. x 17 in., (1194mm x 686mm x 686mm) and this machine can accommodate workpiece weights up to 2,970 lbs. (1345 kg). AccuteX designed the EDM using Finite Element Analysis (FEA) to ensure high accuracy machining. Further contributing to its rigidity is a heavily ribbed, high-grade Meehanite casting. Premium grade components, such as precise drive system, linear bearings, class 5 pre-tensioned fine finish ballscrews, and high resolution servo motors are used, along

with roller type linear guideways, and optical scales. Options for the DS-550 for greater flexibility include a built-in C axis with 360° indexing, an automatic electrode changer, dielectric cooler, and custom tooling package. Customers can perform 3-axis machining in 6 directions, multi-cavity, circular, square and any angle orbiting, internal/external spherical, and 45° corner machining. Further, the EDM can do 3-axis linear machining, 2-axis arc machining, and offers helical machining electrode compensation. The AccuteX control's 15 in. industrial grade, LCD monitor is easy to read and in full color. Its software supports dialogue options for simple, straight-forward programming and operation.

The Tongtai TMV-510G machining center in the cell is engineered for high speed, efficient production of precision graphite electrodes and similar items. A fixed column/moving table type machine, it features a high performance 20,000 RPM direct drive spindle that is oil cooled for thermal stability, and a 20 station high-speed arm-type automatic tool changer (ATC) that produces tool changes in 0.8 seconds and chip-to-chip times of 1.9 seconds.

With X-Y-Z travels of 20", 14.2", and 11.8" (500mm, 355mm, 295mm) respectively, and a 23.6" x 13.6" (590mm x 340mm) work table area, the machine offers useful work volume in a compact 95" x 55" x 90" (2,375mm x 1,375mm x 2,250mm) footprint that conserves valuable shop floor space.

The Tongtai TMV-510G in the cell at IMTS has features provided specifically for graphite machining. The arm-type ATC keeps tools away from contamination and out of the work zone, and a standard full cover on top of the machine contains dust. A Donaldson Torit DFO 2-2 1200 CFM dust collector efficiently evacuates dust from the machine, and automatic shakers clean the filters and deposit the dust into a convenient-to-empty hopper.

The Fanuc M-20iA performing all the part handling tasks in the cell is a compact robot with a slim wrist and small footprint for operation in tight spaces. It can be mounted on the floor, wall, or ceiling. It has a reach of 71" (1811mm) and full circular motion. Cabling, air tubes and valves are enclosed in the dustproof and waterproof robot arm, and vision and force sensors are available to tailor the robot to specific applications.

The cell's complete package includes a safety fence and the engineering expertise, including project management, design engineering, controls engineering, robot programming, and installation.

For more information, visit IMTS 2014 booth E-5225, or contact Absolute Machine Tools, Inc., (513) 701-5550, www.absolutemachine.com.

#