

FOR IMMEDIATE RELEASE

**ENGIS CORPORATION INCREASES BORE-FINISHING OUTPUT WITH
NEW FPM-3X-2 MACHINE**

WHEELING, IL, February 2017 – Engis Corporation, a world leader in superabrasive finishing systems, has announced the availability of its new FPM-3X-2 machine, an enhanced three-axis bore-finishing system for single-pass honing of hydraulic stack valves.

Engis's original three-axis system, the FPM-3X, was created to provide more range and customization with greater features and operations for single-pass bore finishing. The need for such a machine was prompted by the limitations of systems with multiple spindles around a rotary table. While the multi-spindle rotary system could improve production by performing all finishing procedures at once, it could not always meet all of an application's requirements.

A full CNC-controlled, three-axis single-pass bore-finishing machine, the Engis FPM-3X utilizes an automatic tool changer for complete versatility. Typically consisting of two to 32 bores, stack valves are loaded onto the machine's table, which can handle weights of more



than 2,000 pounds. When a new part is loaded into the FPM-3X, the machine inspects bore locations by automatically placing a Renishaw probe into the spindle and feeding it into each bore to touch off on four sides for exact measurements. The inspection results are used to implement the required offsets and provide perfect bore positioning. The system next

performs the finishing sequence for each bore with the desired diamond tools. The table is then returned to the home position with the finished stack-valve assembly for unloading.

The new FPM-3X-2 builds on its precursor's strengths by adding an independent second table, creating even more flexibility for greater output. One table can be loaded and unloaded while the other is in operation. At the same time, different parts can be processed with their own specific tooling and



programming. These capabilities allow for the finishing of a wide spectrum of components with quick change-over. The twin-table design also lets operators load several components at once for unattended finishing.

“While the FPM-3X has proven to be the market’s best solution for precision stack-valve bore honing, the FPM-3X-2 takes the popular problem-solving technology to an even higher level,” said Engis Director of Precision-Hole Finishing Systems Robert Marvin. “It is the only single-pass honing machine in the world to offer the FPM-3X’s powerful production attributes with the wide-open possibilities of a second table.”

Engis Corporation, a worldwide organization headquartered in Wheeling, IL, manufactures and markets superabrasive finishing systems and high-precision micron diamond and CBN powders for operations that demand precision surface polishing and close-tolerance requirements. Engis provides products, services and technological advances in key areas including diamond flat lapping/polishing, diamond- and CBN-plated tools, high-precision honing machines and tools, tool-room products and R&D technical support. For more information, please call (847) 808-9400 or visit www.engis.com.

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