

BORE FINISHING



Precision Honing

PRECISION BORE FINISHING

SPM SERIES Single-Pass Bore Finishing



Single-Pass Bore Finishing Model SPM-6620 shown

High Precision, Tight Tolerance, Low Per Part Cost

For high volume applications, Engis single-pass bore finishing systems are the unsurpassed solution for forward thinking manufacturers to improve roundness, concentricity and finish.

Utilizing the single-pass process, extremely tight tolerances can be held reliably and consistently in your production environment, at a lower overall cost per finished piece. Additionally, Engis diamond plated and superabrasive bore finishing tools ensure high quality by achieving - in standard and semi-blind bores - geometries to within one half of a micron (0.000020") bringing precise accuracy to your finished part.

Single-Pass Bore Finishing Benefits include:

- *Reduced labor costs through automated systems*
- *Lower cost per hole through long tool life*
- *Predictable, consistent results*
- *Improved bore quality*
- *Fewer rejects*
- *Less frequent part inspection*
- *Shorter cycle times*
- *Higher production rates*
- *SPC values >2.0 Cpk*

The SPM series is a standard line of machines designed to meet the needs of job shops for small to medium size parts. Available in 1-10 spindle models, these systems are primarily for bores up to 50mm diameter.

Standard Features:

- Servo fed column design
- 620 (24.5") stroke
- Mitsubishi full CNC Controls capable of supporting optional advanced features including robotic parts handling, vision inspection, dynamic gauging, multiple networking protocols, automatic tool sizing and tool size verification.

Machine Also Includes:

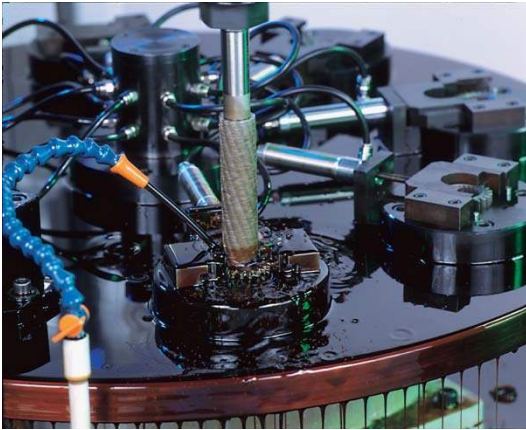
- Class 7 duplex spindle bearings
- 27mm (1-1/6") diameter ASA spindles
- Pre-lubed for life linear slides and ball screw (32mm (1-1/4") diameter)
- Pneumatic counterbalance for Z-axis
- Electro-mechanical, cam-style precision indexer



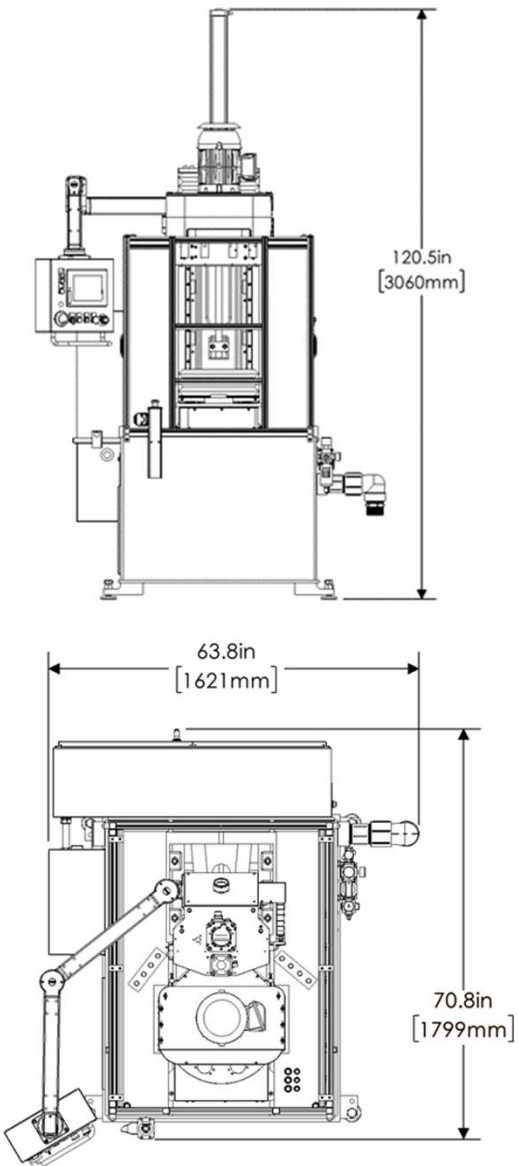
World Leader in Superabrasive Finishing Systems

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Custom fixtures are available



SPM SERIES SPECIFICATIONS:

MACHINE WEIGHT	2,000 kg (4,410 lb)
REQUIRED AIR PRESSURE:	6.2 Bar (90 PSI) .14m ³ /min (5 ft ³ /min)
OPERATING VOLTAGE:	380-460V 50/60Hz 200-240V 50/60Hz 3 Phase
DIAL PLATE DIAMETER:	508mm (20")
Z-AXIS TRAVEL:	620mm (24.5") standard Extended stroke is available
MAXIMUM RAPID SPEED:	8,890 mm/min (350 IPM)
SPINDLE MOTOR:	3.7 kW (5 HP) and 5.6 kW (7.5 HP) standard versions
SPINDLE SPEED:	100 – 1500 RPM
SPINDLE:	27mm (1-1/16") diameter ASA
SPINDLE NOSE TO TABLE MAX:	750MM (29.5") standard Extended length is available
AVAILABLE # OF TOOLS:	1 - 10
CONTROLLER:	Mitsubishi (standard) Other types available
PROGRAMMING:	G-CODE
ABLE TO PROCESS 2 PARTS/CYCLE	

OPTIONS:

- 132 liter (35 gallon) coolant system with single cartridge filtration
- 208 liter (55 gallon) coolant system with double cartridge filtration
- Rotary manifold for pneumatically activated clamping
- Upgraded spindle motor package
- Spindle crash protection
- Solid tool holder with or without crash protection
- Floating tool holder with or without crash protection
- Floating tool holder with angle modification with or without crash protection
- Quick-change tool adapters
- Full perimeter guarding
- Extended column
- Automation, gauging, brushing and guarding package available
- Standard and custom fixturing packages

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Engis

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