

EXCITECH-USA

Excitech USA's P2P is available in three sizes. Each machine is controlled with the new Open Series Osai Industrial Controller which is leading state-of-the-art CNC control technology. The P2P machine is driven with high power AC Servo motors for fast accurate cutting and spindle positioning. The machine includes an Italian 12 HP HSD ATC spindle, German Fam drill bank, Schmalz vacuum pods, and a Becker pump. These high quality components makeup an extremely reliable CNC production work center for any size fabrication shop at an unsurpassed price. This guarantees shop owners will get a return on investment in a shorter period of time thus providing an extraordinary price to performance ratio.

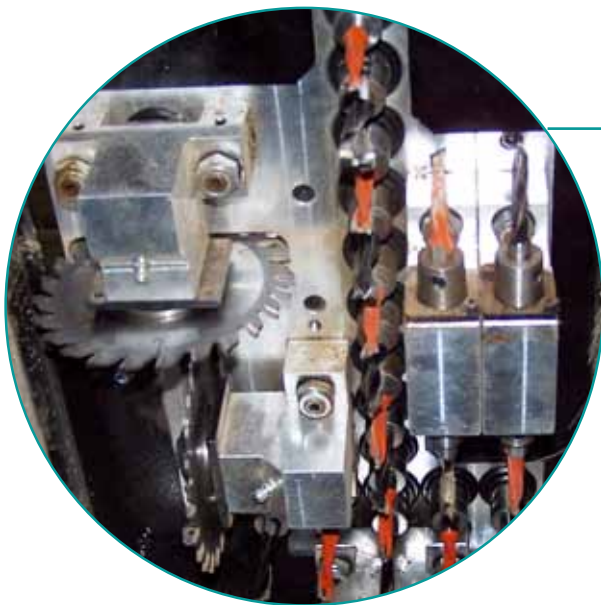


Specifications:

Model	1230D(X/Y/Z)	1243D(X/Y/Z)	1252D(X/Y/Z)
Process area (spindle)	3400x1640x250mm	4660x1640x250mm	5550x1640x250mm
Process area (Boring unit)	3194x1434x250mm	4454x1434x250mm	5344x1434x250mm
Max rapid traverse speed	3000ipm	3000ipm	3000ipm
Max Cutting speed:	750ipm	750ipm	750ipm

- Controller:** PC Based NEW open series Osai CNC industrial controller workstation
- Drive System:** Precision helical rack-n-pinion on X/Y axes, Ball screw on Z-axis
- Drive Motors:** Yaskowa (X=1.8kw, Y=1.7kw, Z=0.85 with pneumatic counterbalance)
- System Power requirements:** 230V, 3-phase – 80 amp circuit
- Spindle:** 12HP or 16HP HSD ATC with 8-tool rotary carousel
- Drillbank:** Fam 14 Vertical + 6 Horizontal + 2 saws or 9 Vertical + 6 Horizontal + 1 Saw
- Pump:** Becker 5.5HP
- Dust collection connection:** 6 inches
- Pods and rails:** (3 pods per rail included)

Dual work zone for easily loading and unloading



➤ Fam Drill Bank

- **Option 1** 9 Vertical + 6 Horizontal + 1 Saw
- **Option 2** 14 Vertical + 6 Horizontal + 2 saws

Options:

- Bar code printer and scanner
- Light Curtains
- Fence guards
- Variety of Pod configurations
- Aggregates

Work flow choices:

Stock material – CNC Router nesting – Edgebander – Packaging
(ME4 Venture Series)

or

Stock material – Panel Saw – Edgebander – Point-to-Point – Packaging
Excitech-USA EP Series Excitech E6 P2P

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CONSTRUCTION FEATURES



Machine Base Frame

All frames are designed using state-of-the-art CAD/CAM software which analyze stresses applied to the frame's structure, also known as Finite element analysis. This state-of-the-art leading edge technology assures the support foundation is structurally stable that will last the test of time. Each frame is stress relieved assuring long term stability in the frame structure mechanics.



Gantry Construction Assembly

Following the same Finite element analysis, the gantry is designed of tubular steel with internal webbed gussets and rail struts for carrying the spindles.



Gantry Support Weldment

Following the same design criteria as the frame the gantry support includes key webbed gussets which carry and transfer loads to the support carriages. The gantry support design mechanics are all steel construction. Each assembly is stress relieved for long term stability. The Gantry support design is an extremely heavy weldment which assures the spindles will run true and provide the stability for smooth accurate cutting.



Bearings
All three axes use precision linear guide rails and bearing manufactured by THK industry leader in linear motion products.

Tooling

E6 Point to Point machine includes an 8-position rotary carousel that moves with the machine while the gantry travels. The use of a carousel speeds up tool changes assuring faster cycle times increasing production capability.



Full Safety Enclosure on Gantry Keeps operator safe from any loose or flying debris as panels are processed. In addition the safety enclosure includes interlocks on the doors so that when operator is loading or changing drill or router bits the machines operations are halted.

CONSTRUCTION FEATURES

Precision Helical Racks

German manufactured ground precision helical rack-n-pinion assure high speed precision motion.

Drive Motors

Yaskawa high powered precision servo gear motors.

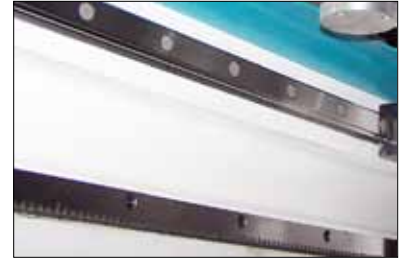
X=1.8kw,

Y=1.7kw,

Z=0.85kw with pneumatic counterbalance.

Gearboxes

The German manufactured gearboxes coupled on the AC motor servo drive directly drive the axis which provides the power from the motor directly to the helical pinion. This direct driven design eliminates movement within the drive mechanics.



Pod and Rail

Activated through pneumatic foot switch allows the operator to load and unload each station as required. Each rail can hold up to 8 pods. Each rail assembly comes with 3 pods, rear alignment pin, and lower lift guide bar. Boards can easily be slid into position banking against pneumatic side bar

and rear pop-up pins making for accurate board alignment on the machine. In addition, a pneumatic lower lift bar allows the board to slide in place above the rubber pod. Upon activation the board is vacuum clamped and ready for drilling, sawing or routing.

Spindle

The E6 Point to Point production work center comes standard with a 12 HP HSD high frequency automatic tool changer. This precision spindle requires no maintenance, uses industry standard ER collets and ISO 30 tool holders. Fully programmable speeds from 6000 to 24000 RPM, and comes complete with pneumatically retractable vacuum hood.

CONSTRUCTION FEATURES



Hand-held Pulse Generator
The Rotary hand wheel, attached to the machine, will control the axis that is selected on the wheels dial. All other functions are disabled when this is active.

The Setup Introduction manual provides information that will have users cutting parts in minutes.

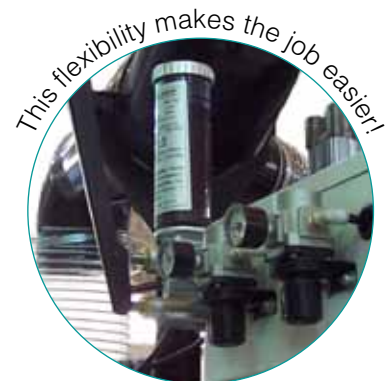
Lubrication

The Point to Point machine includes lubrication oil pumps for each axis making for easy machine maintenance.



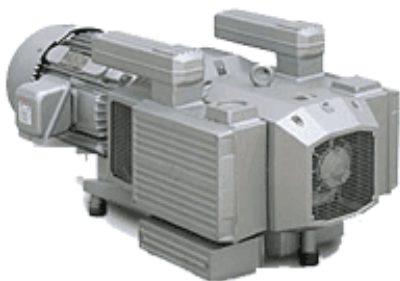
Dust Collection

The Point to Point machine includes a main overhead vacuum duct with a 6" connection.



Debris Trough

The machine is designed with an angled debris trough with access ports in the front of the machine. This allows debris to drop down and out the front of the machine making for easy clean up of the machine.

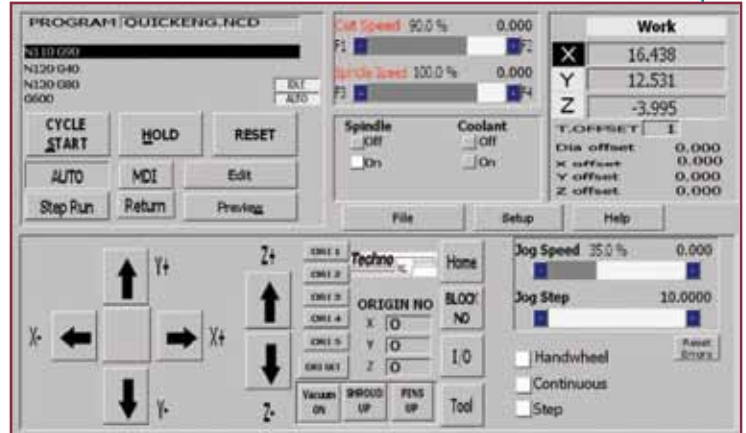
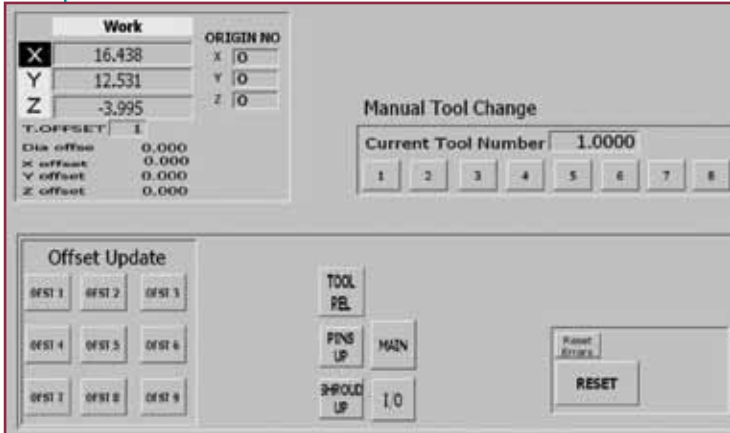


Vacuum Pump

- TEFC (totally enclosed fan-cooled). Rotary Vane Vacuum Pump
- Available in 230/460V, 50-60Hz, 3 ph or single phase
- Comes standard with motor starter, vacuum gauge, primary and secondary filter, check valve and all necessary plumbing to connect to router
- Rated for ultra quiet operation

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CNC Windows-Based G-Code Interface is included with each P2P machine and is an indispensable tool in any CNC Router application. Its open architectural design accepts G-Code files from any industry standard CAD/CAM software package. The jogging buttons, speed controls and run displays are all visible on the main page. The intuitive single-screen design and functions are easy to use and remember. Customers that are new to automation find the Excitech-USA CNC Interface easy to learn and operate. Most are up and running in less than one day. Customers soon discover that just because the Excitech-USA CNC Interface is easy to use does not mean that it is not a comprehensive CNC program.



Several impressive features include:

- Built-in editor for shop floor modifications
- Machine feed rate and spindle override control
- Continuous step jogging, or convenient hand-held pulse generator can be used to fine tune positional locations
- Mechanical homing location controls (at any corner of the machine)
- No DNC link required
- Allows for up to 10 fixture offsets
- I/O machine status display
- Skip function to return to program positions (in case of tool bit failure)
- Convenient vacuum pump switches on interface
- Real time file execution even if overrides used.

Excitech-USA offers FREE updates, via the Excitech-USA Support Web Site, for the life of the machine.

