

HVP 5

HVP 5 Driller

Up to 26" x 36" (660 x 914 mm)

Large panel capacity

Lowest cost per hole

High speed, 5 spindle unit

2000 ipm table speed

CNC-7 PC controller for faster setup

When you're doing large panel applications, you need a drill that's fast. Accurate. And provides extremely high throughput at an exceptionally low cost. Excellon's HVP 5 is it. HVP means High Velocity Precision. With speeds up to 2000 ipm, this 5-spindle drilling unit provides the higher accelerations necessary for increased throughput, especially on short moves. That translates to higher production capacity and the lowest cost per hole. Well, saving money is half the battle, right? Saving time is the other half. That's where the HVP 5's new CNC-7 PC controller comes in. With it, you can significantly reduce setup times. Which enhances your overall productivity, no matter what the application.

It's our custom to offer more options.

We recognize that custom configuration is the name of the game. That's why the HVP 5 offers a number of innovative options. ♦ Our EZ Tooling system lets you increase registration drilling accuracy, reliability and ease of setup. ♦ Our Electric Field Sensor (EFS) actually senses the point at which a tool touches the top surface of a metallic material. So you get the most reliable and repeatable controlled-depth drilling of blind vias. ♦ Our Multiple Cassette Holder (MCH) provides up to 960 tools per station. Just think what that means during long jobs. Much less idle time and operator intervention. And much more productivity. ♦ Our 170K rpm spindle combined with Pulse Drilling* provides a wide range of spindle speeds for increased speed and throughput in small hole and micro-drilling applications.



Drills are the last thing you need to worry about.

After nearly 40 years in the business, rest assured we have everything it takes to take the pressure off you. The products. The support. And most of all, the experience. To learn more about Excellon, and how we can help you, just give us a call at 1-800-EXCELLON.

Excellon

SINCE THE BEGINNING

HVP5

MACHINE SPECIFICATIONS

Machine Base	Fine-grain, black granite guideway
Dimensions & Weight	100" d x 175" w x 96" h (2540 x 4445 x 2438 mm); 19,000 lbs (8,618 kg)
Power Input	208 VAC, 3 phase, plus ground, 30A, 50-60 Hz
Axis Positioning	Split axis system: Table motion along Y-axis; spindle carriage along the X-axis
Table Guide & Support	Pre-loaded frictionless air-bearing guides along Y-axis and air-bearing table support
Precision Z-axis Module	Self-contained precision assemblies incorporating a high-stiffness air-bearing linear guide, brushless drive, pre-loaded leadscrew flexure coupling and Excellon air-bearing spindle.
Table Speed	2000 ipm (847 mm/s)
Drilling Accuracy	±0.001" typical (±0.0254 mm) per Excellon Dynamic Accuracy (EDA) test
Position Accuracy	±0.0002" (±0.005 mm)
Leadscrews	Precision ground recirculating pre-loaded ball screws for X, Y and Z axes
Z-axis Infeed/Retract Rate	Infeed: 500 ipm (212 mm/s) Retract: 1,000 ipm (423 mm/s)
Maximum Panel Size	26.1" x 36" (663 x 914 mm)
Chiller	Coolant refrigeration unit maintains spindle and X-axis carriage temperature

SPINDLE SPECIFICATIONS

Number of Spindles	5
Spindle Specifications	Air-bearing driller spindles: 14,000–125,000 rpm
Drill Bit Sizes	0.0039"–0.259" (0.10–6.58mm) Common shank 0.125" (3.175 mm)

CONTROL SYSTEM SPECIFICATIONS

Controller	Excellon CNC-7 PC
Data Input/Output	3.5" floppy, Ethernet, CD-ROM
Software	Excellon's modular software includes "Quickdrill" feature and multilingual capability

MACHINE OPERATING REQUIREMENTS

Ambient Temperature	To assure specified accuracies: 72°±2°F (22°±1°C)
Ambient Humidity	45–60%
Air input	105–150 psig at 26 scfm flow (7.4–10.5 kg/cm ² at 736 l/min)
Vacuum	25 inches of water (635 mm of water) 11 scfm flow (311 l/min) per spindle

STANDARD DRILLING FEATURES

Bit Detection	Excellon Laser Tool Check (LTC)
Tool Management System (TMS)	120 tools per station (Excellon ringed)

OPTIONS

Special Tooling	Available upon request by Special Material Quotation (SMQ)
Tool Management System (TMS)	240 tools per station (Excellon ringed) 600 tools per station (Euro-ringless or Excellon ringed tools) 960 tools per station (Excellon ringed tools only)
Tool Metrology	Excellon Tool Metrology Gauge (TMG)
Spindle	30,000–170,000 rpm spindle with Pulse Drilling Software (US patent No. 5735646)
Independent Z-axis Depth Control	Excellon TMG, Electric Field Sensor (EFS) or Mechanical Depth Control (MDC)
Bit Detection	Excellon Electric Field Sensor
Microdrill Applications	Excellon Microdrill Pressure Foot (MPF)
Data Communication	Excellon DNC

Specifications subject to change without notice. More detailed specifications available from factory.



Excellon Automation Co.
24751 Crenshaw Boulevard
Torrance, CA 90505
Phone: 310-534-6300
Fax: 310-534-6777

Automation Group
Esterline Technologies

Excellon Europa GmbH Dietzenbach, Germany, Phone: 49-6074-3000

Excellon France Lisses, France, Phone: 33-1-60-86-2737

Excellon Italia (MI), Italy, Phone: 39-39-652-446

Excellon U.K. Littlehampton, West Sussex, United Kingdom, Phone: 44-1-903-711100

Excellon Japan Tokyo, Japan, Phone: 81-3-5779-6420

Excellon Taiwan (Asia) Taipei, Taiwan, Phone: 886-2-2793-7051