



**DPP** **DIRECT**  **PACKAGE**  **PRICE**  
 pre-configured packages yield no-haggle pricing

**DATRON DIRECT ONLY** [deeply-discounted prices based on machines stocked in volume — further discounts will not be granted]

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**MAXIMISER**  
 HIGH-SPEED ROUTER



| Tech Specs                 | <b>MAXIMISER</b><br>HIGH-SPEED ROUTER   |
|----------------------------|---|
| Coordinate Table           | Solid concrete polymer on a steel base, portal set-up with double-sided Y drive, precision guides |
| Machining Area (X x Y x Z) | 39.3" x 98" x 7"  |
| Portal Height              | 75"   |
| Drive System               | Digital servo drives, precision ground ball screw   |
| CAD Interface              | ISO G-Code (standard for NC machining code)   |
| Control System             | Microsoft Windows®-based control (open PC), 3-axis decentralized high-speed                       |
| Lubrication & Cooling      | Minimal quantity lubrication, electronically adjustable dispensing, Ethanol coolant               |
| Machining Spindle          | 2kw high-frequency spindle, 7000 - 60,000 rpm 5/16" collet, hybrid ceramic bearings               |
| Tool Changer               | 10-tool changing unit with tool length sensor or 20-tool changing unit with tool length sensor    |
| Accuracy                   | ±0.004"   |
| Feed Rate                  | 787" per minute   |
| Footprint                  | 69" x 130" x 77" (W x D x H)  |
| Weight                     | Approximately 2 tons  |
| Power Requirement          | 208/220V, 7Amps (single phase)  |

ALL STANDARD FEATURES INCLUDED IN PACKAGE PRICE

| ITEM                                 | DESCRIPTION  | QTY. | UNIT PRICE | TOTAL            |
|--------------------------------------|--|------|------------|------------------|
| <b>MaxiMiser High-Speed Router</b>   | Large 40" x 98" machining area w/ Ethanol Coolant System     | 1    | \$138,800  | <b>\$138,800</b> |
| <b>2kW Spindle with 5/16" Collet</b> | 2.7 hp, 60,000 RPM high-frequency spindle (up to 800"/min)   | 1    | Standard   | no charge        |
| <b>Automatic Tool Management</b>     | 10-tool changer, tool database, tool-length sensor           | 1    | Standard   | no charge        |
| <b>Standard 1-Year Warranty</b>      | Covers parts and electronics except in cases of user-error   | 1    | Standard   | no charge        |
| <b>Computer Command Center</b>       | 850 MHz Pentium PC w/ CNC control software                   | 1    | Standard   | no charge        |
| <b>Computer Features</b>             | 15" LCD monitor, keyboard and hand-held controller           | 1    | Standard   | no charge        |
|                                      | 256 MB RAM, 40 GB part/program storage                       | 1    | Standard   | no charge        |
|                                      | CD-ROM drive, 3.5" drive & USB port                          | 1    | Standard   | no charge        |
| <b>Control Software</b>              | Microsoft Windows® and Windows-based control software        | 1    | Standard   | no charge        |
| <b>Control Features</b>              | Ethernet networking & remote monitoring capabilities         | 1    | Standard   | no charge        |
| Packing                              | Designed to protect machine in transcontinental shipping     |      | Option     |                  |
| Shipping                             | Estimated separately based on customer location              |      | TBD        |                  |
| 20-Tool Changer Upgrade              | Replaces smaller tool changer & upgrades to 20 tools         |      | Option     |                  |
| Z-Correction Probe                   | Measures surface irregularities & compensates dynamically    |      | Option     |                  |
| 3D Probe Extension                   | Enables the Z-Correction Probe to function in 3D (X, Y & Z)  |      | Option     |                  |
| Renishaw TP20 Probe Upgrade          | Touch-trigger probe for complex part measurement             |      | Option     |                  |
| 4th Rotary Axis                      | Servo-controlled rotary axis                                 |      | Option     |                  |
| 4th & 5th Rotary Axis                | Tilting 2-Axis rotary indexer                                |      | Option     |                  |
| RPM Control                          | Programmable spindle speed control by software               |      | Option     |                  |
| Workholding Enabled Setup            | Vacuum pump, tubing, gauges, electric on/off on function key |      | Option     |                  |
| Micro-Jet Coolant System             | High-pressure oil coolant system for machining steel         |      | Option     |                  |
| Windows Control (offline)            | Enables programming & program testing from remote PC         |      | Option     |                  |
| Tutorial Kit                         | Manual, mounting fixture & hardware, 4 tools & 4 plates      |      | Option     |                  |
| On-Site Training                     | Machine installation and overview of control (cost per day)  |      | Option     |                  |

The logo consists of the letters 'DPP' in a white, bold, sans-serif font, centered within a dark blue rectangular background.

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Whether you stick with the standard **tool changer** that comes with the package price or upgrade to one with more tools, you'll be pleased with some unique features. For example, our tool checker is a mechanical sensor that measures tool length and can detect a broken tool. And our software can be programmed with a macro to initiate a tool check at regular intervals by employing an "if/then" statement such as, "Measure this tool; if the length is shorter than the listed parameter, then change the tool."



Datron's optional, but integrated **Z-Correction Probe** recognizes irregular work-piece topography and compensates for it dynamically. It does this by taking measurements along the surface of a blank and feeding that data into the machining controller. The controller automatically adjusts for uneven surfaces or work piece position. Through this process, job setup times are reduced and piece/part rejection is minimized.



With the addition of the **3D Extention**, the Z-Correction Probe locates parts and material irregularities in the X, Y, and Z co-ordinates, finds centers of holes and bosses, pre-measures blanks before the machining starts, compensates for material variations, feeds data into ISO 9000 information chain for quality control, and even allows for the reverse engineering of many parts.



The omni-axis **Renishaw TP20 probe** is ideal for complex part measurement such as engraving a logo onto a rounded surface. Ordinarily, 3D programming would be necessary to accommodate surface depth changes and ensure an even depth engraving. With the TP20, the surface is scanned and irregularities or surface changes are automatically managed in the machining data without 3-D programming. The TP20 features a 6-way, kinematic, touch-trigger probe system to significantly improve cycle times.



The **4th Rotary Axis** option comes complete with one collet chuck (inside diameter from 3mm to 20mm), chuck wrenches and operational software. The servo-controlled axis has a resolution of 64,000 steps per revolution. The axis can be augmented with a standard lathe chuck or custom fixture for larger diameter parts. The dimensions are 8" (w) x 4" (h) x 6.5" (d) Our tilting **5th Axis Rotary Indexer** with manual collet closer comes with a programmable servo control and CNC interface cables.



The **Micro-Jet Coolant System** is specifically designed for machining steel. An oil-based coolant is atomized by compressed air and is forced through nozzles on the machining spindle. The coolant is evenly disbursed on both tool and substrate and penetrates the cutting channel where it expands as it exits thereby producing a cooling effect. The heat from the cutting process evaporates the non-oil content of the mist leaving high lubricity oil to lubricate the cutting tip.



**Windows-based Control Software** comes standard on all Datron machines. But often, product development and programming is done on a different workstation. That's why we offer an **offline version** as an option. This allows R&D to be done remotely within the same program and software environment. The user can see how the machine will respond to their program and work out the kinks before uploading the files to the machine's operating computer.