=ATLAS
The Atlas Series machine is all steel construction, providing the rigid foundation required for ultra-smooth routing results. The Atlas machine includes a 4HP HSD collet spindle. This CNC router model includes a dust hood that has concentrated air flow at the cutter, which provides optimal dust collection performance. The multi-zone vacuum t-slot table is constructed from very hard Phenolic, which is very stable material, and holds tight tolerances for precision cutting. The Atlas Series is connected to a 10HP Rotary vane vacuum pump, which has very quiet operation (82db). The Atlas series is powered by brushless drive motors, and is controlled via easy to use and learn hand held controller.
Specifications:

- 4' x 4', 4' x 8' and 5' x 10' stock sizes (Special sizes available upon request.)
- Maintenance free brushless motors and drives
- 4 HP HSD high-frequency collet spindle
- Automatic tool calibration pad for easy and accurate z-zero
- Multi-zone vacuum t-slot table
- Easy to use hand-held micro stepper controller
- Open architecture works with all industry standard CAD/CAM software

The base frame is fabricated from heavy duty tubular steel that is welded and stress relieved, so that the foundation remains true and steady over the operational life of the machine.

The gantry is constructed of tubular steel with reinforcing ribs that are welded throughout the length of the column, which results in a steady firm beam assembly. This quality engineering and workmanship result in smooth precision cutting.

Automatic tool calibration pad allows for easy and accurate “Z” zero position.
Features:

**Spindle**

The Atlas Series CNC router comes standard with a 4 HP HSD high frequency collet spindle. These precision spindles require no maintenance, use industry standard ER collets, have fully programmable speeds from 6000 to 18000 RPM, and come complete with vacuum hood and wrenches.

**Hand-held Controller**

The hand-held controller is the heart of the operational system. This hand-held controller redefines the phrase "easy-to-use". Customers can be up and running the same day power is connected to the machine. The setup introduction manual provides information that will have users cutting parts in minutes.

**Drive Motors**

The Atlas CNC Router utilizes brushless micro-stepper motors. These motors require no regular maintenance, therefore reducing any maintenance downtime.

**Drive System**

The Techno Atlas CNC Router uses precision helical gear racks on the X and Y axes. The mounting of the rack is inverted to help keep dust and debris from building up on the drive system and this assures smooth motion and long term reliability. The precision gearbox is directly coupled to the stepper motor and pinion. This eliminates belt stretch inaccuracies, assuring high-speed machining while the system positions the spindle accurately.

**Gantry Uprights**

The gantry uprights are cast iron with heavy duty gussets formed into the casting. Each support is machined for housing the various drive assemblies including motors, bearings, belts, and wiring harnesses.

**Electronics**

All the electrical components are housed and wired in a doubledoored Nema 4 electrical enclosure. This allows for easy access and service when needed. All wiring is tagged, so that when service is required, the customer can easily navigate the cabinet. In addition, the cabinet serves as a work bench for the tools required.
4 HP HSD collet spindle

Vacuum hose support cap

Double-doored Nema enclosure

Easy-to-use hand held controller

Cable carriers (keeps wires organized)

Tubular steel gantry

All steel construction

Direct drive brushless motors

Console work station

T-slot vacuum table surface

THK linear rails and bearings

ATLAS
See What the Atlas Series Can Do