

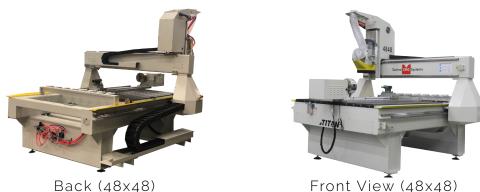


# Titan Series CNC Router

The Titan Series machine is all steel construction providing the rigid foundation required for ultra-smooth routing results. The Titan machine includes a 12HP HSD automatic tool changer with an 8-position tool rack, and a pneumatically operated dust collection hood that concentrates air flow at the cutter. The concentrated air flow provides optimal dust collection performance. The multi-zone vacuum t-slot table on the Titan series is constructed from very hard phenolic, which is very stable material, and holds tight tolerances for precision cutting. The Titan series is connected to a 10HP Rotary vane vacuum pump, which has very quiet operation (82db). For easy sheet alignment, (3) material pop-up pins are included and precisely placed to handle and align various size materials. The Titan series is powered by brushless drive motors, and is controlled via easy to use and learn hand held controller.



#### Different Views:



Back (48x48)



# Specifications:

- 12 HP HSD automatic tool changer spindle
- · Maintenance free brushless motors and drives
- Vacuum T-slot table with main control gate valve
- Pneumatic material pop-up pins
- · Automatic tool length calibration via closed loop touch pad
- · Automatic z-zero via secondary touch pad
- Easy-to-use hand held controller (optional PC based system available)
- Open architecture works with all industry standard CAD/CAM software

## Spindle



The Titan Series machine comes standard with a 12 HP HSD high frequency automatic tool changer spindle. This precision spindle requires no maintenance, and uses industry standard ER collets and ISO 30 tool holders. The Titan Series is fully programmable with speeds from 6000 to 24000 RPM. and comes complete with a pneumatically retractable vacuum hood.

## Pneumatic Material Alignment Stops



The Titan Series machine comes standard with three material pneumatic alignment stops. These pins allow the operator to bank the edge of the material against them precisely aligning the material to the machine origin.

### Tooling



The Titan Series machine includes an 8-position tool rack in the rear of the machine. The position of this rack allows for easy loading and unloading of material from either side of the machine.

## Features:

#### Tool Holder Clamp



The Titan Series comes equipped with a tool holder clamp fixture, providing a much easier way of inserting and tightening the CNC router bits into your tool holder. This method is safer and easier than using the common procedure of tightening the collet nut with two wrenches while the tool holder is still in the spindle.

#### Vacuum Table



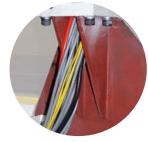
The Titan machine includes a vacuum t-slot table that can be easily customized to fit your particular part geometry. The grid allows the gasketing to be routed around the table sections. In addition, it includes rubber plugs for zoning off specific areas. Vacuum flow is controlled via a main gate valve, which lowers operating costs and saves vane life.

Gantry



The gantry is constructed of tubular steel with reinforcing ribs 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.

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.

Drive Train Assembly



The Techno Titan Series 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, this assures smooth motion and long term reliability. The precision gearbox is directly coupled to the drive motor and pinion. This eliminates belt stretch inaccuracies assuring high-speed machining.

**Tool Calibration** 



The Titan series comes standard with an automatic tool calibration touch off pad. This feature makes measuring tool lengths easy and quick, and allows for single and multiple tool changes through the program.

Electronics



All the electrical components are housed and wired in a doubled-doored Nema 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.

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. Every controller has very easy-to-read, understand, and execute commands. The setup introduction manual provides information that will have users cutting parts in minutes.

# Hand-held Controller Features:



- Easy to read programmed buttons
- Start, stop, and pause buttons
- E-stop on hand-held pendant
- · Real time feed, speed and spindle override
- Single button for XY zero
- Easy one stroke automatic tool length calibration
- Pre-programmed go-to-origin macro
- CNC dust hood control with manual overrise
- Single button control for manual load/unload of tool

- X and Y straight and diagonal jog control
- $\boldsymbol{\cdot}$  Toggle between low and high speed jogging
- Step jog for fine incremental control
- Resume breakpoint function
- · Built-in-help tips menu
- Single button for safety clearence position
- Absolute and relative coordinates control
- Send to home button
- FREE updates





# See What the Titan Series Can Do







Photo by Questech Corp

Photos by Treehouse Hardwoods







