



*Available in the popular '8 by 4' format, the Spandex Tornado V2 is a very versatile, very affordable, entry-level router. Whether you're looking to cut, carve or engrave; work with woods, metals or acrylics; the Tornado V2 will do everything you need it to and much more besides.*

The Tornado V2 is an intelligent router with state of the art Digital Signal Processing controlling its every move. An easy-to-use joystick and display panel enables the operator to drive the router and interact with its remote PC workstation too. An auto tool length sensor comes as standard and there's a wide range of machine head options available, including a nose-cone engraver, a reciprocating steered knife and trailing blade knife. Making the Tornado V2 one of the most versatile profile cutting solutions on the market. If you're looking for a router that offers versatility, affordability and durability, look no further than the Tornado V2 from Spandex.

## SPANDEX TORNADO V2

### Entry Level Router/Engraver

#### OUTLINE SPECIFICATION

**Overall Dimensions:**  
Length 3200mm, Width 1650mm, Height 1450mm

**Active Routing Area:**  
1285mm x 2470mm

**Cutting Speed:**  
X & Y Axis speed 1 - 250mm/sec; Z Axis 1 - 40mm/sec

**Positioning Speed:**  
Maximum positioning speed 250mm/sec

**Maximum material width:**  
1500mm

**Maximum material thickness:**  
110mm

**Cutting depth adjustment:**  
Automatic tool length sensor

**Drive system:**  
Servo controlled Recirculating Ball Leadscrew drives on all axis

**Router motor:**  
2HP Perske variable speed spindle  
(3HP Perske option available)

**Material hold down:**  
Vacuum table with manual clamping facility

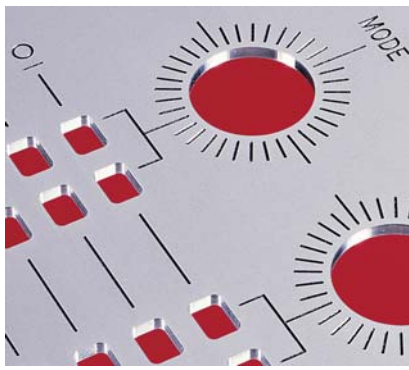
**Operator Interface:**  
Simple to use joystick / control panel uses Digital Signal Processing technology to operate the router and interact with remote PC workstation

**Software Upgradeable:**  
Flash updateable firmware

**Repeatability & Resolution:**  
Leadscrew repeatability .0013mm  
Leadscrew distance accuracy +/- .05mm  
Software Resolution .003mm

**Software:**  
Open Architecture: supports HPGL and G-Code

**Power requirements:**  
Single phase 240V (no vac bed pump fitted)  
3 phase 380V (with optional vac pump)





#### Tornado V2 Optional Accessories

- 3HP Perske motor
- Vacuum bed pump
- Nose-cone engraving motor
- Reciprocating steered knife assembly
- Trailing blade knife holder
- Material thickness sensor
- Bristle foot attachment
- Spindle pen holder
- Signal booster

## SPANDEX **TORNADO** VERSATILITY...

### **Machine head options**

The Tornado V2 is one of the most versatile profile cutting solutions on the market. In addition to the standard router motor, the system can be fitted with a nose-cone engraving motor, a reciprocating steered knife assembly or a trailing blade knife holder. Opening the door to a truly diverse range of materials and profitable business opportunities.

## SPANDEX **TORNADO** ACCURACY...

### **Recirculating ball lead screw drive on all axis**

Simply the best drive system on the market. No expense has been spared on the precision-engineered components that deliver the highest levels of accuracy at the very fastest speeds in the industry. Other benefits of this drive system include minimal wear and low maintenance.

### **Dual drive on Y axis**

Two recirculating ball lead screw drives and two 400 watt motors power the gantry up and down the bed and ensures that it remains perfectly square in all cutting situations.

### **Square linear guide bearings on all axis**

Simply the best bearing system on the market, providing the rigidity required for fast and accurate cutting. Other benefits include extended bearing life with minimal maintenance.

### **Fully welded and planed box section steel table**

The only way to ensure flat, straight, rigid support for truly accurate routing and engraving.

## SPANDEX **TORNADO** PRODUCTIVITY...

### **Powerful vacuum hold down (optional) & clamping system**

The fast and easy set up your jobs. A powerful vacuum pump provides all the bed suction you'll ever need to hold down everything from full sheets to the smallest components in the jobs you do. No need to waste time and money on sacrificial beds or boards.

### **Automatic Tool Length Sensor**

No need for conventional step height gauges or tool length devices. The Tornado will automatically set the tool depth for your job using its unique built-in tool length sensor to give you consistently accurate "cut to mask" routing every time.

## SPANDEX **TORNADO** STRENGTH...

### **Heavy-duty welded aluminium gantry**

This potent combination of integral strength and minimal weight results in high acceleration speeds and 'chatter-free' cutting.

### **Fully welded and planed box section steel table**

The only way to ensure flat, straight, rigid support for truly accurate routing and engraving.

### **High strength steel bed**

This strong and stable bed construction eliminates the possibility of future warping or distortion.

### **PVC working surface**

High quality PVC slats provide an excellent grip surface whilst protecting the finish of materials being routed or engraved.