

# Haas TR Series

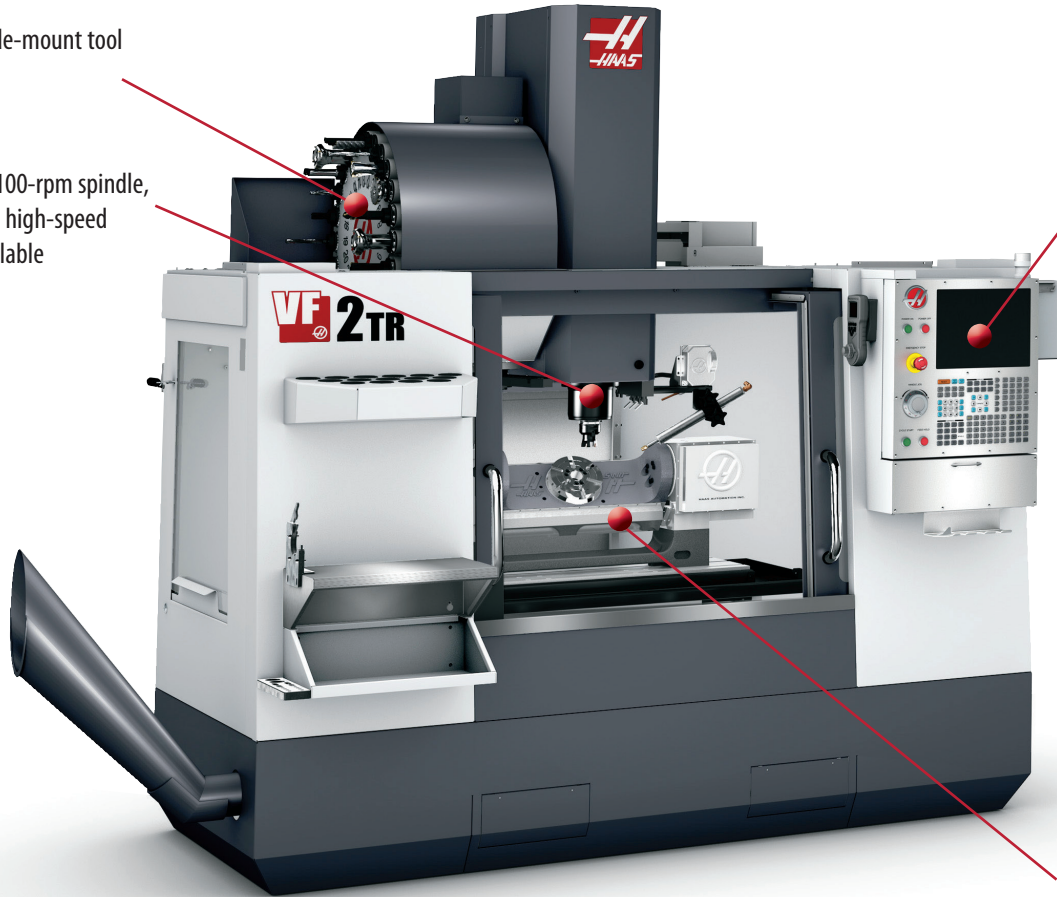
## The 5-Axis Trunnion VMCs



Standard side-mount tool changer

Standard 8 100-rpm spindle, with several high-speed options available

ISO standard G-code programming through the user-friendly, full-function Haas CNC control



Trunnion table provides simultaneous 5-axis motion, or accurate positioning to nearly any angle.

Warranty: 1 Year Parts and Labor

### [ Standard Features ] VF-2TR

- Removable TR160 Dual-Axis Trunnion Table
- $\pm 120^\circ$  Tilt,  $360^\circ$  Rotation
- Side-Mount Tool Changer
- Automatic Chip Auger
- Programmable Coolant Nozzle
- 750 MB Program Memory
- Rigid Tapping
- 38 cm Color LCD Monitor w/USB Port
- Coordinate Rotation & Scaling
- Remote Jog Handle
- User-Definable Macros
- High-Speed Machining w/Look-Ahead

### [ Standard Features ] VF-5TR & VF-6TR

- Fixed Dual-Axis Trunnion Table
- $\pm 120^\circ$  Tilt,  $360^\circ$  Rotation
- Side-Mount Tool Changer
- Automatic Chip Auger
- Programmable Coolant Nozzle
- 750 MB Program Memory
- Rigid Tapping
- 38 cm Color LCD Monitor w/USB Port
- Coordinate Rotation & Scaling
- Remote Jog Handle
- User-Definable Macros
- High-Speed Machining w/Look-Ahead



Haas Automation Europe | [www.HaasCNC.com](http://www.HaasCNC.com) | +32 2 522 99 05 | Made in U.S.A.

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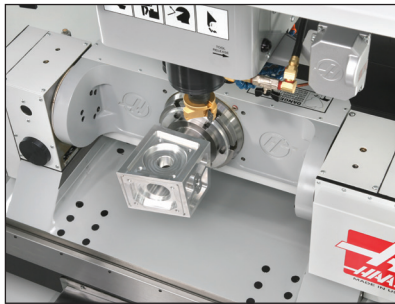
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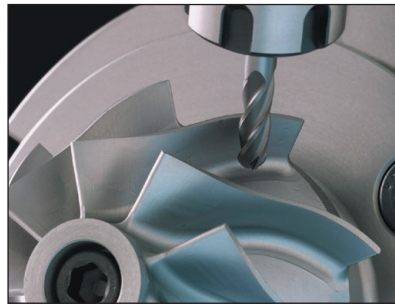
Haas TR Series machines are versatile 5-axis machining centers based on the popular VF-2, VF-5 and VF-6 VMC platforms. Each machine provides full simultaneous five-axis motion, or can position a workpiece to almost any angle for machining.

The VF-5TR and VF-6TR each feature a dual-axis trunnion table in place of the standard T-slot table, which provides additional Z-axis clearance and increases rigidity. These machines are available in both 40-taper and 50-taper configuration.

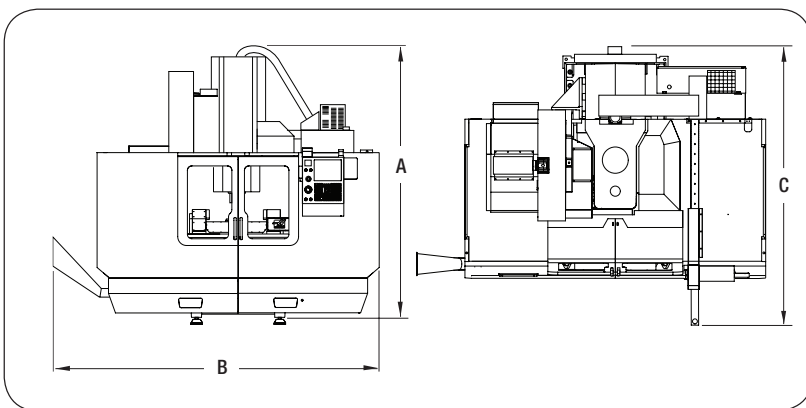
For added flexibility on the VF-2TR, a TR160 trunnion is mounted directly to the machine's standard T-slot table. It can easily be removed when jobs require only 3-axis machining.



Reduce setup times and increase accuracy by machining multi-sided parts in a single setup.



Full 5-axis simultaneous motion simplifies machining of complex parts.



Operating Dimensions	VF-2TR	VF-5TR	VF-5/50TR	VF-6TR	VF-6/50TR
A. Max Operating Height	2769 mm	3023 mm	3226 mm	3378 mm	3683 mm
B. Max Operating Width	3200 mm	4014 mm	4014 mm	5232 mm	5232 mm
C. Max Operating Depth**	2515 mm	2769 mm	2769 mm	3073 mm	3073 mm

\*\* Requires additional 914 mm to open rear service panel.

### [ Specifications ]

Spindle (40 Taper)	VF-2TR	VF-5TR	VF-6TR
Speed		8 100 rpm <sup>1</sup>	
Max Rating		22,4 kW	

### Spindle (50 Taper)

Speed	----	7 500 rpm <sup>1</sup>	7 500 rpm <sup>1</sup>
Max Rating	----	22,4 kW	22,4 kW

### Table

Diameter	160 mm	210 mm	310 mm
Pilot Bore	38,1 x 121,7 mm	50,8 x 129,5 mm	82,6 mm thru
Platter Capacity	36,3 kg	90,7 kg	226,8 kg

### Travels

X	762 mm	965 mm	1 625 mm
Y	406 mm	660 mm	813 mm
Z	508 mm	635 mm	762 mm
A (tilt axis)	± 120°	± 120°	± 120°
B (rotation axis)	360°	360°	360°

### T-Slots

T-Slot Width	16 mm
Quantity	6 - equally spaced @ 60°

### Feedrates (max)

X, Y, Z Cutting	16,5 m/min	12,7 m/min	12,7 m/min
A, B Rapids	4 800°/min	3 600°/min	3 000°/min
A, B Cutting <sup>2</sup>	2 000°/min	2 000°/min	2 000°/min

<sup>1</sup> Higher rpm options are also available.

<sup>2</sup> Complex geometries may require slower feedrates.



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