

COMMERCIAL TECHNICAL DATA SHEET

5-Axis Universal Machining Center | HAAS UMC-500

 Overview

The **HAAS UMC-500 (Year 2022)** is a 5-axis universal vertical machining center, known for its high efficiency and compact shop footprint. Fully Made in the USA, this machine is equipped with the advanced High-Speed Machining control option and a fast 15,000 rpm spindle, making it ideal for multi-sided precision parts in aerospace, medical, and mold-making industries. [\[1, 2, 3\]](#)

 Technical Specifications and Machine Configuration

Category	Parameter / Feature	Value / Details
Identification	Manufacturer, Model & Year	HAAS UMC-500 / Year 2022
Status & Logistics	Country of Origin / Location	Made in USA / Located in Hungary
Axis Capacities	X-Axis Travel	610 mm
Axis Capacities	Y-Axis Travel	406 mm
Axis Capacities	Z-Axis Travel	406 mm
Axis Capacities	B-Axis (Trunnion Tilt)	+120° to -35°
Axis Capacities	C-Axis (Platter Rotation)	360°
Workpiece Size	Platter / Table Diameter	Ø 400 mm
Workpiece Size	Max. Admissible Platter Weight	227 kg (500 lbs)
Spindle Performance	Max. Spindle Speed	15,000 rpm
Spindle Performance	Tool Taper (Interface)	SK 40 / CT 40
Tool System	Tool Changer Capacity	30 + 1 Stations (Side-Mount SMTC)
Cooling System	Through-Spindle Coolant (TSC)	21 BAR (300 psi)
Cooling System	Fluid Management	Oil Skimmer integrated
Cooling System	Coolant Filtration	Auxiliary coolant filter system
CNC Control	Control System & Software	HAAS NextGen Control with High-Speed Machining

Machine Dimensions	Total Dimensions (L x W x H) Approx. 3020 x 2310 x 2570 mm	
Machine Dimensions	Total Machine Weight	Approx. 5,400 kg

Commercial Advantages for the Client

- **Simultaneous 5-axis power:** The rigid dual-axis trunnion table allows flexible setup for complex parts in fewer operations.
- **High-Speed processing:** The High-Speed Machining option reduces cycle times by pre-calculating path vectors smoothly.
- **Chip flushing:** The 21 BAR TSC provides efficient deep-hole drilling and cavity milling by flushing out chips instantly.