



Haas
F1 Team
OFFICIAL MACHINE TOOL

UMC

Universal Machining Centers

5-Axis Machining for Everyone



5-AXIS for every shop

5-axis machining is an effective means to reduce setups and increase accuracy for multi-sided and complex parts. Haas Universal Machining Centers are cost-effective solutions for 3+2 machining and simultaneous 5-axis machining.



UMC-350HD-EDU

40 Taper / 5 Axis
Standard: 10,000 rpm
20+1 Tool Capacity
Travels: 15" x 14" x 12"
(381 x 356 x 305 mm)



UMC-400 UMC-400SS

40 Taper / 5 Axis
Standard: 10,000 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 17" x 11" x 13"
(432 x 279 x 330 mm)



UMC-500 UMC-500SS

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 24" x 16" x 16"
(610 x 406 x 406 mm)



UMC-750 UMC-750SS

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels 30" x 20" x 20"
(762 x 508 x 508 mm)



UMC-1000 UMC-1000SS

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 40" x 25" x 25"
(1016 x 635 x 635 mm)



UMC-1000-P UMC-1000SS-P

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 40" x 25" x 25"
(1016 x 635 x 635 mm)



UMC-1250 UMC-1250SS

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 50" x 30" x 28"
(1270 x 762 x 711 mm)



UMC-1500-DUO UMC-1500SS-DUO

40 Taper / 5 Axis
Standard: 8100 rpm
Super-Speed: 12,000 rpm
30+1 Tool Capacity
Travels: 60" x 20" x 20"
(1524 x 508 x 508 mm)

5-AXIS UNIVERSAL MACHINING CENTERS

The industry-leading Haas Universal Machining Centers have changed the landscape of the machine tool industry by making 5-axis machining simple, affordable, and accessible to everyone. Available in multiple sizes and configurations, Haas UMCs are the perfect job shop machines for reducing setups and increasing accuracy on multi-sided and complex parts.

Spindles

Reliable, high-performance spindles – designed and manufactured by Haas – provide maximum torque output, good thermal stability, and fast acceleration.

- 8100-rpm, 30 hp, Inline Direct-Drive
- 10,000-rpm, 15 hp, Inline Direct-Drive
- 12,000-rpm, 30 hp, Inline Direct-Drive
- 12,000-rpm, 30 hp, HSK-A63
- 15,000-rpm, 30 hp, Inline Direct-Drive
- 15,000-rpm, 30 hp, HSK-A63

HSK SPINDLE option

The Haas-designed HSK-A63 spindle provides high rigidity and high stability for high-speed, extended-reach machining applications. The HSK tooling provides dual contact between the taper and the spindle face, providing a very rigid connection that offers excellent axial and radial accuracy, especially at high spindle speeds.



- 12,000-rpm or 15,000-rpm
 - Dual-contact taper for high rigidity and high accuracy
 - More rigid toolholders for long-reach tools
 - Increased performance for 3D profiling
 - Increased performance when using small cutting tools
 - Requires balanced toolholders with G2.5 rating above 10,000 rpm
- *Not available on the UMC-350HD, UMC-400/SS

Tool Changer Options

50+1
70+1

- Direct-positioning carousel for super-fast tool staging
- Fast tool changes shorten cycle times on every tool change
- Pocket Tool Table in the control allows complete control over the tool changer
- Identify tools as LARGE to leave adjacent pockets empty
- Identify tools as HEAVY to slow tool changer motion



WIRELESS PROBING Standard on all UMCs

Our industry-leading Wireless Intuitive Probing System (WIPS) sets the standard for integrated probing systems.

Also includes:

- Spindle Orientation
- User-Defined Macros
- Coordinate Rotation and Scaling
- Visual Part Programming System

UMC Automated Systems



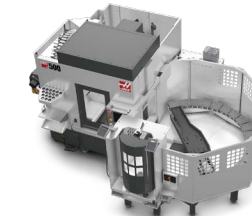
HAAS COBOT & ROBOT PACKAGES

No complex connections. No third-party integration. No additional cost. Direct Haas Control.

HRP-1 – 7 kg Capacity
Fully Integrated 6-Axis Robot
Plug-and-play capabilities to:
UMC-350HD, UMC-500/SS

HRP-2 – 25 kg Capacity
Fully Integrated 6-Axis Robot
Plug-and-play capabilities to:
UMC-500/SS through UMC-1000/SS

COBOT 10 kg + COBOT 15 kg
UMC-500/SS | UMC-750/SS



PALLET POOL SYSTEMS

Whether you're doing high-volume production, high-mix/low-volume machining, or just want to run lights-out, our fully integrated pallet-pool systems will boost your productivity.

- **20+1 PALLET POOL**
UMC-500/SS
- **10+1 PALLET POOL**
UMC-500/SS | 750/SS | 1000/SS

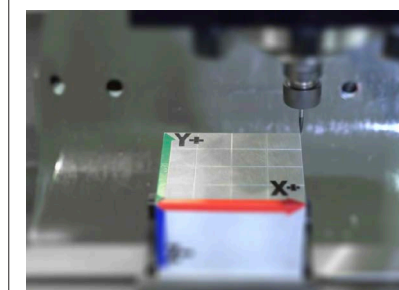
- **6+1 PALLET POOL**
UMC-1250/SS
- **25 kg ROBOTIC PALLET LOADING SYSTEM**
UMC-500/SS



AUTOMATIC PARTS LOADER HAAS APL FOR UMC-500/SS

- All-inclusive design, with plug-and-play capabilities to Haas UMC-500 and UMC-500SS
- Interfaces directly with the Haas control
- Accommodates parts up to 6" length x 6" width x 10 lb (152 mm x 152 mm x 4.5 kg)
- Includes light curtain for safe operation (non-CE)

NOTE: CE compliance requires the optional safety guard fencing.



DWO/TCPC – Dynamic Work Offsets and Tool Center Point Control

- Simplifies setup operations – part and fixture can be placed anywhere on the table / platter
- Saves money by eliminating costly workholding, like self-centering fixtures
- Eliminates the need to regenerate programs from the CAM system
- Makes setting up 5-axis jobs as easy as setting up a 3-axis machine

IT'S EASIER - WITH PICTURES, VIDEOS & GRAPHICS.

THE HAAS CONTROL- Designed, built, and programmed by Haas.

The Haas control - hardware and software - is designed and built in-house, and optimized specifically for Haas machine tools. If there is a problem - Haas Automation takes full responsibility for the entire machine. The Haas control is easy to learn and use, and it is the same across the entire product line. Haas machines are also used extensively in educational institutions around the world, so graduating students are already familiar with the Haas control, which makes finding new operators and programmers easier, and simplifies training.



STANDARD CONTROL FEATURES:

- Dedicated Keypad
- One-Button Features
- Multi-Function Jog Handle
- 15" Color LCD Screen
- Ethernet Interface
- Control Touchscreen
- Advanced Tool Management
- HaasDrop Wireless File Transfer
- USB Port
- 1 GB Memory
- Power-Failure Detection Module
- M130 Media Player
- HaasConnect Mobile Monitoring
- WiFi Connectivity

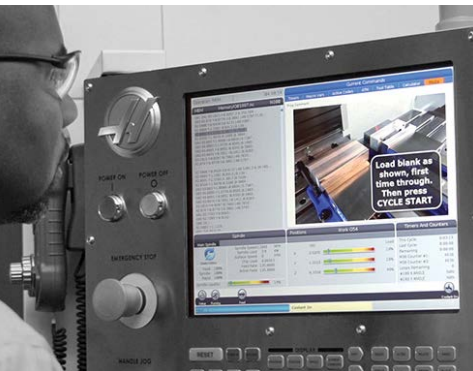
VISUAL PROGRAMMING SYSTEM

The Haas Visual Programming System uses graphical templates and a form-like interface to help you quickly create G-code programs for not only basic part features, but also more complex operations, like bolt-pattern cycles, probing, and more. Simply define the feature in the template, and VPS then outputs working G-code at the touch of a button. VPS also includes a custom template generator, so you can create templates for your own part features or frequently used programs.



M130 MEDIA DISPLAY

The Haas M130 Media Display M-Code is a powerful tool for communicating with machine operators and programmers directly from the Haas control. Use M130 to call up setup instructions, tool lists, part images, manufacturing information, and more. When the program reaches an M130, the specified media (image, video, or PDF) will be displayed in the upper right corner of the control screen.



- Explain difficult-to-understand secondary operations, using pictures and videos
- Avoid miscommunications with your shop peers
- Describe step-by-step part inspection processes
- Share important setup information with shop personnel



ALARM VIDEOS

When your machine alarms out, the first thing you want to know is: Why? The Haas control not only includes fully descriptive alarm text explaining the problem, but for many common alarms, it also includes short videos explaining the alarm, and providing valuable troubleshooting tips to resolve the issue.

MAKE THE CONNECTION WITH HAASCONNECT

Get your machine status notifications anywhere, on any device! The Haas Control has the ability to send you, and others you designate, email notifications about the operating status of your Haas machine. Set up is fast and easy through the MyHaas Portal and HaasCNC.com.

