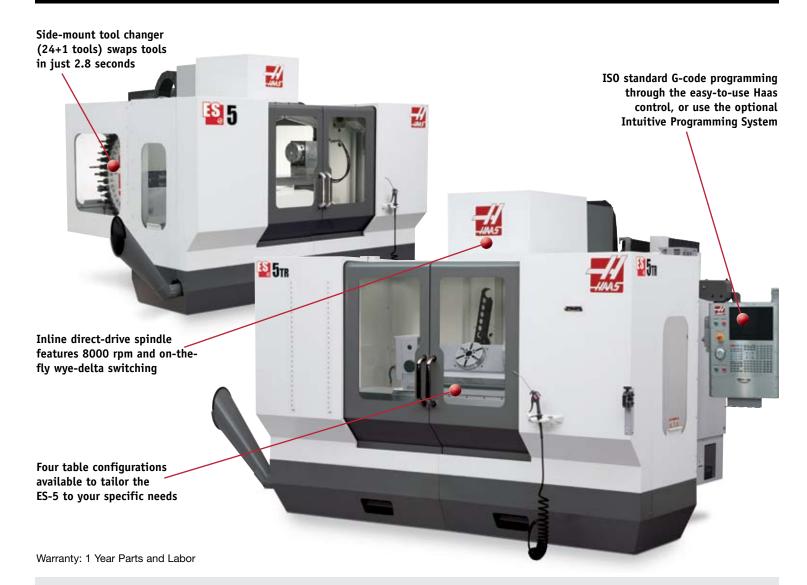
Haas ES-5 Series

The Horizontal Machining Center



[Standard Features]

- 20 hp Vector Drive
- 8000-rpm 40-Taper Spindle
- Inline Direct Drive
- 24+1 Side-Mount Tool Changer
- 15" Color LCD Monitor w/USB Port
- Rigid Tapping
- Made in the USA

[Options] partial list

- 30 hp, 12,000-rpm Spindle
- 40+1 Side-Mount Tool Changer
- Programmable Coolant Nozzle
- High-Speed Machining w/Look-Ahead
- Through-Spindle Coolant Systems
- Ethernet Interface
- Haas Intuitive Programming System

[Table Configurations]

- 3-Axis w/T-Slot Table
- T-Slot Table w/Integrated 4th Axis
- 4-Axis w/Rotating T-Slot Table
- 5-Axis with Trunnion Table



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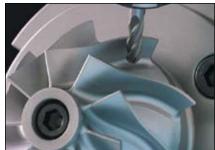


The compact and affordable ES-5 Series HMCs feature 40"x18"x22" (xyz) travels, and a VMC-style enclosure for visibility and access. Each ES-5 comes standard with an 8000-rpm, inline direct-drive 40-taper spindle, a 20 hp vector drive system with on-the-fly wyedelta switching and a 24+1 tool side-mount tool changer.

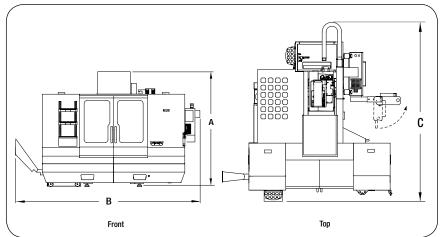
These configurations are available: the ES-5-T is a 3-axis HMC with a T-slot table; the ES-5-4AX has a T-slot table with integrated 4th-axis platter; the ES-5-4T has a full 4th-axis rotating table that will accept a 5th-axis rotary and fixture; and the ES-5-TR has a built-in dual-axis trunnion table.



The ES-5-4T with 4th-axis rotating table is perfect for complex operations like cylinder head porting. Simply mount a rotary table and fixture to the T-slot table for full 5-axis machining capability.



The ES-5-TR incorporates a dual-axis trunnion table to provide full 5-axis simultaneous motion, or position a part to nearly any angle for machining.



| Operating Dimensions | ES-5 |
|------------------------|---------------|
| Max Operating Height | 94" 2388 mm |
| 3. Max Operating Width | 155" 3 937 mm |
| C. Max Operating Depth | 150" 3810 mm |

[Specifications]

| Configurations | |
|----------------|---|
| ES-5-T | 3-axis w/ 52" x 18" T-slot table |
| ES-5-4AX | 52" x 20" T-slot table w/ integrated 4th-axis |
| ES-5-4T | 4-axis w/ 40" x 15" rotating T-slot table |
| ES-5-TR | 5-axis w/ built-in trunnion table |

| Travels | ES-5T | ES-5-4AX | ES-5-4T | ES-5-TR |
|---------------|----------|----------|----------|----------|
| X | 40" | 40" | 40" | 40" |
| | 1016 mm | 1016 mm | 1 016 mm | 1 016 mm |
| Υ | 18" | 18" | 18" | 18" |
| | 457 mm | 457 mm | 457 mm | 457 mm |
| Z | 22" | 22" | 22" | 21" |
| | 559 mm | 559 mm | 559 mm | 533 mm |
| Table | | | | |
| Length | 52" | 52" | 40" | Ø8.27" |
| | 1 321 mm | 1 321 mm | 1 016 mm | Ø210 mm |
| Width | 18 | 20" | 15" | _ |
| | 457 mm | 508 mm | 381 mm | _ |
| Max Weight | 3500 lb | 3500 lb | 625 lb | _ |
| on Table | 1 588 kg | 1 588 kg | 284 kg | _ |
| Max Weight | _ | 1000 lb | _ | 200 lb |
| on Platter | _ | 454 kg | _ | 91 kg |
| Standard Spin | dle | | | |

| Otaliaaia Opiliaio | |
|--------------------|---|
| Speed | 8000 rpm |
| Drive System | Inline Direct Drive |
| Max Torque | 75 ft-lb @ 1400 rpm 102 Nm @ 1 400 rpm |
| Max Rating | 20 hp 14.9 kW |
| Ontional Snindle | |

| Speed | 12,000 rpm |
|--------------|---------------------|
| Drive System | Inline Direct Drive |
| Max Torque | 75 ft-lb @ 2100 rpm |
| | 102 Nm @ 2 100 rpn |
| Max Rating | 30 hp 22.4 kW |

| reegrates | | |
|-------------|----------|------------|
| Max Rapids | | |
| X Axis | 710 ipm | 18.0 m/min |
| Y & Z Axes | 1000 ipm | 25.4 m/min |
| Max Cutting | 500 ipm | 12.7 m/min |
| | | |

| Tool Changer | | | |
|--|-----------------------------|--|--|
| Capacity | 24+1 (40+1 optional) | | |
| Tool Type/Taper | CT or BT 40 | | |
| Max Tool Diameter (adj. full/empty) | 3.0" / 5" 76 mm / 127 mm | | |
| Tool to Tool | 2.8 sec | | |
| Chip to Chip | 3.6 sec | | |
| General | | | |

195 - 260 VAC 3-Phase

Power Required (min)