



Haas
F1 Team
OFFICIAL MACHINE TOOL

TS

ST-20/25/28 SERIES

TOTALLY REDESIGNED

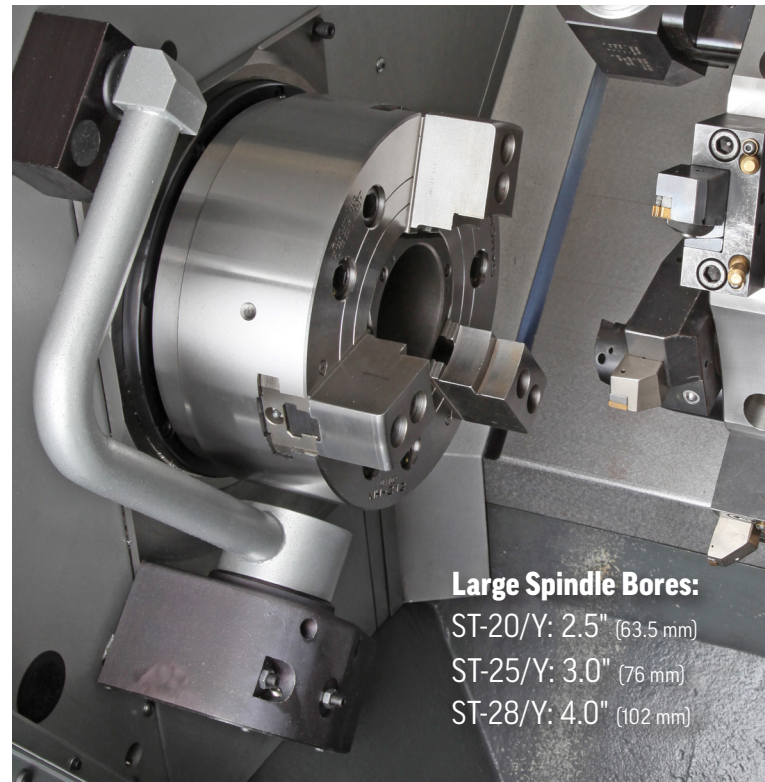
- **Optimized castings** – rigid structure, compact footprint
- **11% smaller footprints** (than the previous models)
- **Large spindle bores**
- **Increased Z-axis travels**



ST-20/Y / 8.3" (210 mm) / 2.5" (63.5 mm) / 4000 / 20 hp (14.9 kW)
MODEL CHUCK BAR RPM POWER

ST-25/Y / 10" (254 mm) / 3.0" (76 mm) / 3400 / 30 hp (22.4 kW)
MODEL CHUCK BAR RPM POWER

ST-28/Y / 12" (305 mm) / 4.0" (102 mm) / 3200 / 40 hp (29.8 kW)
MODEL CHUCK BAR RPM POWER



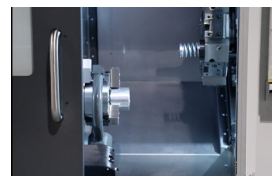
Large Spindle Bores:
 ST-20/Y: 2.5" (63.5 mm)
 ST-25/Y: 3.0" (76 mm)
 ST-28/Y: 4.0" (102 mm)

IMPROVED

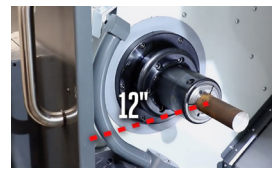
with you in mind



- WORK ENVELOPE**
- 22.5" (572 mm) Z-Axis Travel
1.5" (38 mm) MORE Z-Travel
 - 13" (330 mm) Max Cutting Diameter*
 - 22.5" (572 mm) Max Cutting Length**



- AUTO DOOR AVAILABLE**
- Minimize operator fatigue
 - Reliable drive system
 - Opens with an M-Code or push button



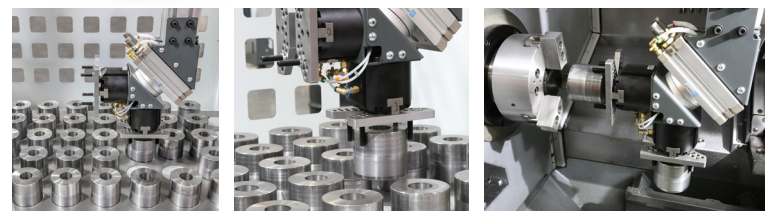
- LOAD PARTS EASIER**
- Reduced distance to the chuck
 - Distance = 12" (305 mm)
- * 11.75" (298 mm) for Y models and BMT65 turret.
 ** Max cutting length varies with workholding.



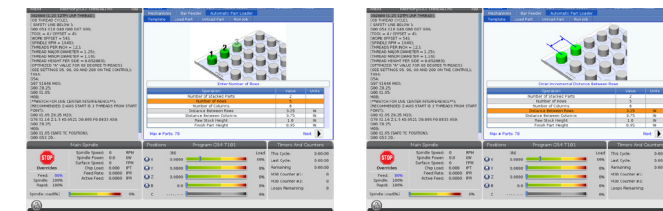
Loading and Unloading Parts for Unattended Machining

Our Automatic Parts Loader is a simple and affordable way to automate part production and boost productivity on Haas turning centers. It is designed and built exclusively for use on ST-10Y, 15Y, 20, 20Y, 25, 25Y, 28, and 28Y turning centers, and connects directly to the Haas control.

- All-inclusive design, with plug-and-play capabilities
- Interfaces directly with the Haas control
- Accommodates parts up to Ø5.8" x 5" x 10 lb (Ø147 x 127 mm x 4.5 kg)
- Includes light curtain for safe operation (non-CE)
- CE compliance requires the optional safety guard fencing



APL Part Management – Part management on the APL table is done using one of three included templates. Various part shapes – such as round, hex, and square – can be loaded, and grippers can be adjusted or modified to best fit your parts.



Easy-to-Use APL Interface – Our easy-to-use APL interface uses simple, step-by-step instructions to help the operator "teach" the APL the correct positions for picking up, loading, and unloading parts.

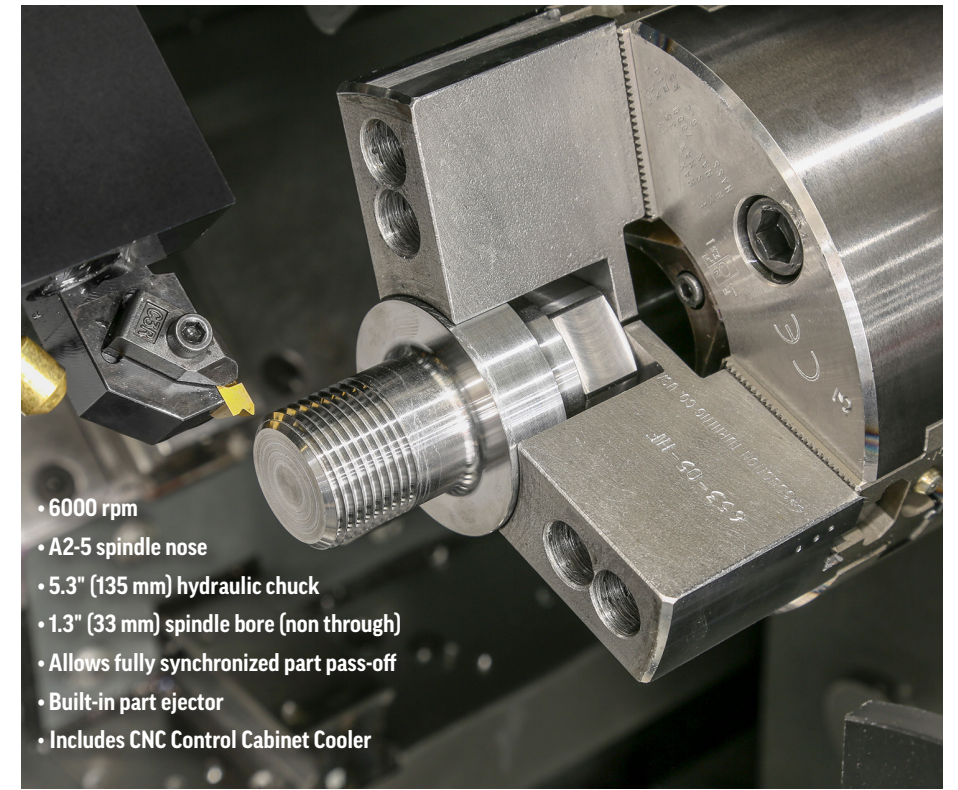
A2-5 Finishing Sub-Spindle

Our finishing sub-spindle will make you more productive, and provide new options for finishing the 2nd-op side of your parts.

This affordable A2-5 spindle is equipped with a 5.3" (135 mm) hydraulic chuck, and will fully synchronize with the main spindle for effortless "in-cycle" part handoff. This allows you to finish both sides of your part in a single setup.

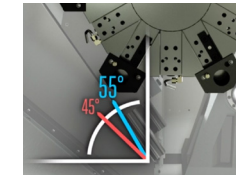
A built-in part ejector propels the finished part into the optional parts catcher for automated operation.

Note: Not compatible with the tailstock option.



- 6000 rpm
- A2-5 spindle nose
- 5.3" (135 mm) hydraulic chuck
- 1.3" (33 mm) spindle bore (non through)
- Allows fully synchronized part pass-off
- Built-in part ejector
- Includes CNC Control Cabinet Cooler

LATHE TURRETS



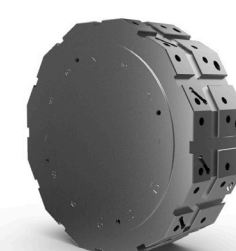
Increased Wedge Angle

A steeper wedge angle provides a more compact footprint, and better chip flow.

TWO AXIS Non-Live Tooling



- BOT TURRET STD**
- Super-rigid mounting of turning tools and boring bars.
 - Industry-standard bolt-on toolholders around the perimeter, and radial slots for OD tools on the face



- BMT65-12 TURRET OPT**
- Industry-standard BMT65 tooling connections
 - Provides additional clearance for tailstock operations
 - Increases setup flexibility
 - Includes tooling kit



- VDI TURRET STD in EU**
- 12-station VDI40
 - Accepts live-tooling heads (with the live tooling option)
 - Single locking wedge secures the toolholders in the turret for quick, easy setups

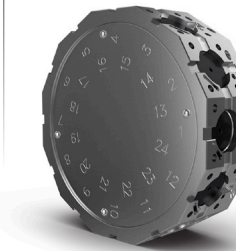


- BMT65-24 OPT**
- Half-station indexing increases your available tool stations to 24
 - Increases setup flexibility
 - Includes tooling kit, with half-index holders

Y-AXIS with Live Tooling

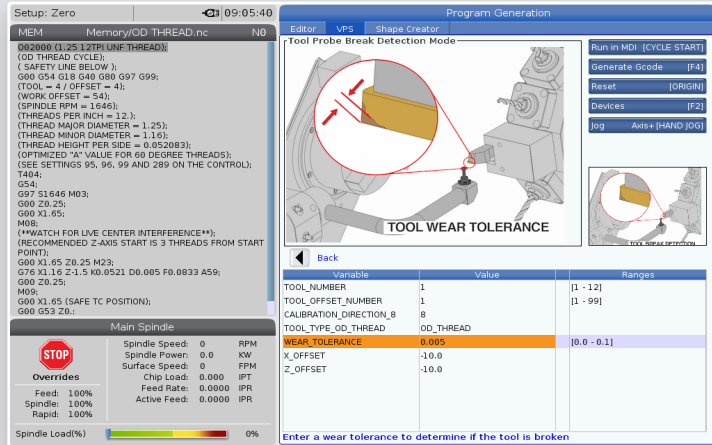


- BMT65-12 TURRET STD on Y Models**
- Industry-standard BMT65 tooling connections
 - Provides additional clearance for tailstock operations
 - Increases setup flexibility
 - Includes tooling kit



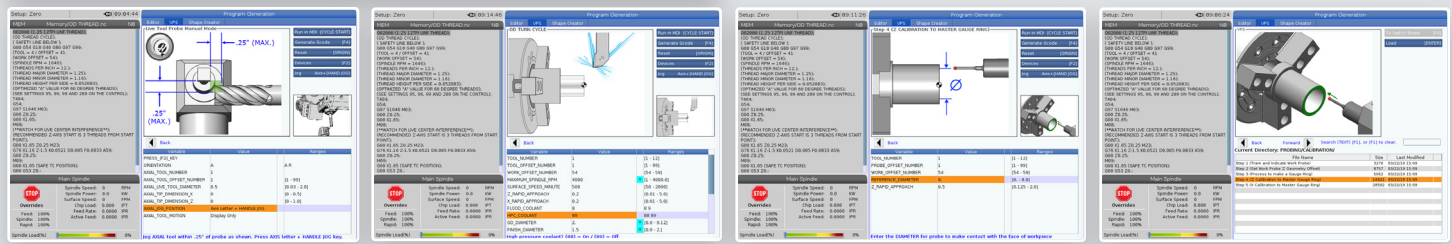
- BMT65-24 OPT**
- Half-station indexing
 - Industry-standard BMT65 tooling connections
 - Significantly increases the turret tooling capacity
 - Increases setup flexibility
 - Includes tooling kit, with half-index holders

UNLOCK YOUR MACHINE'S POTENTIAL



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 Y-axis milling/drilling, 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.



SPECIFICATIONS

Capacities	ST-20	ST-20V	ST-25	ST-25V	ST-28	ST-28V
Chuck Size	8.3" (210 mm)	8.3" (210 mm)	10" (254 mm)	10" (254 mm)	12" (305 mm)	12" (305 mm)
Max Cutting Dia. (BOT turret)	13" (330 mm)	–	13" (330 mm)	–	13" (330 mm)	–
Max Cutting Dia. (BMT65 turret)	11.75" (298 mm)	11.75" (298 mm)	11.75" (298 mm)	11.75" (298 mm)	11.75" (298 mm)	11.75" (298 mm)
Max Cutting Length*	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)
Bar Capacity	2.5" (63.5 mm)	2.5" (63.5 mm)	3.0" (76 mm)	3.0" (76 mm)	4.0" (102 mm)	4.0" (102 mm)
Max Part Swing	21" (533 mm)	21" (533 mm)	21" (533 mm)	21" (533 mm)	21" (533 mm)	21" (533 mm)
Turret						
Type Std (Opt)	BOT (VDI, BMT65)	BMT65	BOT (VDI, BMT65)	BMT65	BOT (VDI, BMT65)	BMT65
Number of Tools	12 std / 24 opt	12 std / 24 opt	12 std / 24 opt	12 std / 24 opt	12 std / 24 opt	12 std / 24 opt
Live Tooling (rpm)	4000 opt / 6000 opt	4000 std / 6000 opt	4000 opt / 6000 opt	4000 std / 6000 opt	4000 opt / 6000 opt	4000 std / 6000 opt
Spindle						
Max Speed	4000 rpm	4000 rpm	3400 rpm	3400 rpm	3200 rpm	3200 rpm
Max Motor Rating	20 hp (14.9 kW)	20 hp (14.9 kW)	30 hp (22.4 kW)	30 hp (22.4 kW)	40 hp (29.8 kW)	40 hp (29.8 kW)
Spindle Nose	A2-6	A2-6	A2-6	A2.6	A2-8	A2.8
Travels						
X Axis	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)
Y Axis	–	±2" (±51 mm)	–	±2" (±51 mm)	–	±2" (±51 mm)
Z Axis	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)

* Max cutting length varies with workholding.

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Specifications subject to change without notice. Not responsible for typographical errors. Machines shown with optional equipment. Actual product appearance may differ. Pricing subject to change without notice.