Vertical Mills:
VF Series
MEDIUM

The World's Most Popular CNC Mills

VF **4ss**

VF Series MEDIUM

The industry-leading Haas VFs are the best-value, high-performance machine tools available today.

What can a VF Series vertical mill handle? With our wide range of available models, the VF Series can match nearly any size and productivity range. Regardless of your requirements, there's a VF just right to meet the demands of your machine shop.

30/40/50	/	**3/4/5**	/	**7.5k-30k**	/	**20-40**
TAPER		AXIS		RPM		TOOL CAPACITY

A Wide Range of Sizes and Features to Fit Any Shop's Needs

SPINDLES

Reliable, high-performance spindles – designed and manufactured by Haas.

STANDARD
• 8100-rpm, Inline (40-taper)
• 12,000-rpm, Inline (SS 40-taper)
• 7500-rpm, Gearbox (50-taper)

OPTIONAL
• 8100-rpm, Gearbox (40-taper)
• 10,000-rpm, Gearbox (40-taper)
• 10,000-rpm, Inline (40-taper)
• 15,000-rpm, Inline (40-taper & SS)
• 30,000-rpm, Belt Drive (40-taper)
• 10,000-rpm, Gearbox (50-taper)

TOOL CHANGERS

Capacity and speed to minimize your cycle times and boost your productivity.

STANDARD
20-Station Carousel (40-taper)
30+1 Side-Mount (50-Taper, SS & TR)

OPTIONAL
30+1 Side-Mount (40-taper)
40+1 Side-Mount (40-taper)

CHIPS & COOLANT

Features and options to help your machine do what it does best – make chips efficiently.

• Through-Spindle Coolant*
• Through-Tool Air Blast*
• Minimum Quantity Lube*
• Chip Auger*

HAAS CONTROL

Faster, smarter, and better than ever, with the goal of keeping your spindle turning.

• HaasConnect Remote Monitoring
• Ethernet Connectivity
• User-Definable Macros*
• DWO/TCPC*
• Expandable Memory*
• WiFi Connectivity*

Available Models

VF-3
40" x 20" x 25" travels
VF-3 / $62,995
VF-3SS / $74,995

VF-3YT
40" x 26" x 25" travels
VF-3YT / $72,995
VF-3SSYT / $84,995
VF-3YT/50 / $94,995

VF-4
50" x 20" x 25" travels
VF-4 / $65,995
VF-4SS / $77,995

VF-5
50" x 26" x 25" travels
VF-5 / $78,995
VF-5SS / $92,995
VF-5TR / $147,995
VF-5/50 / $105,995
VF-5/50TR / $165,995

VF-5XT
60" x 26" x 25" travels
VF-5XT / $89,995
VF-5/50XT / $119,995

BUILD & PRICE yours
at www.HaasCNC.com

HAAS

Haas / Haas F1™ Team
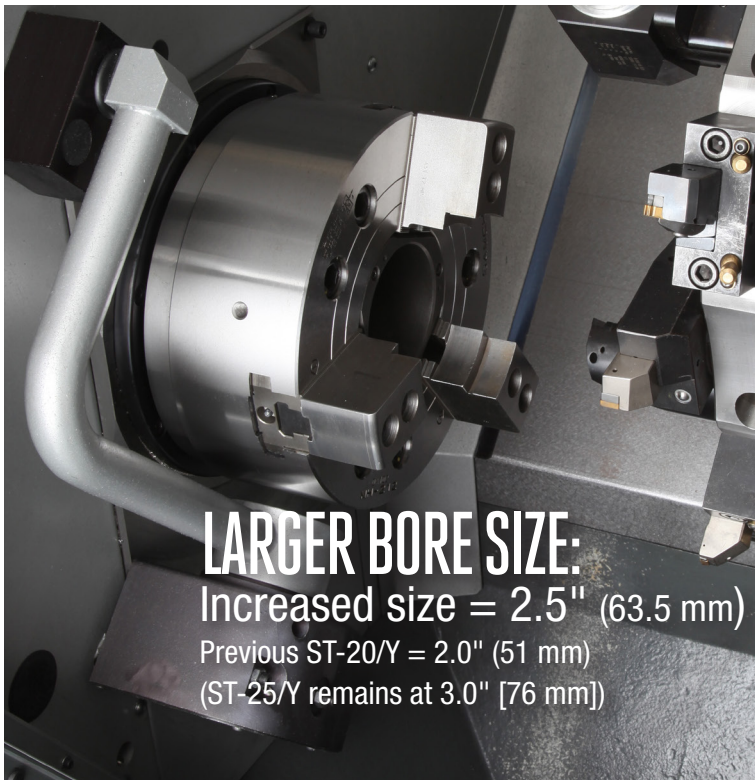OFFICIAL MACHINE TOOL

ALL-NEW
ST-20/25 Series

TOTALLY REDESIGNED

- New castings – *rigid structure, compact footprint*
- 11% smaller footprint
- Larger spindle bore *(ST-20/Y)*
- Increased Z-axis travel

MODEL	CHUCK	BAR	RPM	POWER
ST-20/Y	8.3"	2.5"	4k	20 hp
ST-25/Y	10"	3.0"	3.4k	30 hp

IMPROVED WITH YOU IN MIND

LARGER BORE SIZE:
Increased size = 2.5" (63.5 mm)
Previous ST-20/Y = 2.0" (51 mm)
(ST-25/Y remains at 3.0" [76 mm])

Work Envelope
- **22.5" Z-Axis Travel** (572 mm)
  1.5" (38 mm) MORE Z-Travel
- **10" Max cutting diameter** (254 mm)
- **22.5" Max cutting length*** (572 mm)
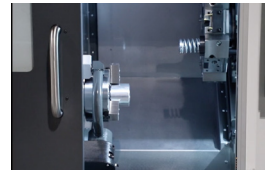
Auto Door: Standard
- Minimize operator fatigue
- **Reliable** drive system
- Opens with an **M-Code** or **push button**

Load parts easier
- **Reduced distance** from the door to the chuck
- Distance = **12"** (305 mm)

12"

* 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-10 through ST-35 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
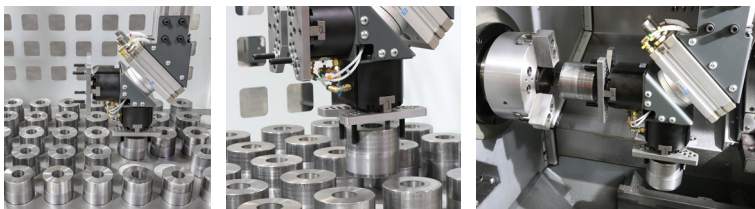
APL Part Management – Part management on the APL table is done using one of three included templates. Various part shapes – such as round, hex, and square – can be loaded, and grippers can be adjusted or modified to best fit your parts.
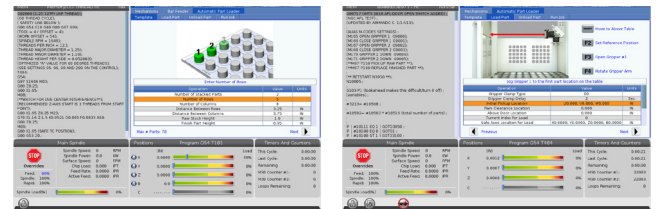
Easy-to-Use APL Interface – Our easy-to-use APL interface uses simple, step-by-step instructions to help the operator "teach" the APL the correct positions for picking up, loading, and unloading parts.

A2-5 FINISHING SUB-SPINDLE

Our finishing sub-spindle will not only make you more productive, but also will 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 to provide effortless "in-cycle" part handoff. This allows you to finish both sides of your part in a single setup – simply load your raw workpiece, and the next time you open the door, you'll have a finished part. A built-in part ejector propels the finished part into the optional parts catcher for automated operation.

Note: Not compatible with the tailstock option.
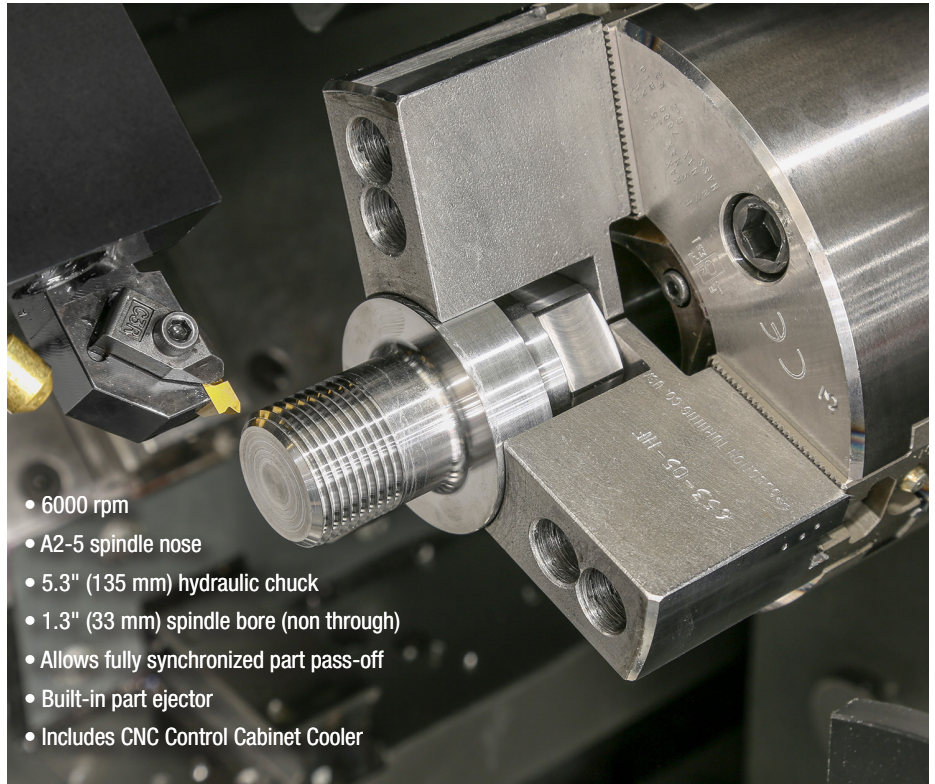
- 6000 rpm
- A2-5 spindle nose
- 5.3" (135 mm) hydraulic chuck
- 1.3" (33 mm) spindle bore (non through)
- Allows fully synchronized part pass-off
- Built-in part ejector
- Includes CNC Control Cabinet Cooler

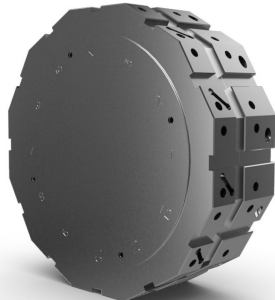# LATHE TURRETS
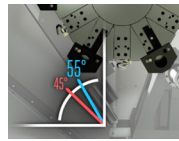
Increased Wedge Angle

A steeper wedge angle provides a more compact footprint, and better chip flow.
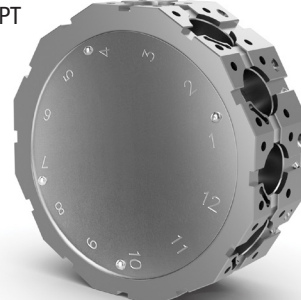
TWO AXIS
Non-Live Tooling

BOT TURRET STD
- Super-rigid mounting of turning tools and boring bars.
- Industry-standard bolt-on toolholders around the perimeter, and radial slots 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
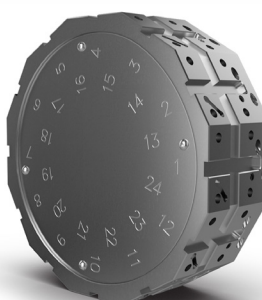
Y-AXIS
with Live Tooling

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

TECHNOLOGY FOCUS

UNLOCK YOUR MACHINE'S POTENTIAL

VISUAL PROGRAMING SYSTEM

The Haas Visual Programming System lets you quickly create G-code programs for basic part features using graphical templates and a form-like interface. 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.
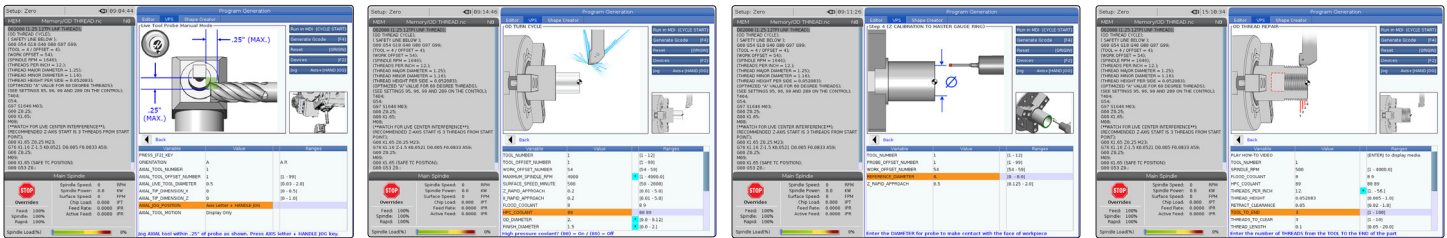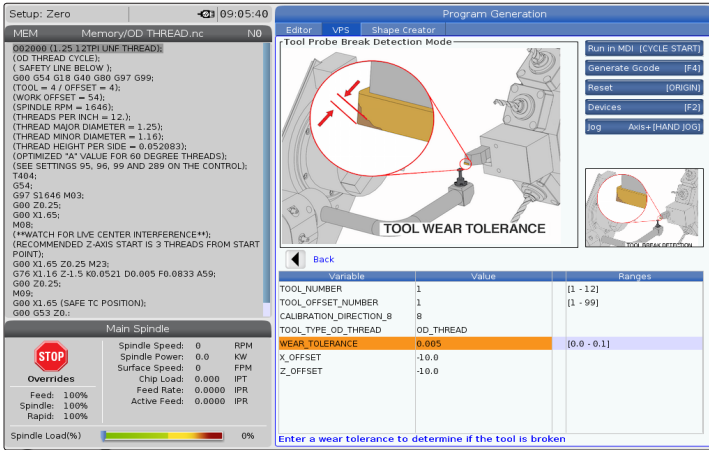
SPECIFICATIONS

Capacities	ST-20	ST-20Y	ST-25	ST-25Y
Chuck Size	8.3" (210 mm)	8.3" (210 mm)	10" (254 mm)	10" (254 mm)
Max Cutting Dia. (may vary w/turret)	10" (254 mm)	10" (254 mm)	10" (254 mm)	10" (254 mm)
Max Cutting Length (varies w/workholding)	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)
Max Part Swing	21" (533 mm)	21" (533 mm)	21" (533 mm)	21" (533 mm)
Turret				
Type (Opt)	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
Live Tooling	4k opt / 6k opt	4k std / 6k opt	4k opt / 6k opt	4k std / 6k opt
Spindle				
Max Speed	4000 rpm	4000 rpm	3400 rpm	3400 rpm
Max Motor Rating	20 hp (14.9 kW)	20 hp (14.9 kW)	30 hp (22.4 kW)	30 hp (22.4 kW)
Spindle Nose	A2-6	A2-6	A2-6	A2.6
Travels				
X Axis	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)	8.4" (213 mm)
Y Axis	—	±2" (±51 mm)	—	±2" (±51 mm)
Z Axis	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)	22.5" (572 mm)