



Haas
F1™ Team
OFFICIAL MACHINE TOOL

THE MACHINES THAT
DEFINED A CATEGORY
MINI MILL
REDEFINED



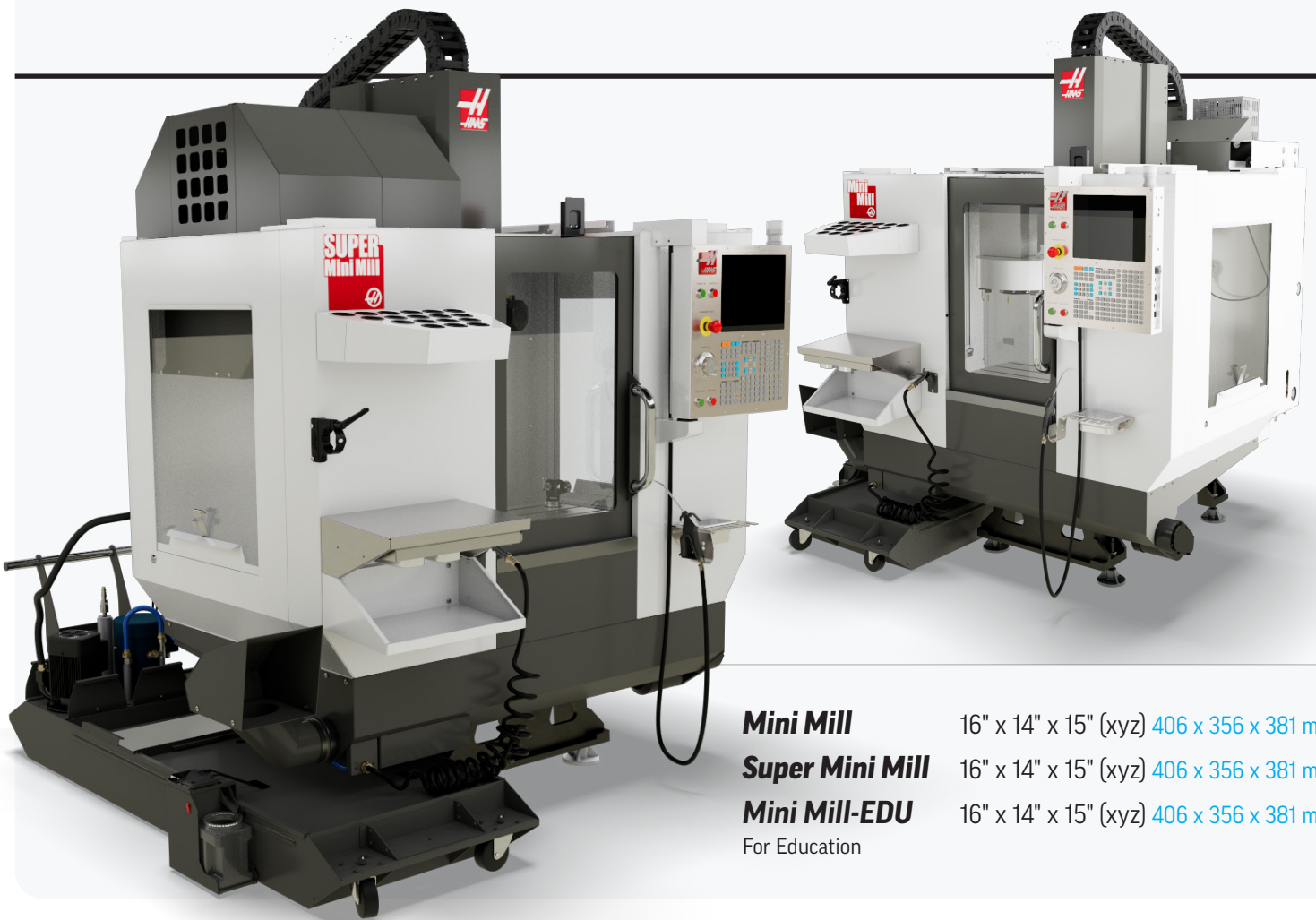
The **ALL-NEW** Mini Mill Series –
Mini in Name.
Mighty in Performance.

Mini Mill Series

- 40
TAPER
- 3/4/5-AXIS
 - 8000-15,000 RPM
 - 10-31 TOOL CAPACITY

The completely redesigned Mini Mill machines are enhanced with all-new FEA-optimized base and column castings, larger travels, a side-mount tool changer (Super Mini Mill), and faster spindle speeds and rapids for increased production output. An all-new Y-axis washdown nozzle improves chip flow inside the machine, and a new 45-gallon (170-liter) external coolant tank simplifies maintenance.

The new Mini Mills are perfect for high-production shops where space is limited, and easily interface with Haas robot packages or the Compact APL for easy, unattended automation.



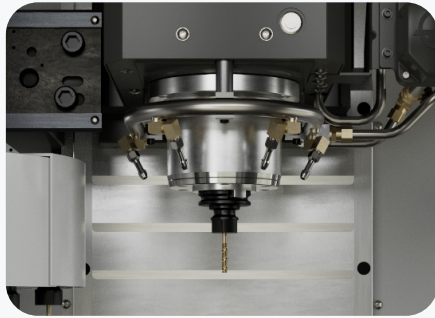
Mini Mill	16" x 14" x 15" (xyz) 406 x 356 x 381 mm
Super Mini Mill	16" x 14" x 15" (xyz) 406 x 356 x 381 mm
Mini Mill-EDU For Education	16" x 14" x 15" (xyz) 406 x 356 x 381 mm

BIG UPGRADES
SAME COMPACT FOOTPRINT



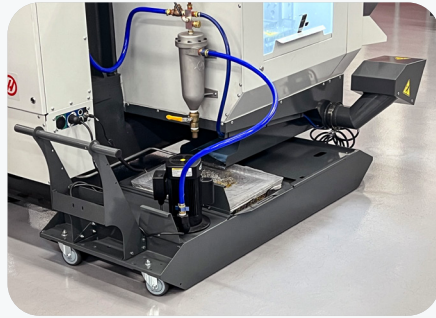
**ALL-NEW FEA-OPTIMIZED
CASTING DESIGN**

REDESIGNED to increase the overall rigidity and stability of the machine. The new castings are 30% heavier, but we only added material where needed, to increase performance without increasing cost.



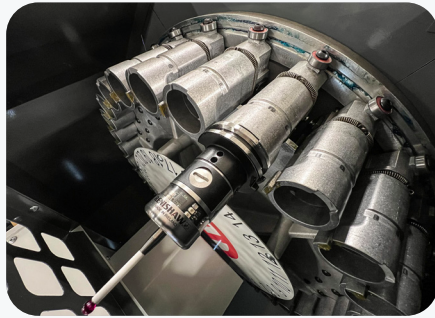
**FASTER STANDARD SPINDLE SPEED
AND RAPIDS (MINI MILL)**

NOW STANDARD on the Mini Mill and Mini Mill-EDU, our 8000-rpm grease-packed spindle allows higher feedrates, and provides more horsepower and torque for heavier cuts.



**EXTERNAL 45-GALLON
COOLANT TANK**

NOW STANDARD on all Mini Mills, the 45-gallon (170-liter) external coolant tank simplifies coolant maintenance and tank cleanout, and provides additional coolant capacity.



**30+1 SIDE-MOUNT TOOL CHANGER
(SUPER MINI MILL)**

NOW STANDARD on the Super Mini Mill, this Haas-designed and -built 30+1 side-mount tool changer provides more tools and faster tool changes, while freeing up the work envelope for larger fixtures and rotary tables.



Y-AXIS WASHDOWN NOZZLE

The **ALL-NEW** Y-axis washdown nozzle flushes chips from the rear Y-axis waycover to prevent chip build-up behind the table during extended machining operations.



COMPACT AUTO PARTS LOADER

Increase your spindle up-time by adding the optional Compact Automatic Parts Loader (C-APL) to get unattended loading and unloading of parts.

Scan here or go to www.HaasCNC.com to discover more about the ground-up redesign of the Haas Mini Mill line!

HIGHLIGHTS FROM THE GROUND-UP REDESIGN



NEW MM/SMM/EDU

Travels (X, Y, Z)	16" x 14" x 15" (406 x 356 x 381 mm)	16" x 12" X 10" (406 x 305 x 254 mm)
Spindle nose to Table (Max)	19" (483 mm)	14" (356 mm)
Spindle nose to Table (Min)	4" (102 mm)	4" (102 mm)
Coolant Tank	45-gal (170 L) external	40-gal (151 L) integral



OLD MM/SMM/EDU

	NEW SUPER MM	OLD SUPER MM
Spindle Speed	10,000 rpm	10,000 rpm
Spindle Max Rating	15 hp (11.2 kW)	15 hp (11.2 kW)
Max Torque	22 ft-lb (29.8 Nm)	17 ft-lb (23 Nm)
Rapids	1200 ipm (305 m/min)	1200 ipm (305 m/min)
Max Cutting	833 ipm (21.2 m/min)	833 ipm (21.2 m/min)
Tool Changer	30+1 Side Mount	10-Pocket Carousel

	NEW MM	OLD MM
Spindle Speed	8000 rpm	6000 rpm
Spindle Max Rating	10 hp (7.5 kW)	7.5 hp (5.6 kW)
Max Torque	45 ft-lb (61 Nm)	33 ft-lb (44.7 Nm)
Rapids	800 ipm (203 m/min)	600 ipm (15.2 m/min)
Max Cutting	650 ipm (16.5 m/min)	500 ipm (12.4 m/min)
Tool Changer	10-Pocket Carousel (20 opt)	10-Pocket Carousel

	NEW MM-EDU	OLD MM-EDU
Spindle Speed	8000 rpm	6000 rpm
Spindle Max Rating	10 hp (7.5 kW)	7.5 hp (5.6 kW)
Max Torque	45 ft-lb (61 Nm)	33 ft-lb (44.7 Nm)
Rapids	800 ipm (203 m/min)	600 ipm (15.2 m/min)
Max Cutting	650 ipm (16.5 m/min)	500 ipm (12.4 m/min)
Tool Changer	1 (10 opt)	1 (10 opt)

DON'T FORGET THE TOOLING!

We have thousands of high-quality tooling products at unbeatable low prices ... and we're adding more every day at www.HaasTooling.com

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Actual product appearance may differ. Pricing subject to change without notice.

