

**SUMMIT**  
MACHINE TOOL LLC



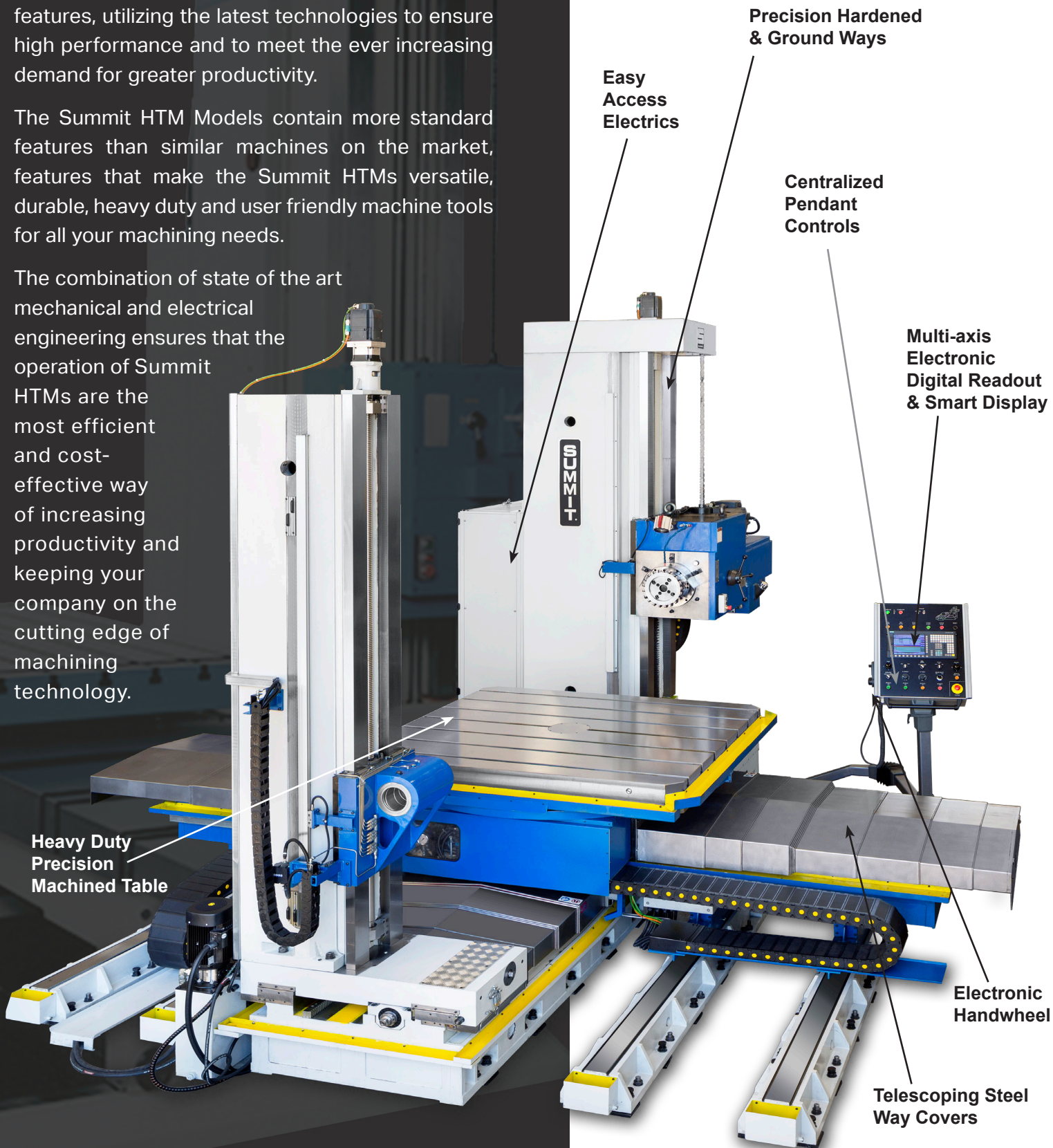
# HEAVY DUTY HORIZONTAL BORING MILL

HTM SERIES

Whenever metal must be machined with precision, **Summit Heavy Duty Horizontal Boring Mills** provide a cost effective solution. Summit's series of HTMs incorporate many advanced construction features, utilizing the latest technologies to ensure high performance and to meet the ever increasing demand for greater productivity.

The Summit HTM Models contain more standard features than similar machines on the market, features that make the Summit HTMs versatile, durable, heavy duty and user friendly machine tools for all your machining needs.

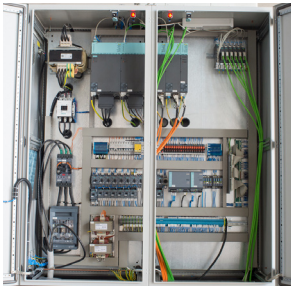
The combination of state of the art mechanical and electrical engineering ensures that the operation of Summit HTMs are the most efficient and cost-effective way of increasing productivity and keeping your company on the cutting edge of machining technology.



# HEAVY DUTY HORIZONTAL BORING MILLS

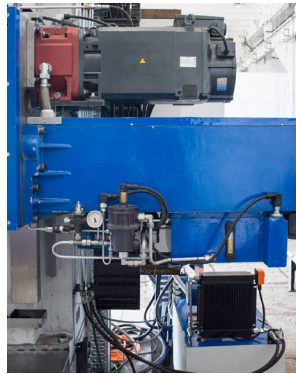


## HTM4H-XS, HTM4H-S, HTM4H, HTM5H & HTM5-XHD



### Electrics & Drives

Summit utilizes only state of the art programmable logic electronics to ensure long, reliable operation. Components are installed in a centralized, column-mounted, fully accessible cabinet for ease of maintenance. Each load circuit is provided with fused or thermally-monitored overload devices to ensure complete protection of major components. These devices are fully integrated into the control circuit to provide display warning messages and/or suspend machine operation as necessary.



### Centralized Lubrication System

Lubrication of the HTM is achieved through independent, centralized lube systems for each of the major machine sections. Individual self-contained pumping units provide proper lubrication for the spindle ZF drive gearbox, the headstock ways and the table/saddle assembly. The lubrication oil is distributed through specially calibrated metering units to ensure precise lubrication amounts to all critical components.



### Table Feeds & Way Covers

Each linear axis is driven by an independent ballscrew and servomotor through a planetary reducer. Rotary table (B axis) is driven by a backlash-free reducer with independent high torque servomotor. Fully telescoping steel way covers provide the ultimate in protection of the bedways. Always in place, the covers telescope and retract without interfering with the table travel. The machine life and accuracy are extended with this valuable standard feature.

## STANDARD FEATURES

- Modular travels
- Heavily-ribbed closed grain cast iron construction, heat-treated and stress-relieved
- Hardened and precisioned ground steel ways as option
- Angular contact bearing spindle cartridge headstock
- Limit switches on all axes
- Easy access programmable electrics
- Built-in rotary table
- Bellville washer tool clamping with hydraulic unclamping
- Precision hardened and ground gears
- ZF Box & belt transmission on main motor
- Central pendant control
- Multi-axis electronic digital readout
- Inch/Metric switchable readout
- Automatic timed lubrication system
- Inch/Metric programmable threading
- Steel telescoping way covers
- Hydraulic axis clamping
- Rapid traverse
- Ballscrews on all linear axes
- Electronic handwheel
- Manual machine plus control
- Rotary digital readout
- UL/CSA Electrics

### Tailstock (optional)

The tailstock is a large casting with hardened and ground ways and a precision ballscrew, which carries the outboard support bushing for line boring. The support bushing movement is normally synchronized with the movement of the headstock, but may be separated when not in use. An electronic handwheel allows precise positioning and reduces setup time. (The tailstock may be removed to facilitate large workpieces.)



### Facing Head (optional)

The 19 5/8" diameter facing head is mounted directly to the spindle face and is capable of operations up to 190 RPM. This attachment will face diameters up to 35 1/2".



### Vertical Attachment (optional)

Standard No. 50 milling machine type spindle will accept a wide variety of readily available tooling. 360° rotation right angle spindle allows complete turning flexibility.



### Heavy Duty Rotary Table

The 12T HD rotary table with hydrostatic ways.



### Coolant System (optional)

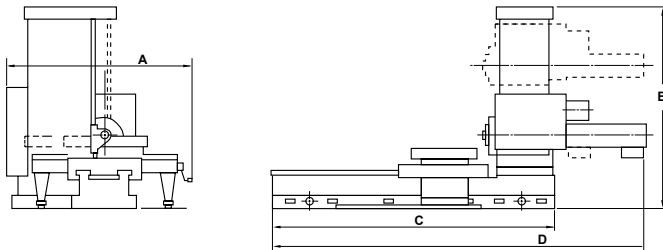
The flood coolant system with inground tank and submersed pump.

## OPTIONAL EQUIPMENT

- Facing head
- Vertical attachment
- Coolant system
- Coolant thru
- Spindle support
- Tailstock
- Heavy duty rotary table
- Installation assistance

# DIMENSIONS AND SPECIFICATIONS

## HTM SERIES HEAVY DUTY HORIZONTAL BORING MILLS



### HORIZONTAL BORING MILL DIMENSIONS

MODEL	A	B	C	D
HTM4H-XS	138"	131"	140"	208"
HTM4H-S	162"	145"	165"	228"
HTM4H	182"	174"	183"	240"
HTM5H	214"	185"	285"	250"

SPECIFICATIONS	HTM4H-XS		HTM4H-S		HTM4H		HTM5H	
	STANDARD	METRIC	STANDARD	METRIC	STANDARD	METRIC	STANDARD	METRIC
<b>SPINDLE</b>								
Diameter of Spindle	4 1/8"	105mm	4 1/8"	105mm	4 1/8"	105mm	5"	125mm
Taper of Spindle	#50		#50		#50		#50	
Number of Spindle Speeds	Infinitely Variable		Infinitely Variable		Infinitely Variable		Infinitely Variable	
Spindle Speed Range	10-1800 RPM		10-1800 RPM		10-1800 RPM		10-1800 RPM	
<b>TRAVELS</b>								
Spindle Travel - W Axis	31.5"	800mm	31.5"	800mm	31.5"	800mm	31.5"	800mm
Vertical Headstock - Y Axis	33.4"	850mm	47"	1200mm	61" / 74.8"	1550/1900mm	78"	2000mm
Cross Travel of Table - X axis	47"	1200mm	70.8"	1800mm	86" / 106"	2200/2700mm	100"/122"/143" 2500/3100/3650mm	
Saddle Travel w/o Tailstock - Z axis	39.34"	1000mm	59"	1500mm	65"/84"/104" 1650/2150/2650mm		65"/84"/104" 1650/2150/2650mm	
<b>FEEDS</b>								
Number of Feeds	Infinitely Variable		Infinitely Variable		Infinitely Variable		Infinitely Variable	
Threads Per Inch	Programmable		Programmable		Programmable		Programmable	
Metric Threads	Programmable		Programmable		Programmable		Programmable	
Rapid Traverse	118 IPM	3000mm/min	118 IPM	3000mm/min	118 IPM	3000mm/min	118 IPM	3000mm/min
<b>ROTARY TABLE</b>								
Position Only	360,000		360,000		360,000		360,000	
Size of Table	55" x 55"	1400x1400mm	55" x 55"	1400x1400mm	55" x 63"	1400x1600mm	70" x 78"	1800x2000mm
T-slot Width (7)	7/8"	22mm	7/8"	22mm	7/8"	22mm	1.1"	28mm
Floor to Top of Table Height	45.5"	1155mm	45.5"	1155mm	45.5"	1155mm	47.5"	1185mm
Max. Weight of Workpiece	13,200 lbs.	6,000kg	13,200 lbs.	6,000kg	13,200 lbs.	6,000kg	26,500 lbs.	12,000kg
Table Movement	Programmable		Programmable		Programmable		Programmable	
<b>COLUMN</b>								
Width of Ways	5.5"	140mm	5.5"	140mm	5.5"	140mm	5.5"	140mm
Number of ways	2		2		2		2	
Width Across Ways	27.5"	700mm	27.5"	700mm	27.5"	700mm	27.5"	700mm
<b>SADDLE &amp; BASE</b>								
Width of Ways	7.5"	190mm	7.5"	190mm	7.5"	190mm	7.5"	190mm
Number of ways	2		2		2		2	
Width Across Ways	39.5"	1000mm	39.5"	1000mm	39.5"	1000mm	39.5"	1000mm
<b>MAIN DRIVE MOTOR</b>	20 HP	15kw	20 HP	15kw	22 / 30 HP	17 / 22kw	40 / 50 HP	28 / 37kw
<b>ELECTRICS</b>	440/3/60		440/3/60		440/3/60		440/3/60	

**WARRANTY:** A copy of Summit Machine Tool LLC's standard written warranty is attached to each Summit Machine. Call or write to Summit for a copy or for further information concerning Summit's standard warranty. All purchases are subject to Summit's standard written warranty. Specifications are subject to change without notice.

**POINT OF OPERATION GUARDING** is the responsibility of the end user. For information contact your local OSHA office.

## SUMMIT MACHINE TOOL LLC

518 N Indiana Ave • Oklahoma City, OK 73106

MAIN 405.235.2075

FAX 405.232.5169



FOR MORE INFORMATION CALL 1-800-654-3262

[WWW.SUMMITMACHINETOOL.COM](http://WWW.SUMMITMACHINETOOL.COM)