



## 2.2 Specifications

<i>Spindle</i>	Boring spindle diameter	4-1/8"
	Boring spindle taper	ISO 50
	Spindle speed range	14-1,400 RPM
	Number of spindle speeds	18
	Milling spindle diameter	7.08"
	Spindle feeds:	16
	Inch/rev	0.001" - 0.190"
	In./Min.	0.25" - 48"
	Cutter holder flange diameter	8.718"
	Boring spindle travel (Z-axis)	27-1/2"
	Threading range	
	Inch:	27 steps 2 - 28
	mm:	21 steps 0.25 - 12
Vertical headstock travel (Y-axis)	64"	

*Feed Axes* Refer to Figure 2-16 below for the nomenclature of the axes of the HTM4.

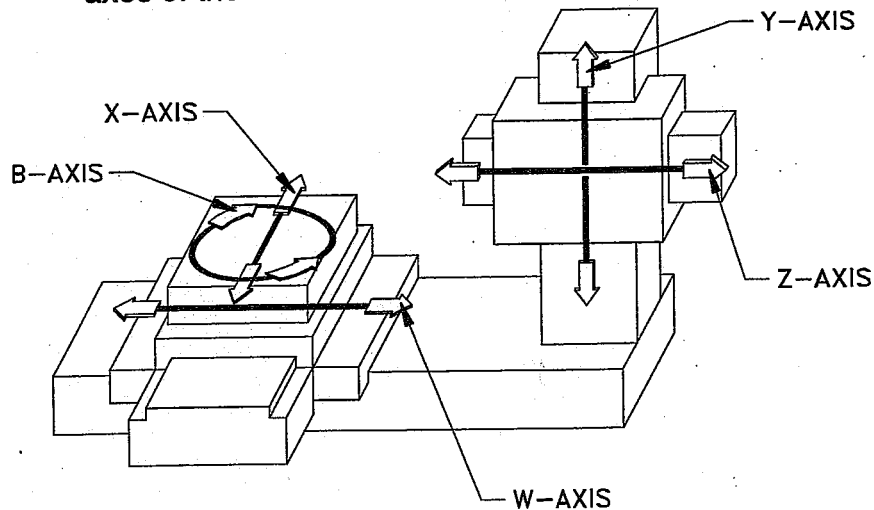


Figure 2-16

### *Feeds*

Feeds are applicable to all axes except spindle which has additional feeds available using quadrant gear system (only for tapping), and table rotational feed.

Slide feeds:	16 feeds
In./rev:	0.001 - 0.189
in./min.	0.25 - 48
Table rotational feed	2 RPM
Rapid traverse in all directions:	
In./Min	102
mm/Min	2,591

## 2.2 Specifications (cont'd)

<i>Column</i>	Width of ways	Main: 5" Aux.: 4-1/4"
	Number of ways	2
	Width across ways	21-1/2"
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<i>Saddle</i>	Width of ways	7"
	Number of ways	2
	Width across ways	32-1/4"
	Longitudinal travel Without tailstock:	50"
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<i>Cross Slide</i>	Width of ways	7"
	Number of ways	2
	Width across ways	32-1/4"
	Transverse travel (X-axis)	78"
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<i>Bed</i>	Width of ways	7"
	Number of ways	2
	Width across ways	29-1/2"
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<i>Rotary Table</i>	Size L x W	48" x 60"
	T-slot width	22H7 mm
	Number of T-slots	7
	Height from floor to table top	41"
	Table movement	360°
	Number of indexing positions	4 x 90°
	Accuracy of indexing	6 sec.
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<i>Optional Facing Plate</i>	Diameter	19.6"
	Slide travel	7.08"
	Max. facing diameter	33.4"
	Facing plate speed	9 steps: 14 - 224 RPM
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<i>Optional Vertical Milling Head</i>	Milling head support length	18"
	Distance from main spindle to center of milling device	21.65"
	Angle of rotation of milling head	±90°
	Milling head spindle cone	ISO 50
	Power of milling head	5.5 Kw
	Max. torque	125 daN.m
	Max. speed	710 rev/Min.



## 2.2 Specifications (cont'd)

### *Electrical*

Electrical power	220V/440V/3Ø/60Hz
Control Voltage	110V/60Hz
Indication circuit voltage	24 VDC
Brake/clutch voltage	24 VDC

### *Miscellaneous*

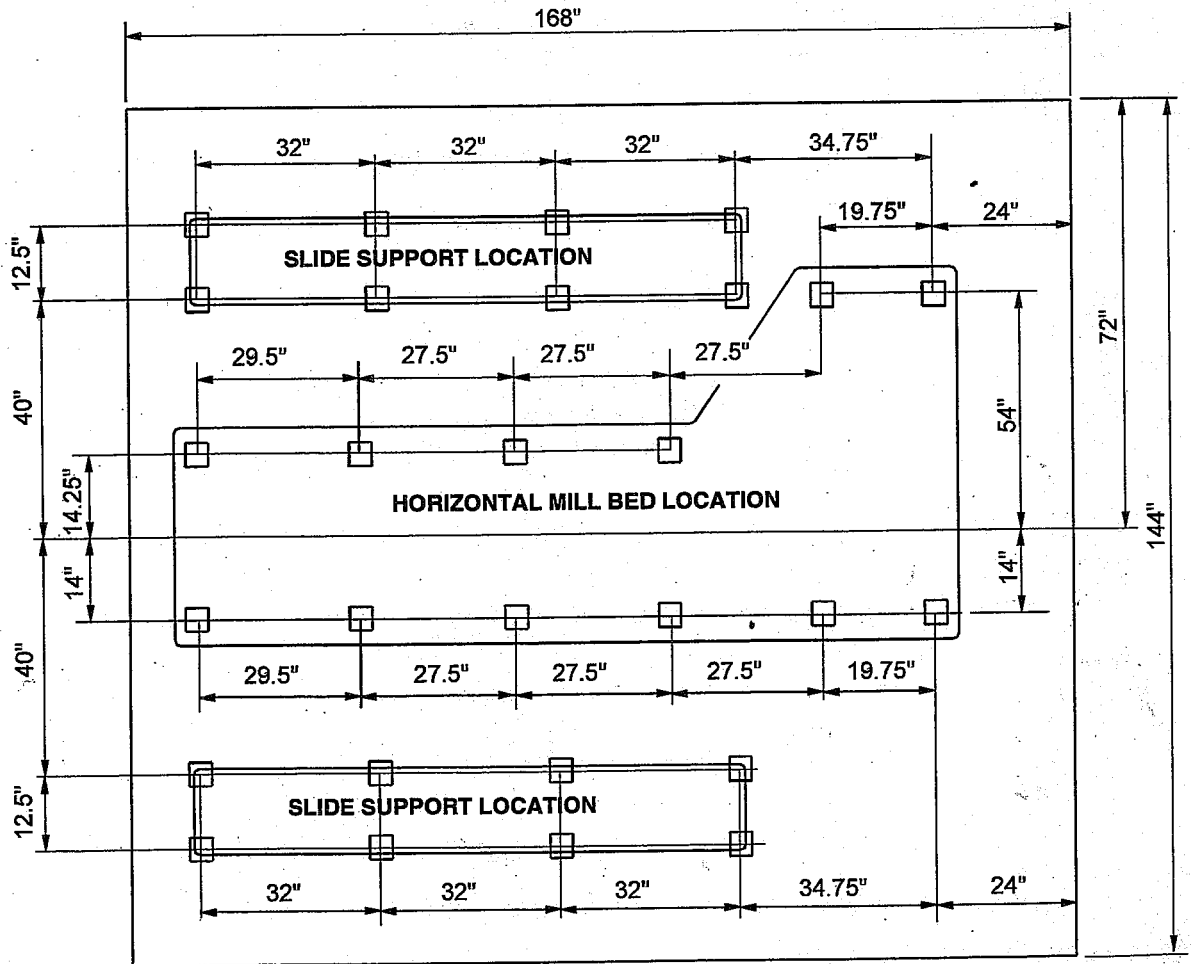
Main drive motor	18 HP @ 13Kw
Maximum workpiece weight	11,000 lbs.
Floorspace	See Figure 2-17 below
Approx. weight	36,000 lbs.



### 3.1 Foundation and Leveling

The foundation for the mill must be designed by a structural engineer and constructed according to a certified foundation plan (see Figures 3-3 and 3-3a). Pay particular attention to the core locations. The pad must be level to an overall tolerance of  $\pm 1/2$ " to insure being able to level all three sections (bed and two slide supports) to an acceptable tolerance. The weight and forces of the machine, as well as soil quality must be taken into consideration.

**CAUTION!**  
**THE DIAGRAM BELOW SHOWS APPROXIMATE DIMENSIONS, WHICH MAY VARY FROM MACHINE TO MACHINE. CONSULT THE DRAWINGS PROVIDED WITH YOUR MACHINE FOR EXACT DIMENSIONS.**



Typical Foundation Plan, for Reference Only

Figure 3-3