

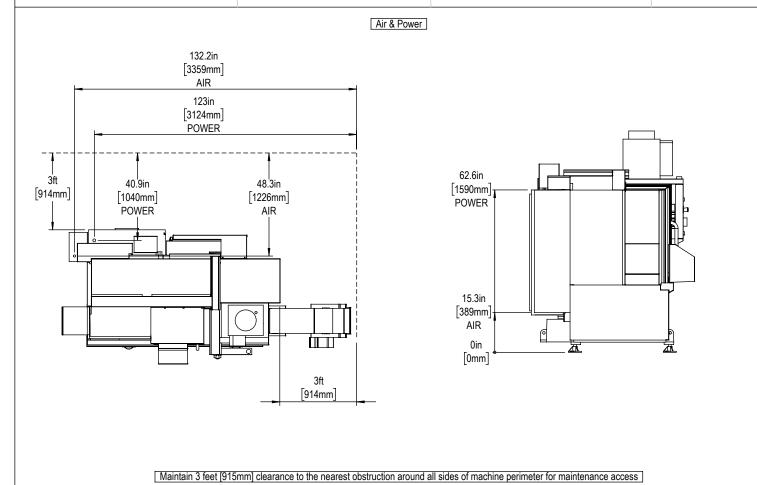
Shipping Dimensions

## **Machine Layout Drawing**

#### ST-10/15

### **Utilities & Anchoring**





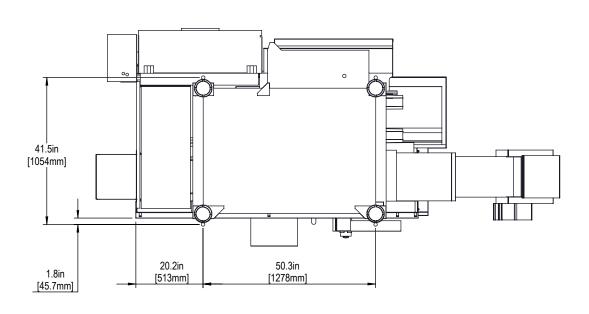
Note: Machine must be placed on one continous concrete slab. Slab should extend 12in [305mm] beyond anchor holes in all directions

Anchor Pattern

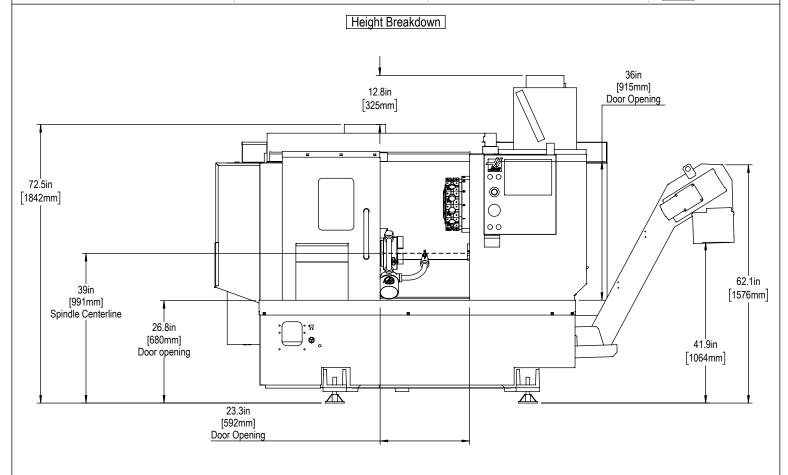
Anchor Hole Detail

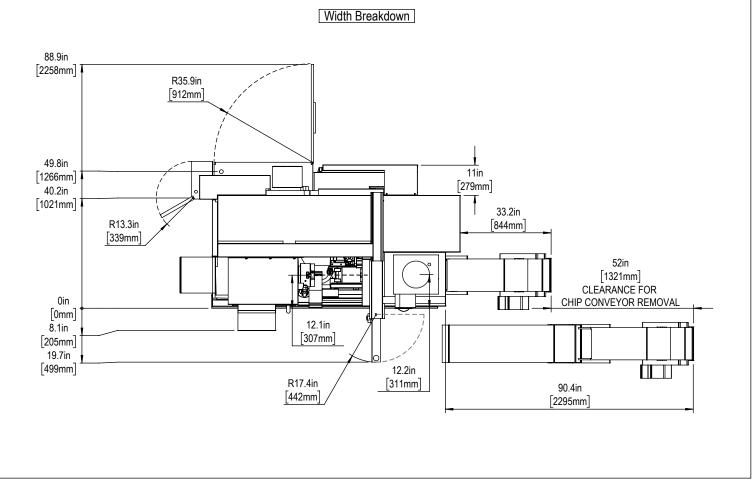
Ø 1.0in[25mm]

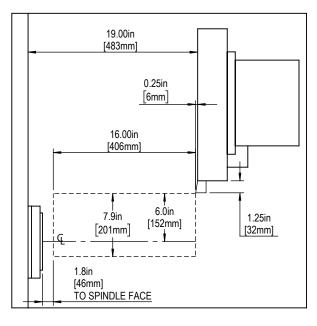
 $\sqrt{2.5}$ in[66mm]

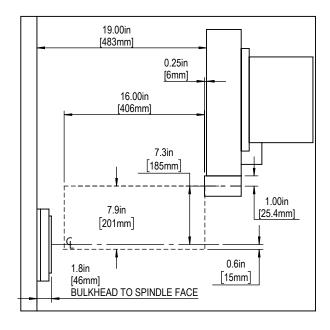


For precise locations and specifications please use template in Anchoring Kit found at Haascnc.com





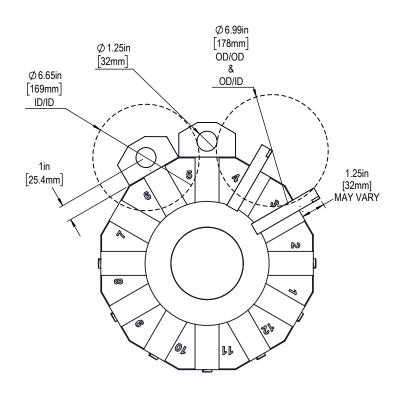


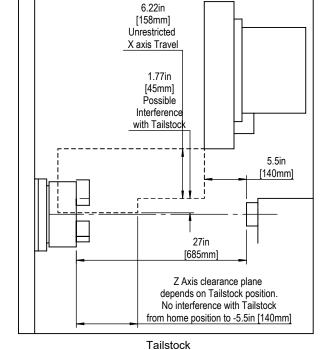


BOT OD\* BOT ID / Drill / Bore \*/\*\*

AVERAGE CHUCK WIDTH IS 3.6in [91mm] - AVERAGE CHUCK JAWS HEIGHT IS 1.25in [32mm]

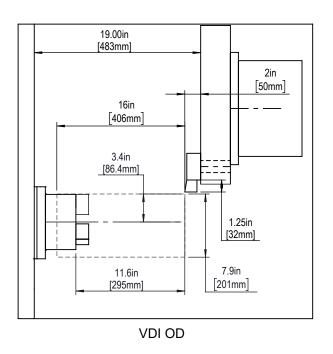
#### ALTERNATIVE TALLER WORKHOLDING OR JAWS WILL REDUCE THE AVAILABLE WORK ENVELOPE

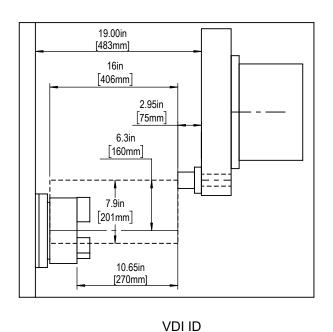




- \* Shift the work envelope in X by the tool protrustion length
- \*\* Shift the work envelope in Z by the tool protrustion length

Note - Sub Spindle not compatible with BOT Turret

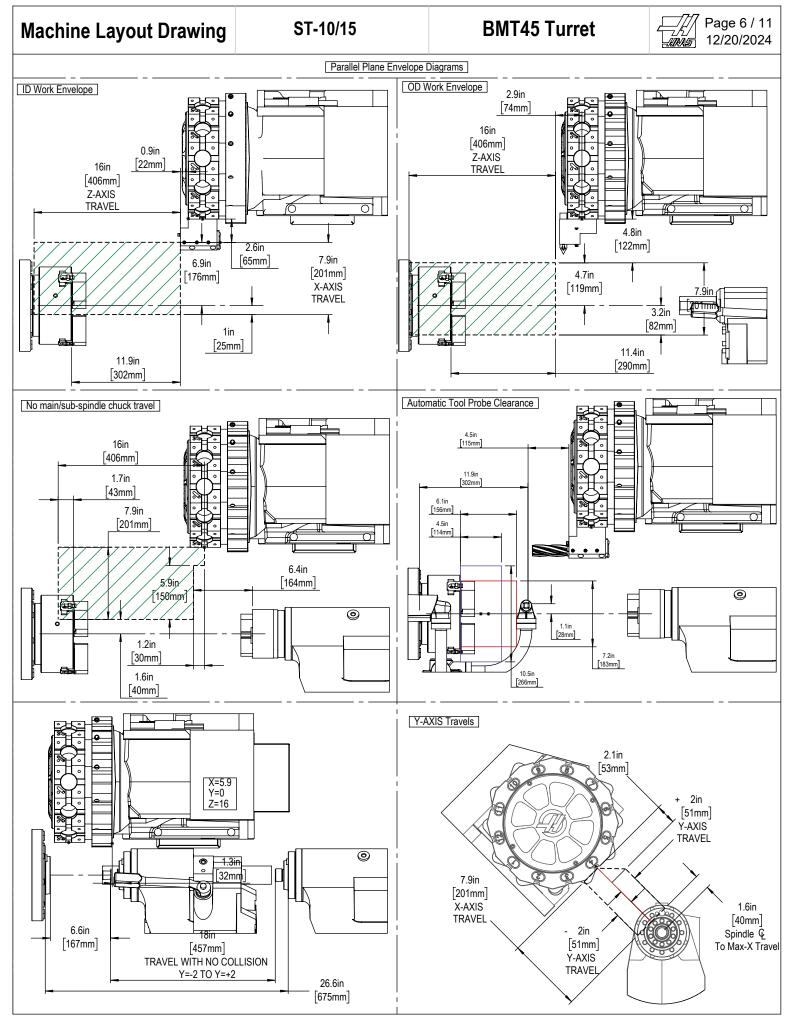


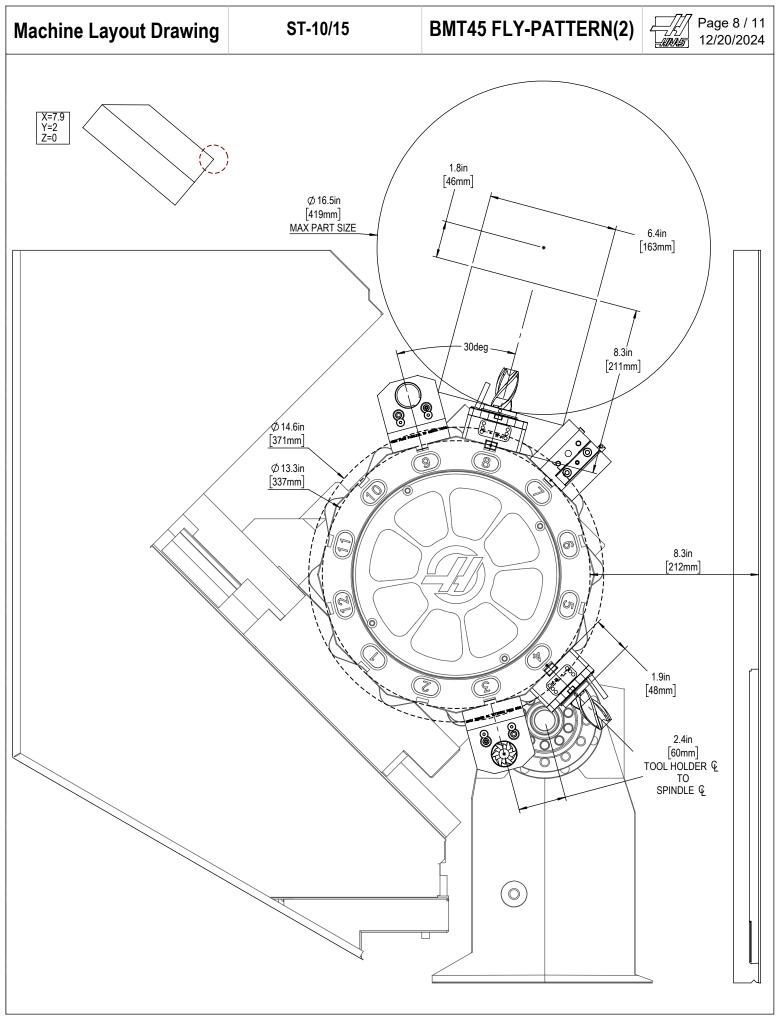


20.54in [522mm]

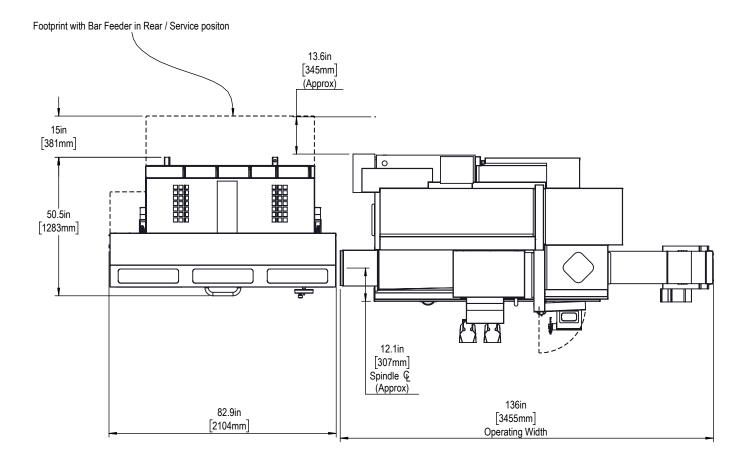
4.25in [108mm]

Note: The TURRET shape and dimensions may vary depending on the vintage of the machine.





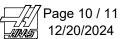
## **Barfeeder Layout**

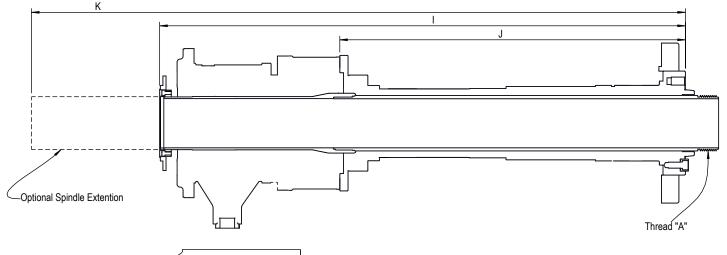




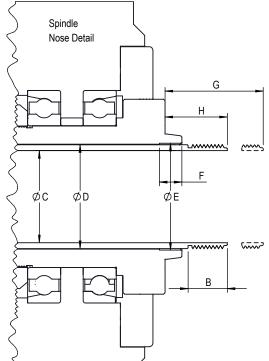
ST-10/15

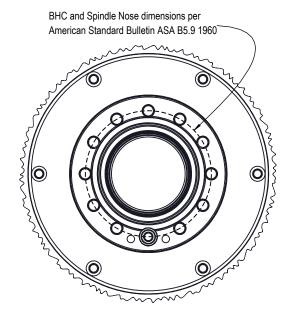
# Main Spindle Nose Details



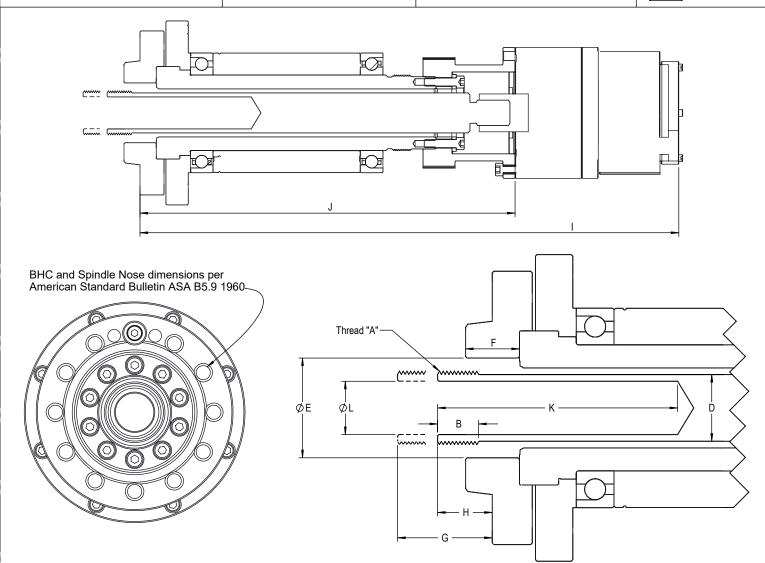


The following dimensions should be used as a reference only. Haas uses many different vendors for our drawtube assemblies. If any custom workholding is required Haas recommends you retrieve the exact dimensions from your delivered machine.





ST-10/15/Y/Reboot Spindle Schematic for all vintages							
		ST-10/Y		ST-15/Y			
DESCRIPTION	DIMENSION	SAE	METRIC	SAE	METRIC		
MAIN OR SUB SPINDLE & TYPE		Main / <b>A2-5</b>		Main / <b>A2-6</b>			
DIAMETER OF THREAD	Α	2.165"	55 MM	2.95"	75 MM		
THREAD PITCH	Α	0.0787"	2.0 MM	0.0787"	2.0 MM		
INTERNAL OR EXTERNAL	Α	External		External			
LENGTH OF THREAD	В	0.70"	17.78 MM	1.36"	34.54 MM		
DRAWTUBE INNER DIAMETER	С	1.81"	45.98 MM	2.56"	65 MM		
DRAWTUBE OUTER DIAMETER	D	2.25"	57.15 MM	3.03"	76.96 MM		
COUNTERBORE INNER DIAMETER	E	2.50"	63.5 MM	3.52"	89.4 MM		
COUNTERBORE DEPTH	F	0.620"	15.75 MM	0.75"	19.05 MM		
DRAWTUBE EXTENDED DISTANCE	G	1.52"	38.6 MM	2.50"	63.5MM		
DRAWTUBE RETRACTED DISTANCE	Н	0.93"	23.6 MM	1.52"	38.6MM		
SPINDLE FACE TO BACK OF UNION		30.78"	781.8 MM	33.53"	851.67 MM		
SPINDLE FACE TO UNION ADAPTOR	J	22.75"	578 MM	22.53"	572.3 MM		
TO BACK OF EXTENTION (OPTION)	K	48.0"	1219MM	48.0"	1219MM		



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SUB-SPDL-A2-5 for ST-10 to ST-25						
DESCRIPTION	DIMENSION	SAE	METRIC			
MAIN OR SUB SPINDLE & TYPE		Sub-Spindle / A2-5				
DIAMETER OF THREAD	Α	1.378"	35 MM* or 40 MM			
THREAD PITCH	Α	0.059"	1.5 MM			
INTERNAL OR EXTERNAL	Α	External				
LENGTH OF THREAD	В	0.50"	12.7 MM			
DRAWTUBE INNER DIAMETER	С	N/A - SOLID DRAWBAR				
DRAWTUBE OUTER DIAMETEER	D	1.25"	31.75MM			
COUNTERBORE INNER DIAMETER	E	1.870"	47.5 MM			
COUNTERBORE DEPTH	F	1.01"	25.65MM			
EXTENDED DISTANCE TO NOSE	G	1.465"	37.2 MM			
RETRACTED DISTANCE TO NOSE	Н	0.874"	22.2 MM			
FROM SPINDLE FACE TO BACK OF UNION	I	11.72	297.7MM			
FROM SPINDLE FACE TO UNION ADAPTOR	J	16.84	427.7MM			
EJECTOR POCKET DEPTH	K	4.5"	114.3MM			
EJECTOR POCKET DIAMETER	L	1.0"	25.4MM			
*M35 applies to Sub-Spindles made after July 2019 - M40 applies to older vintages						