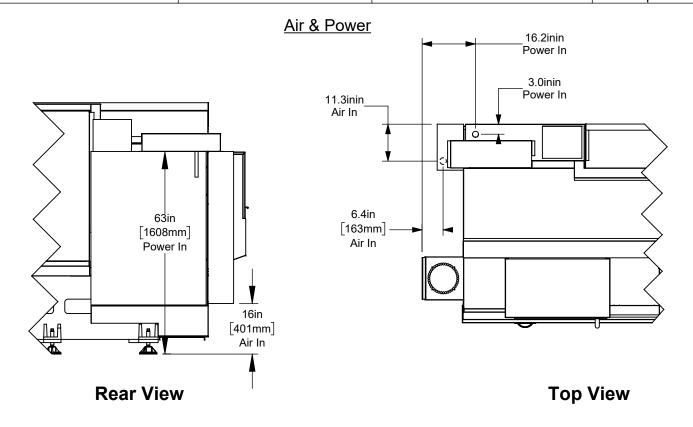
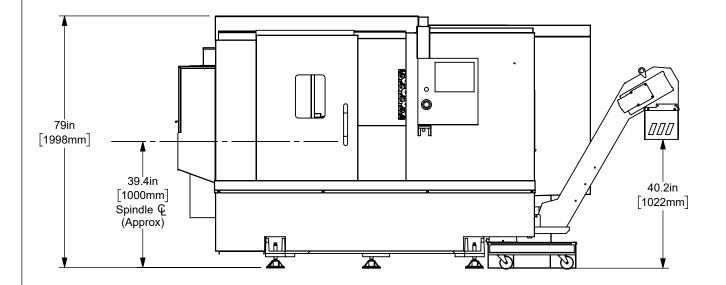


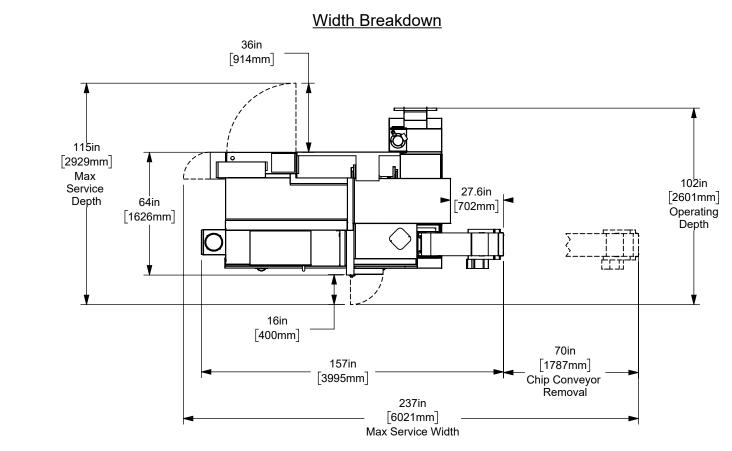
All dimensions based on stackup of sheetmetal, subject to variation of 1/2" (13 mm)



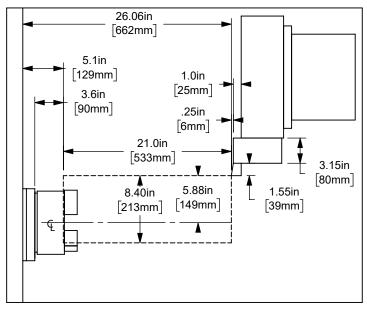
Height Breakdown

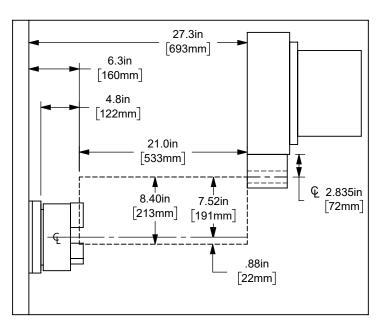


All dimensions based on stackup of sheetmetal, subject to variation of 1/2" (13 mm)

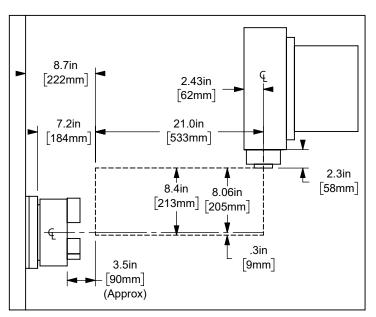


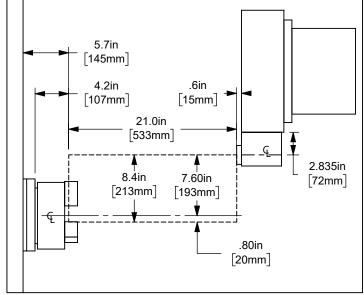
All dimensions based on stackup of sheetmetal, subject to variation of 1/2" (13 mm)





BMT OD BMT ID / Drill / Bore (*) **

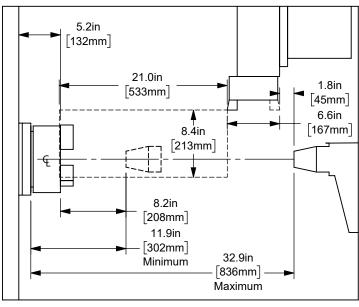




BMT Live Cross Tool *

BMT Live Face Tool **

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



21.0in
[533mm]

8.4in
[213mm]

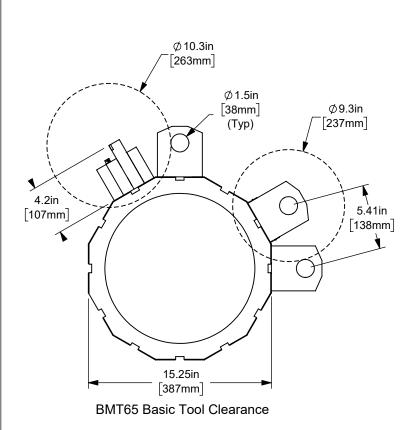
32.41in
[823mm]

Chuck Face to Chuck Face (Approx)

38.79in
[985mm]
Spindle Face to Spindle Face

Tailstock Option

Sub Spindle Option



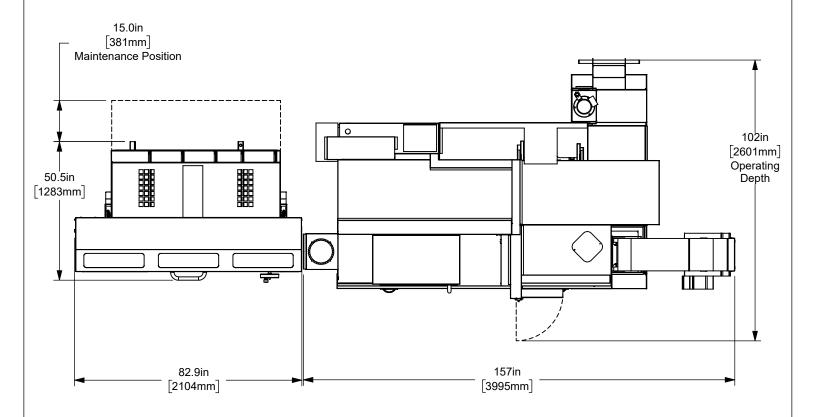
2.834in [72mm] 2.010 [21.05mm] X Axis Travel X Axis Q 8.4in [213mm] 0.88in [22.35mm] 2in [50.8mm] Below Spindle Y Axis Q 2in [50.8mm]

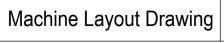
Y Axis Travel Envelope

Same Dimensions Apply To 90° Live Face Tool

Maximum Turret Swing Ø 35.0in [889mm]

Bar Feeder Layout

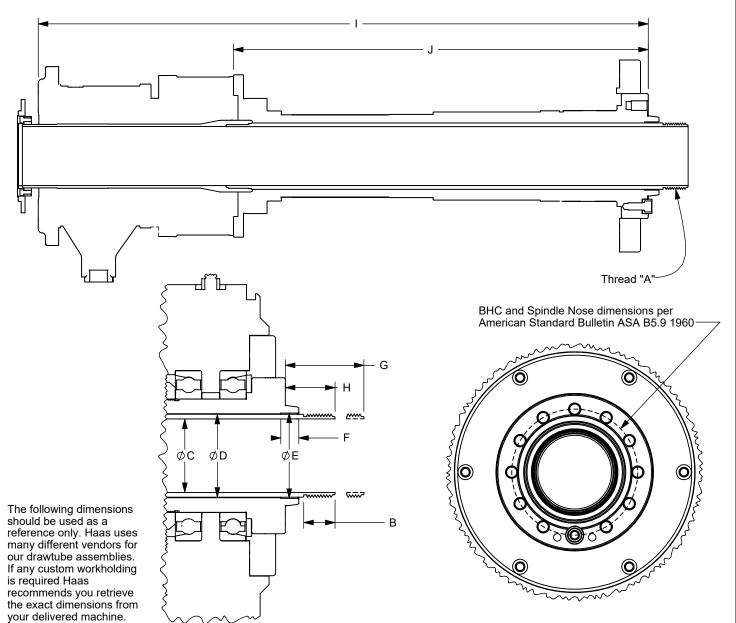




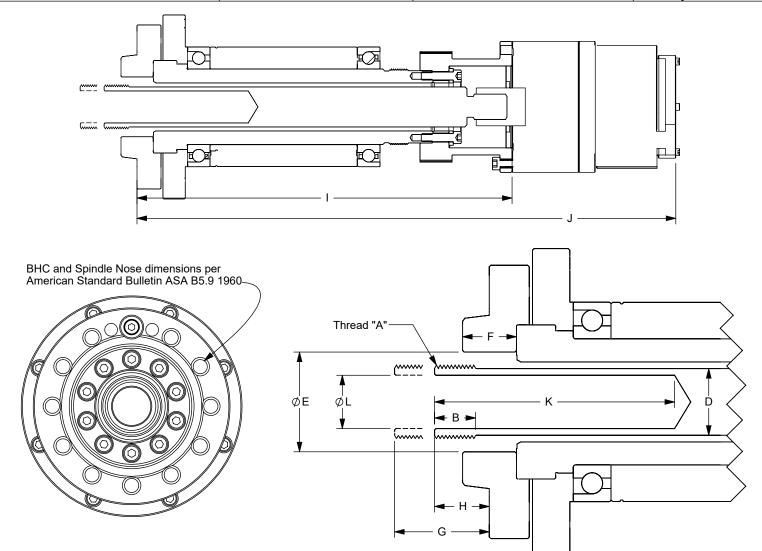
ST-20/25Y

Spindle Nose Detail

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ST-20/25/Y Reboot Spindle Schematic (For machines built after May 2019)							
		ST-20/Y		ST-25/Y			
DESCRIPTION	DIMENSION	SAE	METRIC	SAE	METRIC		
MAIN OR SUB SPINDLE & TYPE		Main / A2-6		Main / A2-6			
DIAMETER OF THREAD		2.953"	75 MM	3.346"	85 MM		
THREAD PITCH		0.0787"	2.0 MM	0.0787"	2.0 MM		
INTERNAL OR EXTERNAL	Α	External		External			
LENGTH OF THREAD	В	1.360"	34.5 MM	1.43"	36.3 MM		
DRAWTUBE INTERNAL DIAMETER	С	2.560"	65 MM	3.06"	77.7 MM		
DRAWTUBE EXTERNAL DIAMETER	D	2.960"	75.18 MM	3.50"	88.9 MM		
COUNTERBORE INTERNAL DIAMETER	E	3.560"	90.4 MM	3.560"	90.4 MM		
COUNTERBORE DEPTH	F	0.750"	19.05 MM	0.750"	19.05 MM		
DRAWTUBE EXTENDED	G	2.50"	63.5MM	2.75"	69.8MM		
DRAWTUBE RETRACTED	Н	1.375"	35MM	1.615"	41MM		
SPINDLE FACE TO BACK OF UNION	I	31.50"	800 MM	31.50"	800 MM		
SPINDLE FACE TO UNION ADAPTOR	J	22.25"	565 MM	22.00"	558 MM		



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.

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	Е	1.870"	47.5 MM			
COUNTERBORE DEPTH	F	1.01"	25.65MM			
EXTENDED DISTANCE TO NOSE	G					
RETRACTED DISTANCE TO NOSE	Н					
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						