

Tooling Sheet

<i>Program reference:</i>	<i>Date:</i> 07-DEC-09	<i>Sheet</i> 1 of 1
Punch Insert	<i>Programmer:</i> Peter Smid	

Tool No.	Tool Description	Z-depth	Tool Ø	RPM	Feed	OFFSET H D	
T21	3.0 inch Face Mill	Z0	3.0	509	10.0	H21	-
T08	1.0 inch 4-flute End Mill - ROUGH	Z-1.55	1.0	401	2.0	H08	D58
T08	1.0 inch 4-flute End Mill - FINISH	Z-1.55	1.0	439	3.0	H08	D78
T29	1/2 inch Spot Drill (90° point)	Z-0.1713	0.5	892	8.0	H29	-
T34	Letter 'I' - HSS Drill	Z-1.0765	0.272	1053	8.0	H34	-
T35	5/16-24 NF Tap	Z-0.875	0.3125	611	24.7	H35	-
	<i>Setup notes:</i>						
1.	Grip in a vise, maximum 0.400 grip depth						
2.	Set X0Y0 to the center of part - Z0 to the top of finished face						
3.	Face top – minimum amount - 400 ft/min						
4.	Rough – semifinish and finish contour - 105 ft/min (semi-finish) - 115 ft/min (finish)						
5.	Spot drill – Drill – Tap (2 holes) – 80 ft/min (spot drill) – 75 ft/min (drill) – 50 ft/min (tap)						
	Tapping feedrate = RPM / TPI - 3% = 611 / 24 – 3% = 24.7						