

MANUFACTURING PLAN

В

RAW MATERIAL STOCK: 1/4" Aluminum Sheet

STEP	PROCESS DESCRIPTION	MACHINE	FIXTURE	TOOL(S)	SPEED (RPM)
1	water jet outside of frame and hole A1- A12	Waterjet			
2	deburr	file		file	
3	Secure part in mill	mill	no parallels, vise stop and extended jaw		
3	find X and Y datum (same datum even when rotated)	mill	Vise Stop and Extended Jaws	edge finder with drill chuck	1000
5	Center Drill B3	mill	Vise Stop and Extended Jaws	Center drill with drill chuck	1600
6	Blind drill hole .50" deep B3	mill	Vise Stop and Extended Jaws	#36 with drill chuck	1600
7	Countersink hole B3 .03" deep with reamer	mill	Vise Stop and Extended Jaws	.1654" reamer with drill chuck (ask shop for tool)	100
8	Tap hole B3 with a 6-32 tap	mill	Vise Stop and Extended Jaws	#6-32 tap with drill chuck	By hand
9	Repeat steps 5-8 for holes B2 and B1	mill	Vise Stop and Extended Jaws		
10	Rotate part to drill identical holes on the opposite side	mill	Vise Stop and Extended Jaws		
11	Use same datum and vise stop	mill	Vise Stop and Extended Jaws		
12	Repeat steps 5-8 for holes B1-B3, exactly matching opposite side of plate.	mill	Vise Stop and Extended Jaws	Center drill, #36 drill, .1654" ream, #6-32 tap	
14	deburr entire part	file		file	
					SHEET 2 C
	2			1	

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