



Shielded Metal Arc Welding (Vertical Welding)

Project 1 – Specification and Print

Weld Type	4 Fillet Welds
Welding Process	SMAW
Position	Vertical
Material	1/4 " Steel
Joint Type	Tee
Backing Option	
Backing Material	

Polarity	DC+
Electrode	E7081 3/32
Transfer Mode	
Tungsten Electrode	
Shielding Gas	
Flow Rate	
Cup Size	

Welding Procedure									
Weld Layers	Pass No.	Process	Filler Metal Classification	Filler Metal Diameter in (mm)	Current Amps	Current Type and Polarity	Wire Feed Speed	Volts	Remarks
Multi Pass to top	Stringers	SMAW	E7018	3/32	70a	DC+			
	Weave	SMAW	E7018	3/32	70a				





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Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench after 2-3 passes

Stress Relieving:

Technique: 2 sides are to be done using stringer beads welding in vertical up.

2 sides are to be done using a weave technique welding in vertical up.

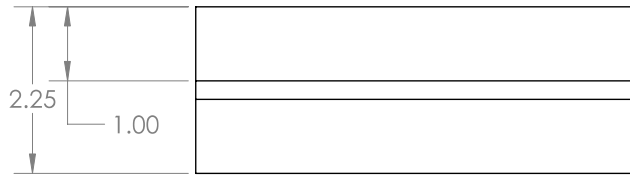
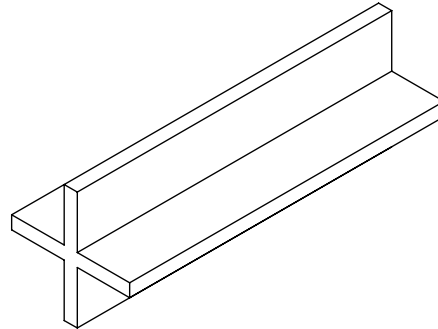
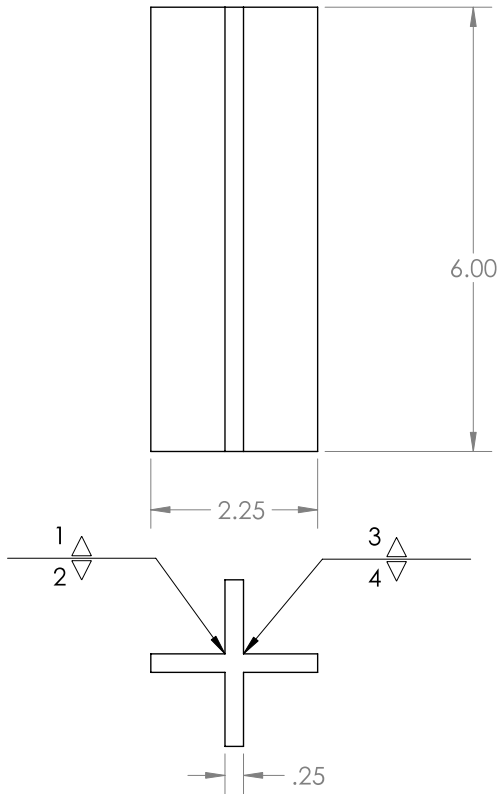
Number of Electrodes: whatever it takes

Additional Notes: Show instructor progress every 30 minutes, minimum.





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NOTE: OFC PROCESS
SIDE 1: 6013 1/8 9DA
SIDE 2: 7024 1/8 140A
SIDE 3: 6010 1/8 8DA
SIDE 4: 7018 1/8 120A

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE: CIMWD-110 Project 1	
DIMENSIONS ARE IN INCHES		DRAWN	J.SIBERT		2/12/2015
TOLERANCES:		CHECKED			
FRACTIONAL ±		ENG APPR.			
ANGULAR: MACH ± BEND ±		MFG APPR.			
TWO PLACE DECIMAL ±		Q.A.			
THREE PLACE DECIMAL ±		COMMENTS:			
INTERPRET GEOMETRIC TOLERANCING PER:					
MATERIAL					
FINISH					
USED ON					
APPLICATION					
DO NOT SCALE DRAWING					
SIZE	DWG. NO.	REV			
A	PART 3	0			
SCALE: 1:2	WEIGHT:	SHEET 1 OF 1			

5

4

3

2

1





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