



Pipe Welding (Socket and Flange Welding)

Project 1 – Specification and Print

Weld Type	Fillet
Welding Process	SMAW or GTAW
Position	1G and 2G
Material	3" Sch. 80 Pipe
Joint Type	Tee and Lap
Backing Option	
Backing Material	

Polarity	DC+
Electrode	E6010 3/32, E7018 3/32
Transfer Mode	
Tungsten Electrode	Or 2% Ceriated
Shielding Gas	100% Argon
Flow Rate	25cfh
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
Stringer		SMAW	E7018	3/32	75a	DC+			
Stringer		GTAW	ER70s-6	1/16 or 3/32	120a	"			





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Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench between passes

Stress Relieving:

Technique: SMAW- Align socket and flange and weld socket in 1G and Flange in 2G
GTAW- 1G and 2G use ER70s-6 1/16" or 3/32" filler metal

Initial/Interpass Cleaning- Chip and Brush

Number of Electrodes-

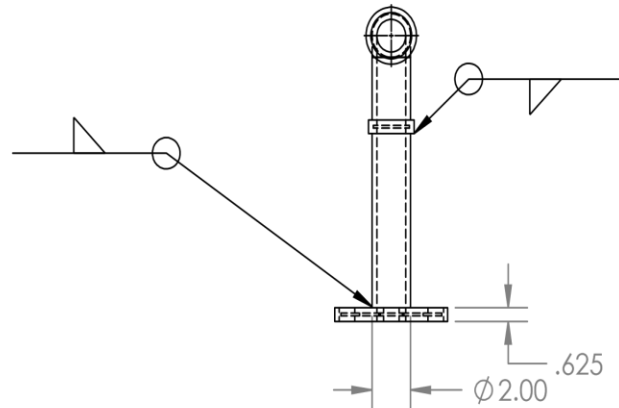
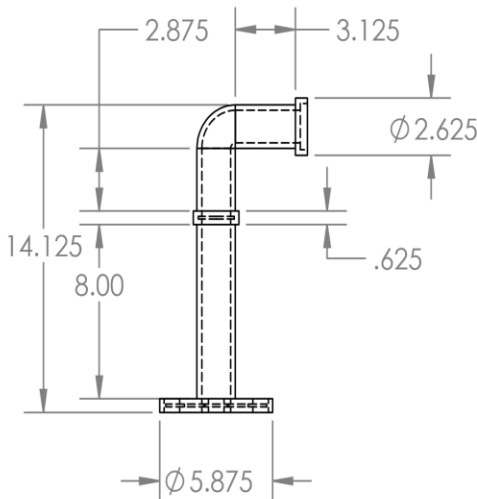
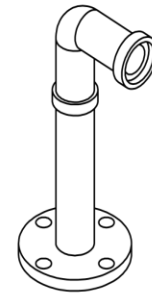
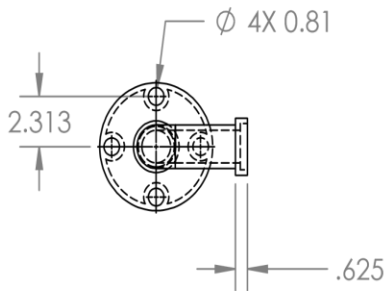
Additional Notes: Show instructor progress every 30 minutes minimum.





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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE		
		DIMENSIONS ARE IN INCHES	DRAWN	J.SIBERT	3/27/15	TITLE: CIMWD-212 Project 1
		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	PIPE	0				
SCALE: 1:8	WEIGHT:	SHEET 1 OF 1				

5

4

3

2

1





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