



## Pipe Welding (2G and 5G Welding)

### Project 1 – Specification and Print

<b>Weld Type</b>	CJP Groove
<b>Welding Process</b>	SMAW or GTAW
<b>Position</b>	Horizontal
<b>Material</b>	3" Sch. 80 Pipe
<b>Joint Type</b>	Vee Butt
<b>Backing Option</b>	No Backer
<b>Backing Material</b>	

<b>Polarity</b>	DC+
<b>Electrode</b>	E6010 3/32, E7018 3/32
<b>Transfer Mode</b>	
<b>Tungsten Electrode</b>	Or 2% Ceriated
<b>Shielding Gas</b>	100% Argon
<b>Flow Rate</b>	25cfh
<b>Cup Size</b>	

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	root	SMAW	E6010	3/32	50a	DC+			
	fill	"	E7018	3/32	75a	"			
	cover	"	E7018	3/32	75a	"			
Stringer	Root & Fill	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- Root Pass performed with E6010 3/32 for CJP. Fill and Cover Passes performed with E7018 3/32.

GTAW- Root/Fill/Cover use ER70s-6 1/16" or 3/32" filler metal

Initial/Interpass Cleaning- Chip and Brush

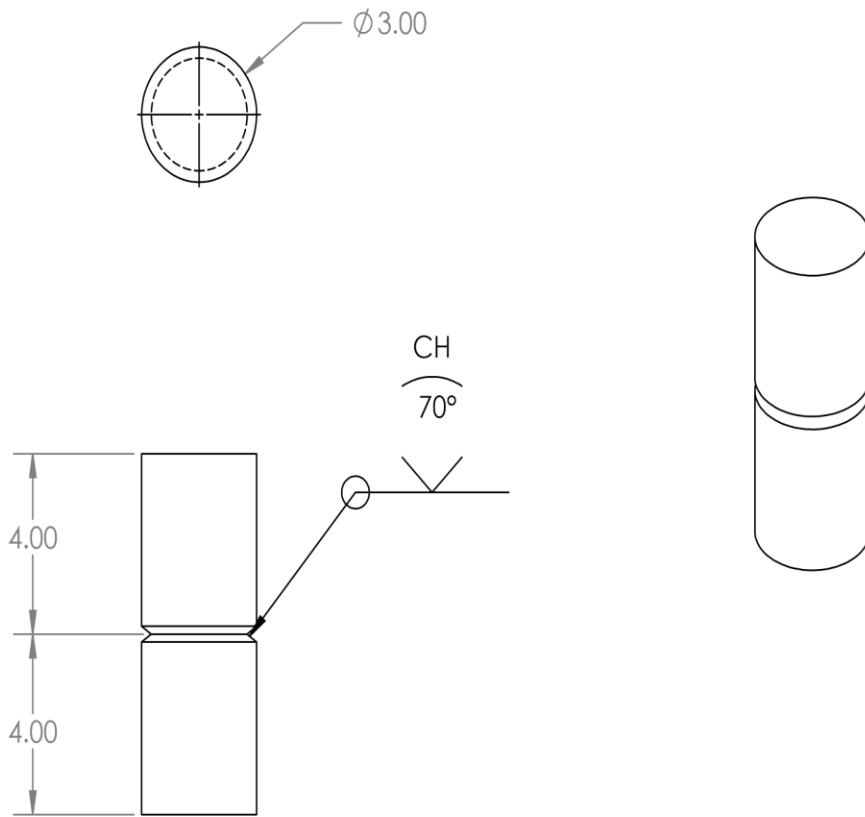
**Additional Notes:** Show instructor progress every 30 minutes minimum.





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**NOTES:** FLAME CUT BEVEL  
3/32 LAND  
6010 3/32 ROOT  
7018 3/32 FILL & COVER

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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE		
		DIMENSIONS ARE IN INCHES	DRAWN	J.SIBERT	3/27/2015	TITLE:  CIMWD-210 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				
5	4	3	2	1		
			SIZE	DWG. NO.	REV	
			<b>A2G Drawing</b>		<b>0</b>	
			SCALE: 1:4	WEIGHT:	SHEET 1 OF 1	





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