

Multi-State Advanced Manufacturing	RELEASE DATE	09/09/2015		
Consortium	VERSION	v 001		
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PRIMARY DEVELOPER: Kevin Ridge, Welding Instructor, Henry Ford College				

Shielded Metal Arc Welding – Flat and Horizontal Project 1 – Specification and Print

Weld Type	4 Fillet Welds
Welding Process	SMAW
Position	Flat
Material	¼" Steel
Joint Type	Tee Flat
Backing Option	
Backing Material	

Polarity	DC+
Electrode	E6013 1/8, E7024 1/8, E6010 1/8, E7018 1/8
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		SMAW	E6013	1/8	90a	DC+			
			E7024	1/8	140a				
			E6010	1/8	80a				





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		E7018	1/8	120a		

Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench after 2-3 passes

Stress Relieving:

Technique: 4 Multi-pass fillet welds in flat positions using 4 different electrodes. Each side is to be filled to the top using multi-pass stringer technique.

Number of Electrodes: whatever it takes

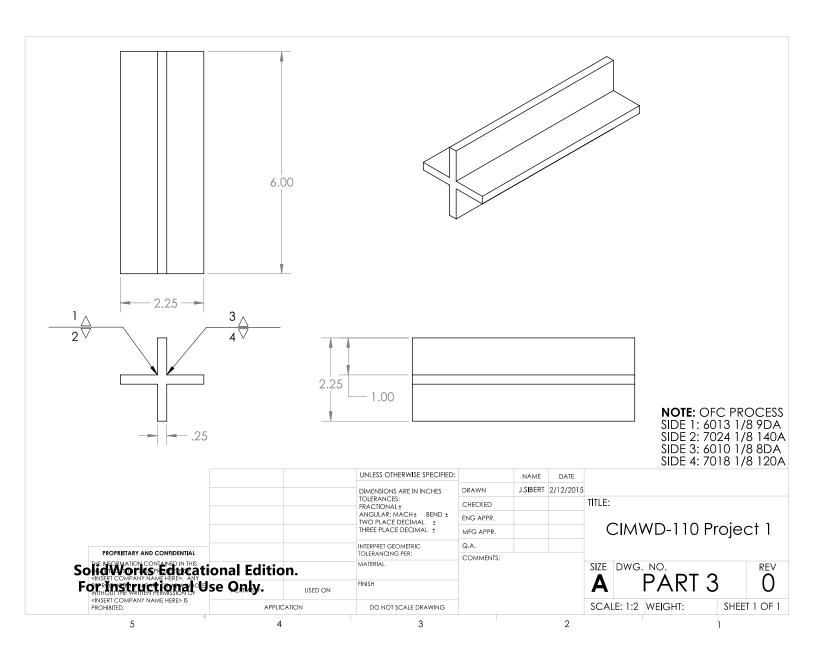
Additional Notes: Show instructor progress every 30 minutes, minimum.





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