



Shielded Metal Arc Welding – Flat and Horizontal

Project 3 – Specification and Print

Weld Type	2 Fillet and 1 PJP Groove
Welding Process	SMAW
Position	Horizontal
Material	¼" Steel
Joint Type	Tee, Lap, and Butt
Backing Option	
Backing Material	

Polarity	DC+
Electrode	E7018 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
Stringer	Tee	SMAW	E7018	3/32	75a	DC+			
	Lap	"	E7018	3/32	75a	"			
	Butt	"	E7018	3/32	75a	"			





**Multi-State
Advanced Manufacturing
Consortium**

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Number of Electrodes: Whatever it takes

Technique: 1 Stringer Bead on each Joint

Initial/Interpass Cleaning: Chip and Brush

Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench between passes

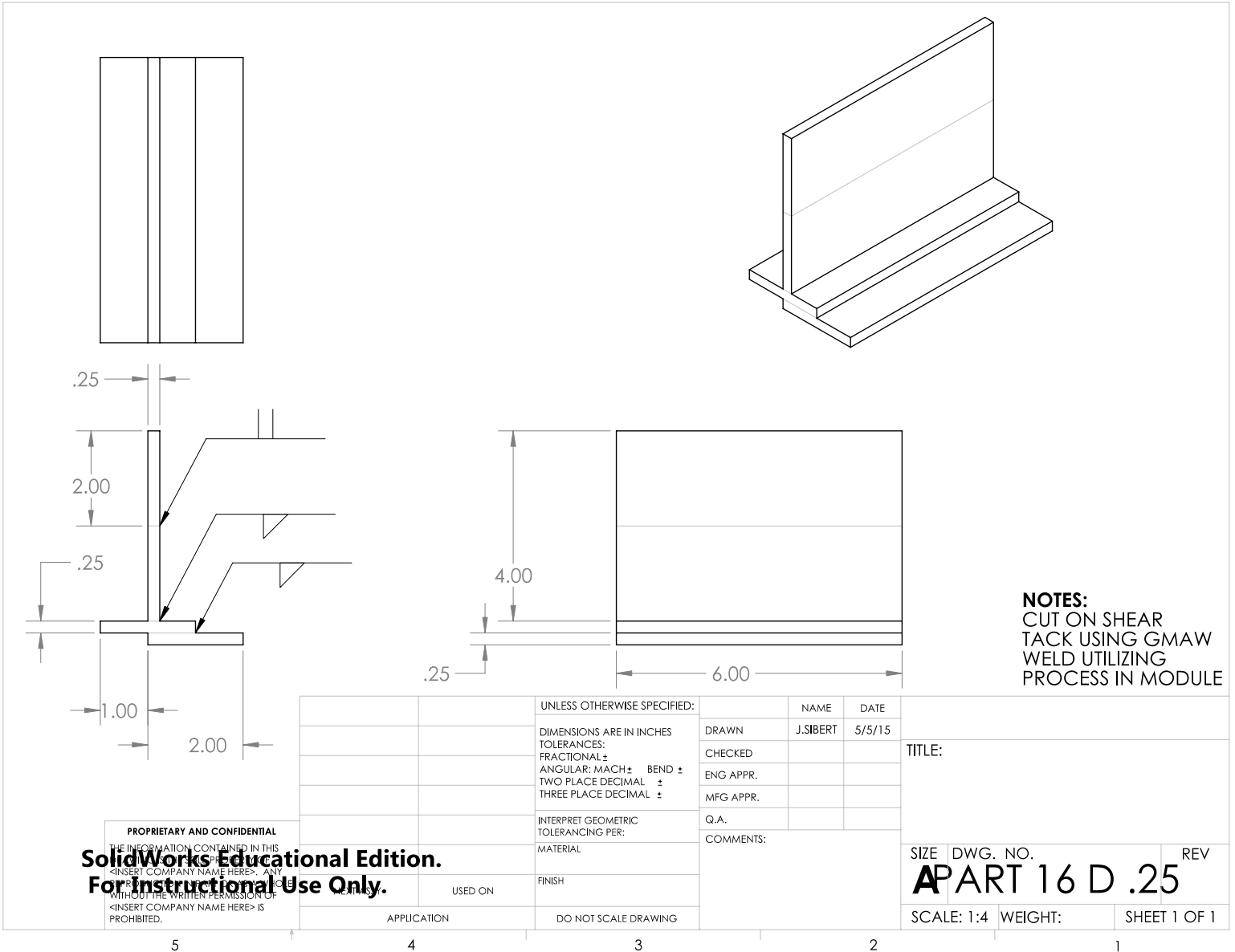
Stress Relieving:

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





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