



## Tool and Die Welding (SMAW)

### *Project 2 – Specification and Print*

<b>Weld Type</b>	Line Build-Up
<b>Welding Process</b>	SMAW
<b>Position</b>	Flat
<b>Material</b>	1/4" Steel
<b>Joint Type</b>	
<b>Backing Option</b>	
<b>Backing Material</b>	

<b>Polarity</b>	DC+
<b>Electrode</b>	E7018 3/32
<b>Transfer Mode</b>	
<b>Tungsten Electrode</b>	
<b>Shielding Gas</b>	
<b>Flow Rate</b>	
<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
Pad		SMAW	E7018	3/32"	75a	DC+			





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#### **Heat Treatment:**

**Preheat Temperature:**

**Post Heat Temperature:**

**Interpass Temperature:** Quench every 2-3 passes

#### **Stress Relieving:**

**Technique:** A line build up using stringer beads. Looking for bead quality and bead placement.  
3 ½"x1 ½" high.

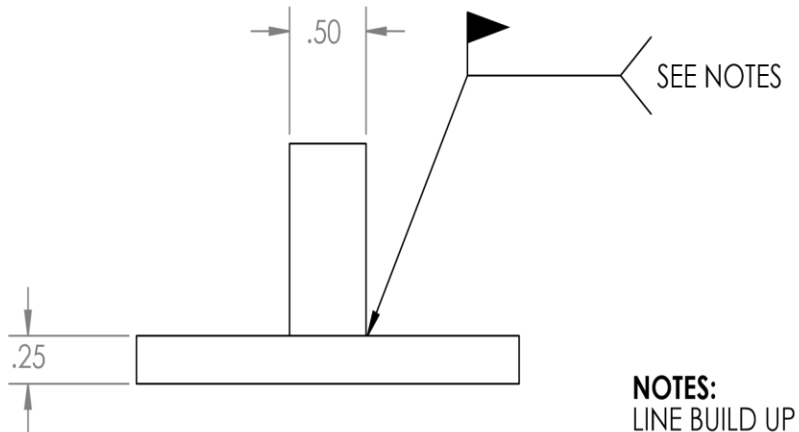
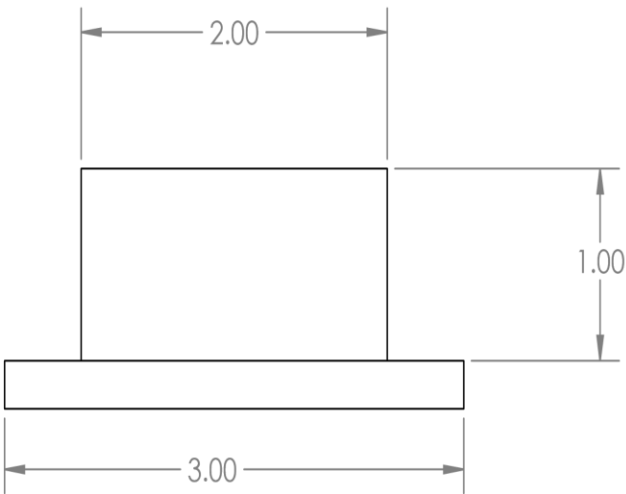
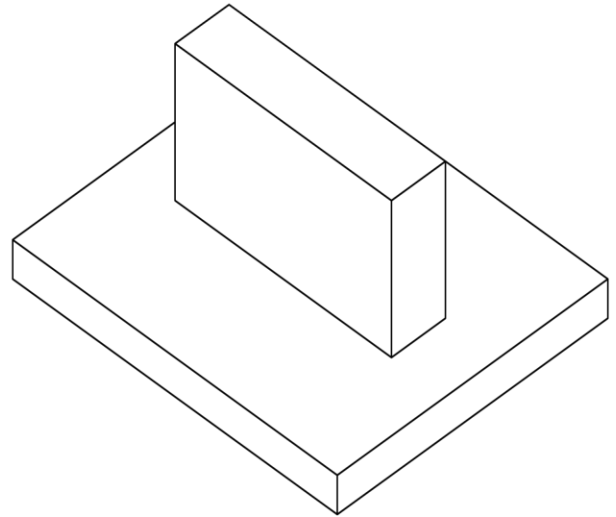
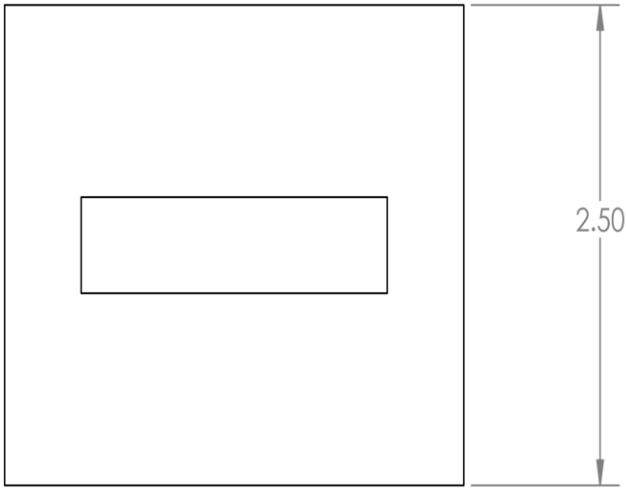
**Additional Notes:** Show instructor progress every 30 minutes minimum.





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**NOTES:**  
LINE BUILD UP  
SMAW 7018 3/32

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE: <b>CIMWD-222 Project 2</b>
DIMENSIONS ARE IN INCHES		DRAWN	J.SIBERT 5/5/15	
TOLERANCES:		CHECKED		
FRACTIONAL ±		ENG APPR.		
ANGULAR: MACH ± BEND ±		MFG APPR.		SIZE DWG. NO. REV <b>A PART 12 D</b>
TWO PLACE DECIMAL ±		Q. A.		
THREE PLACE DECIMAL ±		COMMENTS:		SCALE: 1:1 WEIGHT: 1
INTERPRET GEOMETRIC TOLERANCING PER:				SHEET 1 OF 1
MATERIAL				
FINISH				

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