



Gas Metal Arc Welding (Vertical and Overhead Welding)

Project 7 – Specification and Print

Weld Type	Fillet Weld
Welding Process	GMAW
Position	Overhead
Material	1/4" Steel
Joint Type	Tee
Backing Option	
Backing Material	

Polarity	DC+
Electrode	ER70s-6
Transfer Mode	Short Circuit Transfer
Tungsten Electrode	
Shielding Gas	75% Argon/25% CO2
Flow Rate	25 cfh
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
Weave	Tee	GMAW	ER-70s-6	.035"		DC+	50	7.0	





Gas Metal Arc Welding (Vertical and Overhead Welding)

Project 7 – Specification and Print

Heat Treatment:

Preheat Temperature:

Post Heat Temperature:

Interpass Temperature: Quench between passes

Stress Relieving:

Technique: Tee Joint use weave bead in overhead position

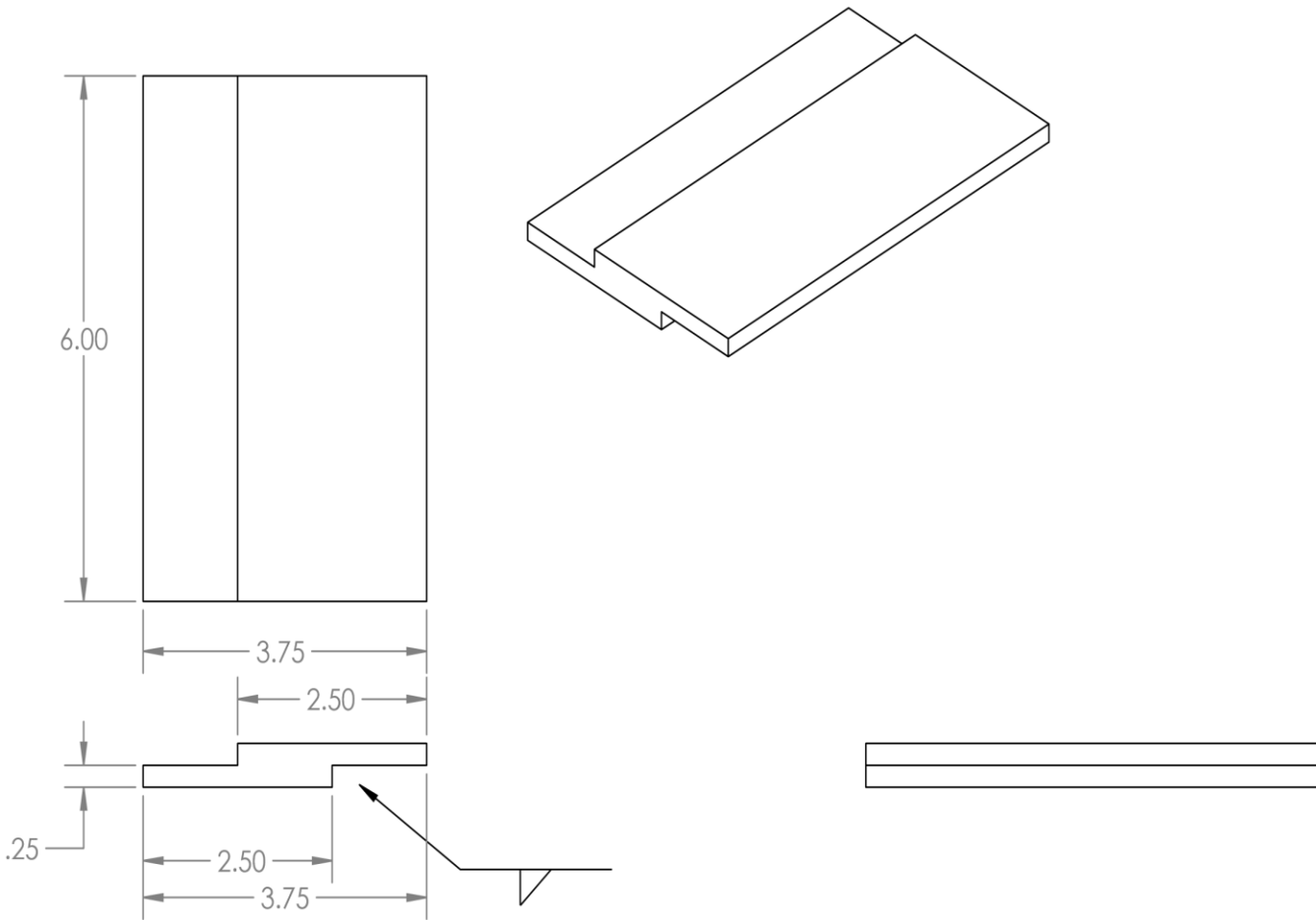
Additional Notes: Show instructor progress every 30 minutes minimum.





Gas Metal Arc Welding (Vertical and Overhead Welding)

Project 7 – Specification and Print



		UNLESS OTHERWISE SPECIFIED:		NAME	DATE			
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: CIMWD-131 Project 7		
		TOLERANCES:	CHECKED					
		FRACTIONAL ±	ENG APPR.					
		ANGULAR: MACH ± BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.			SIZE	DWG. NO.	REV
		THREE PLACE DECIMAL ±	COMMENTS:			CIMWD 131 pr 7		
		INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 1:2	WEIGHT:	SHEET 1 OF 1
		MATERIAL						
		FINISH						
		USED ON						
		APPLICATION						
		DO NOT SCALE DRAWING						

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE PROPERTY OF
<INSERT COMPANY NAME HERE>. ANY
REPRODUCTION OR TRANSMISSION
WITHOUT THE WRITTEN PERMISSION OF
<INSERT COMPANY NAME HERE> IS
PROHIBITED.

**SolidWorks Student Edition.
For Academic Use Only.**

5

4

3

2

1





Gas Metal Arc Welding (Vertical and Overhead Welding)

Project 7 – Specification and Print

SAFETY DISCLAIMER:

M-SAMC educational resources are in no way meant to be a substitute for occupational safety and health standards. No guarantee is made to resource thoroughness, statutory or regulatory compliance, and related media may depict situations that are not in compliance with OSHA and other safety requirements. It is the responsibility of educators/employers and their students/employees, or anybody using our resources, to comply fully with all pertinent OSHA, and any other, rules and regulations in any jurisdiction in which they learn/work. M-SAMC will not be liable for any damages or other claims and demands arising out of the use of these educational resources. By using these resources, the user releases the Multi-State Advanced Manufacturing Consortium and participating educational institutions and their respective Boards, individual trustees, employees, contractors, and sub-contractors from any liability for injuries resulting from the use of the educational resources.

DOL DISCLAIMER:

This product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

RELEVANCY REMINDER:

M-SAMC resources reflect a shared understanding of grant partners at the time of development. In keeping with our industry and college partner requirements, our products are continuously improved. Updated versions of our work can be found here: <http://www.msamc.org/resources.html>.

