



## Gas Tungsten Arc Welding (Steel and Stainless Steel-Flat and Horizontal)

### *Project 5 – Specification and Print*

|                         |                      |
|-------------------------|----------------------|
| <b>Weld Type</b>        | Square Groove        |
| <b>Welding Process</b>  | GTAW                 |
| <b>Position</b>         | Flat                 |
| <b>Material</b>         | 1/8" Stainless Steel |
| <b>Joint Type</b>       | Butt                 |
| <b>Backing Option</b>   | Square Groove        |
| <b>Backing Material</b> |                      |

|                           |             |
|---------------------------|-------------|
| <b>Polarity</b>           | DC+         |
| <b>Electrode</b>          | 308         |
| <b>Transfer Mode</b>      |             |
| <b>Tungsten Electrode</b> | 2% Ceriated |
| <b>Shielding Gas</b>      | 100% Argon  |
| <b>Flow Rate</b>          | 25 cfh      |
| <b>Cup Size</b>           |             |

| <b>Welding Procedure</b> |                 |                |                                    |                                      |                     |                                  |                        |              |                |
|--------------------------|-----------------|----------------|------------------------------------|--------------------------------------|---------------------|----------------------------------|------------------------|--------------|----------------|
| <b>Weld Layers</b>       | <b>Pass No.</b> | <b>Process</b> | <b>Filler Metal Classification</b> | <b>Filler Metal Diameter in (mm)</b> | <b>Current Amps</b> | <b>Current Type and Polarity</b> | <b>Wire Feed Speed</b> | <b>Volts</b> | <b>Remarks</b> |
| Stringer                 | Butt            | GTAW           | 308                                | 1/16"                                | 75a                 | DC+                              |                        |              |                |





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#### **Heat Treatment:**

**Preheat Temperature:**

**Post Heat Temperature:**

**Interpass Temperature:**

**Stress Relieving:**

**Technique:** Butt Joint single pass weld

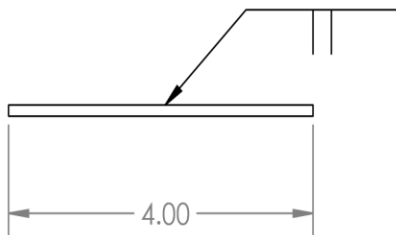
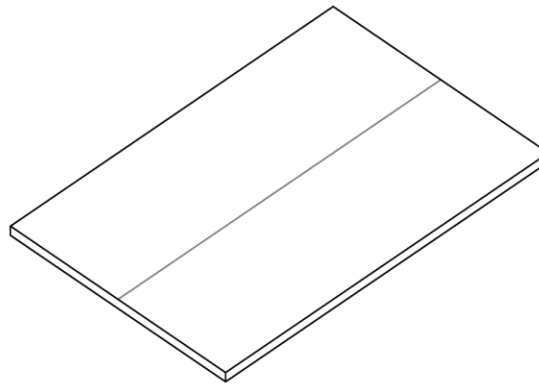
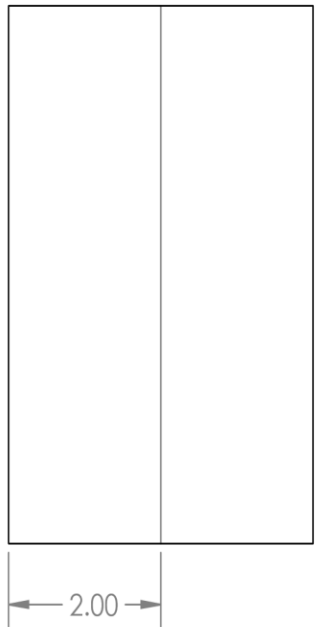
**Additional Notes:** Show instructor progress every 30 minutes, minimum.





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|  |             |  |           |      |      |                                 |
|--|-------------|--|-----------|------|------|---------------------------------|
|  |             | UNLESS OTHERWISE SPECIFIED:  |           | NAME | DATE | TITLE:<br>CIMWD-121 Project 5   |
|  |             | DIMENSIONS ARE IN INCHES   | DRAWN     |      |      |                                 |
|  |             | TOLERANCES:<br>FRACTIONAL ±  | CHECKED   |      |      |                                 |
|  |             | ANGULAR: MACH ± BEND ±<br>TWO PLACE DECIMAL ±<br>THREE PLACE DECIMAL ± | ENG APPR. |      |      |                                 |
|  |             | INTERPRET GEOMETRIC TOLERANCING PER:                                   | MFG APPR. |      |      | SIZE DWG. NO. REV               |
|  |             | MATERIAL   | Q.A.      |      |      | <b>A</b> Part 9 1 8 line        |
|  |             | FINISH   | COMMENTS: |      |      | SCALE: 1:2 WEIGHT: SHEET 1 OF 1 |
|  | APPLICATION | DO NOT SCALE DRAWING   |           |      |      |                                 |

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