

Oxy-Acetylene Welding Task - Butt Joint Flat

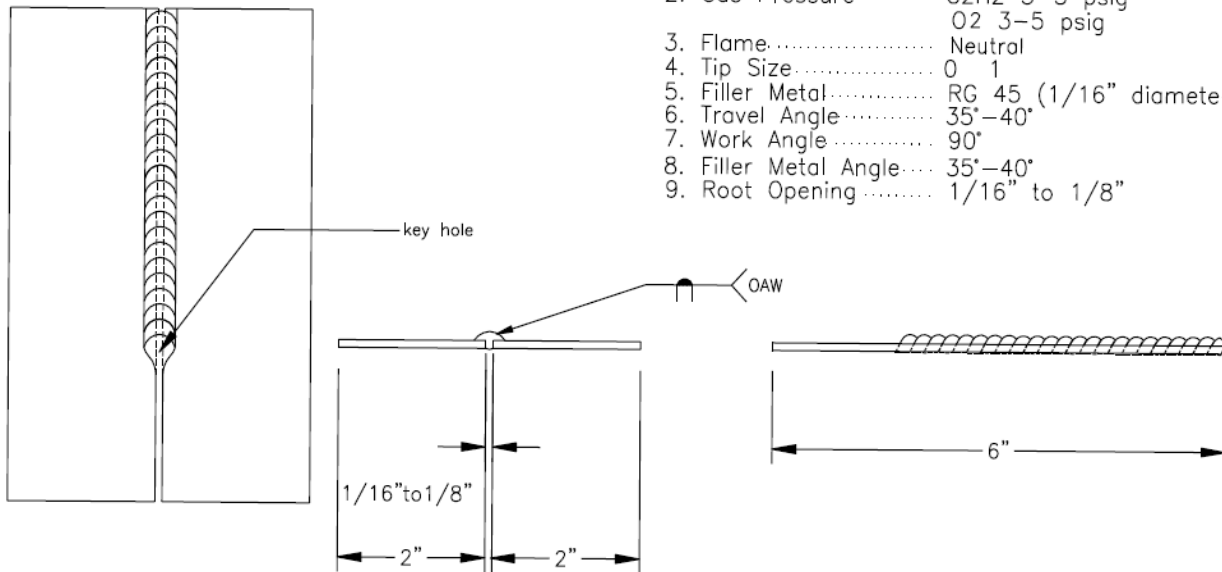
Name: _____

Date: _____

Flat Position (1G)
Butt Joint

Welding Procedure

1. Material..... 12 Gauge 4"x6"
2. Gas Pressure..... C2H2 3-5 psig
O2 3-5 psig
3. Flame..... Neutral
4. Tip Size..... 0 1
5. Filler Metal..... RG 45 (1/16" diameter)
6. Travel Angle..... 35°-40°
7. Work Angle..... 90°
8. Filler Metal Angle..... 35°-40°
9. Root Opening..... 1/16" to 1/8"



Procedure

1. Both plates should be preheated to form a keyhole. Move torch side-to-side and add filler directly into the puddle. A slight keyhole should be maintained to ensure complete penetration. The weld should completely fuse into side of joint and completely penetrate to form a root reinforcement of $\frac{1}{16}$ ". Bead width on face should be $\frac{1}{4}$ ".
2. Tack plates together at both ends, place one or more tacks in middle to hold spacing and to prevent warping during welding.



Snap a picture of your final piece and insert it here:

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Criteria	Student Assessment	Instructor Assessment
Reinforcement (0" - $\frac{1}{8}$ ")		
Undercut ($\frac{1}{32}$ ")		
Weld Bead Contour (smooth)		
Penetration		
Cracks (none)		
Arc Strikes (none)		
Fusion (complete)		
Porosity (none)		

Grade:

/8
