TIG Welding Tips

1. Use Argon shielding for steel, stainless, and aluminum.

2. Use DC-Straight Polarity (DCEN) for steel and stainless. Use AC for aluminum.

3. Always use a push technique with the TIG torch.

4. Match the tungsten electrode size with the collet size.

5. Aluminum - use a pure tungsten, AWS Class EWP (green identifying band). Will form a balled-end in AC.

6. Steel and stainless steel - use a 2% thoriated tungsten, AWS Class EWTH-2 (red identifying band). Prepare a pointed-end for DCEN welding. (Refer to Diagram 11. Tungsten Preparation)

7. When welding a fillet, the leg of the weld should be equal to the thickness of the parts welded. (Refer to Diagram 10. Recommended Fillet Weld Thickness)

Diagram 10: Recommended Fillet Weld Thickness

Diagram 11: Tungsten Preparation

**CORRECT**

Ideal Tungsten Preparation – Stable Arc

1. Stable Arc
2. Flat
3. Grinding Wheel
4. Straight Ground

Note: Do not use wheel for other jobs or tungsten can become contaminated causing lower weld quality.

**INCORRECT**

Wrong Tungsten Preparation – Wandering Arc

1. Arc Wander
2. Paint
3. Grinding Wheel
4. Radial Ground