

Hobart® MaxalMig®/ MaxalTig® 4943

Features & Benefits

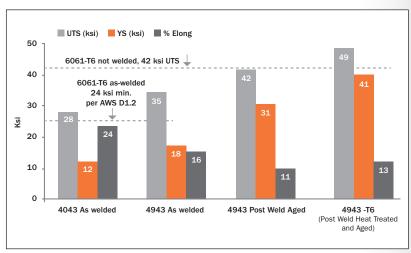
- All of the advantages of 4043 series aluminum alloys without the limitation of lower strength
- First new aluminum filler metal designed for welding wrought base metals registered with the Aluminum Association in 50 years
- 4943 is the ULTIMATE improvement/modification to the original 4043 aluminum alloy
- Produces 25% higher ultimate tensile and shear strengths in the as-welded condition
- 4943 can be used anywhere that 4043 is currently being used and offers a significant strength benefit.
- Uses the same voltage and WFS settings as 4043
- Can be used to join 1xxx, 3xxx, 5xxx with less than 3.0% Mg (example 5052) & 6xxx series base metals
- 4943 is heat treatable allowing for additional strength benefits on heat treatable base metals and exceeding strengths of similar heat treatable alloys. (Cost competitive with standard alloys as opposed to other heat treatable alloys that demand a premium price)

4043 and 4943 advantages –

4943 advantages

- · High fluidity
- · Low hot cracking sensitivity
- · Low shrinkage rate
- · Low melting temperature
- · Excellent corrosion characteristics
- · Use in high temperature service
- · Low welding fume and smut
- Higher tensile and shear strengths than 4043
- Heat treatable

Tensile Strength Comparison, 4043 vs. 4943 (All weld metal, MIG welded, no base metal dilution¹)



¹Insufficient dilution can be a concern with alloy 4043, which can result in low weld strength. Alloy 4943 eliminates the need for base metal dilution to achieve good weld strength in as-welded, post weld aged and T6 condition.

Strength vs. Size of 4043 vs. 4943

