

Praxair's *StarGold* Aluminum Shielding Gas

Designed for high quality joining of aluminum and aluminum alloys.

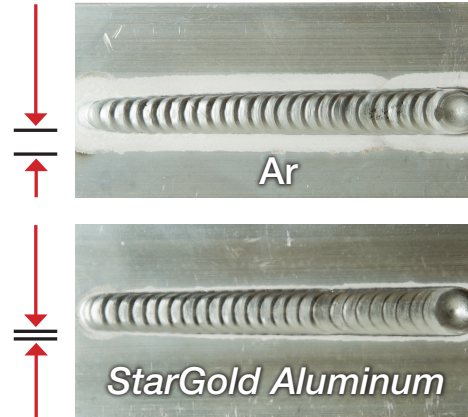
Improved Welding Performance

By increasing arc stability, arc energy and overall arc performance, Praxair's *StarGold™* Aluminum gas blend can help improve bead appearance and help provide better penetration when welding aluminum alloys including sheet, extrusion, tubing and pipe and other parts.

StarGold Aluminum can help create a reduction in the cleaning or frost zone and an increase in weld bead smoothness and wetting characteristics when using both the Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW) processes. In addition to conventional GMAW spray transfer, this blend can also be used in the pulsed mode of metal transfer. Various filler metal types can be used including 4xxx and 5xxx series.

Top-to-Bottom Blend Quality

Precise blending and consistency comes from Praxair's mixing process. Prior to filling, empty cylinders are evacuated and purged before they are filled. A master mixture containing a select concentration of the ppm additives is then added at a specific pressure and weight and the cylinders are then pressurized with argon, creating a uniform blend.



Bead on plate TIG welds; 4043 filler, equal parameters

Can Help Provide Benefits for Many Applications

Praxair's *StarGold* Aluminum blend can help provide benefits for a wide range of applications such as:

- Automotive frames, hoods, body panels
- Aluminum truck bodies, trailers and fuel tanks
- Livestock and utility trailers
- Aluminum ship hulls
- Diamond plate toolboxes
- Loading ramps
- Rail car structures and panels
- Aluminum ladders
- Radiators and heat transfer equipment

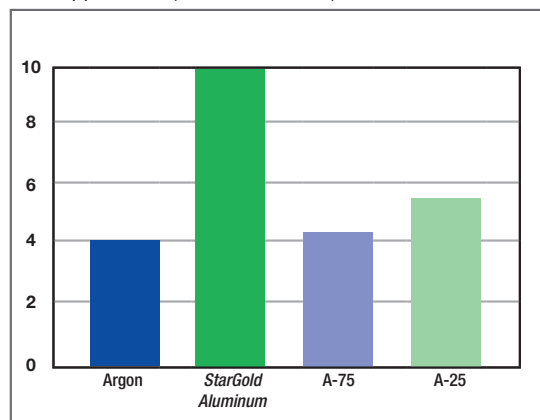


Choose Praxair's StarGold Aluminum Shielding Gas – Designed for High Quality Aluminum Welding

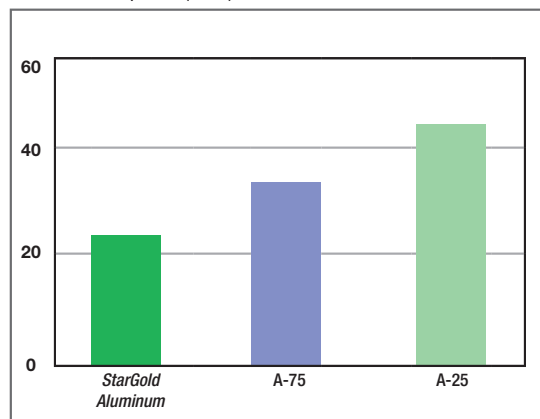
You can rely on Praxair's advanced shielding gas blends to provide high quality performance and help to increase weld quality while enhancing your welding productivity.

Because *StarGold Aluminum* is argon based, lower gas flow can be used which can result in cost savings due to less gas and a lower number of cylinders required.

Weld Appearance (10=best, 1=worst)



Gas Flow Required (CFH)



Graph information is based on tests conducted at Praxair Technology, Inc.'s R&D lab in Tonawanda, New York, USA.

Here are some of the benefits you may find when using *StarGold Aluminum*:

- Improved arc stability over argon or argon/helium shielding gases (less sensitive to arc voltage disturbances)
- Better weld appearance, better bead shape and penetration
- Greater welder appeal
- Easier to feed wire into weld pool compared to argon or argon/helium blends
- Reduced cleaning or frost zone
- Better wetting or fluidity vs. argon or argon/helium blends
- No visible surface porosity
- Improved deposition efficiency in MIG welding
- Better performance and increased arc energy at lower voltages compared to Ar/He mixtures (smaller heat affected zone)
- Greater process flexibility – works well in TIG and MIG using either conventional or pulsed spray transfer in all welding positions
- Good for joining most commercially used aluminum alloy materials

Praxair offers Reliability

Along with Praxair's *StarGold Aluminum* blend, we can offer you:

- Consistent, dependable Praxair service and technical expertise
- The support of over a century of experience

As a leader in shielding gases technology, Praxair can help you:

- Find the right solution for your welding challenges
- Find ways to improve welding performance

The Praxair Difference

Along with Praxair's *StarGold Aluminum* blend, we can offer you:

- Application-based solutions with Praxair's *StarSolver*® Productivity Enhancement Program
- Praxair's exclusive *PROSTAR*® brand high-quality premium products



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