

Praxair's Starblend™ Mixing System

Consistent mixture integrity
from start to finish.

Starblend Filling Procedure

Maintaining gas mixture integrity with high-pressure cylinders is the key to achieving high-quality welds. Praxair developed the patented *Starblend* mixing system for two, three and four part argon-based blends containing CO₂. Cylinder to cylinder, Praxair provides an industry leading mixture consistency.

- Lowers residual cylinder losses
- Ends premature cylinder changeouts
- Helps eliminate costly rework

From full to empty, Praxair's *Starblend* mixing system helps ensure your shielding gas blends are thoroughly mixed. Cylinders filled using our technology deliver consistent mixture integrity from start to finish.



The cylinder is evacuated and a vacuum is pulled before filling.



The cylinder is partially filled with CO₂.



The cylinder is partially filled with Argon.



Filling turbulence ends, resulting in a perfect gas blend.

Maintaining Mixture Integrity

In an argon/carbon dioxide cylinder filled by conventional methods, CO₂ settles at the bottom of the cylinder resulting in an inconsistent mixture.

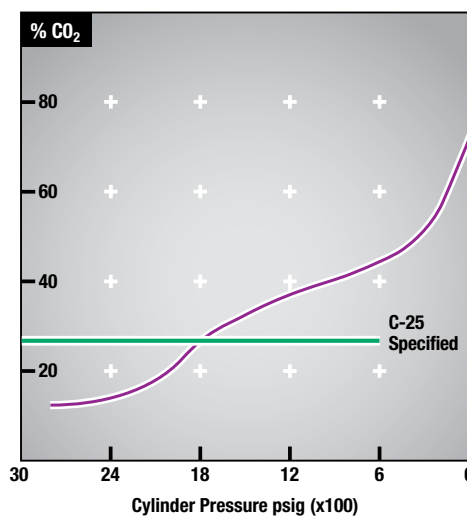
The Praxair *Starblend* mixing system was developed specifically for argon/carbon dioxide mixtures. A specially designed eductor "dip" tube with openings along its length creates turbulence in the cylinder during filling. This promotes superior gas mixing and produces a homogeneous blend without need to roll the cylinder.

In addition to uniform mixing, the eductor tube design permits withdrawal of the mixture from various locations within the cylinder, ensuring a consistent mix from beginning to end.

Patented eductor tube helps ensure shielding gas blends are thoroughly mixed.



Results obtained with Ar/CO₂ mixtures: conventional cylinder versus Praxair's patented eductor tube.



Conventional Mixture

Praxair's Uniform Mixture