

# GOLD GAS<sup>®</sup>

## PREMIUM SHIELDING GASES

**The Gold Standard in Welding Performance.**



**Seven precision blends that increase weld quality, lower production costs, and ultimately save you money. You'll find it with Airgas.**

It's the smallest cost in your welding applications. Yet the right shielding gas can have the greatest impact on your total cost. At Airgas, we understand how shielding gases influence the quality of your weld, the productivity of your labor and the profitability of your business. Our welding process specialists, including certified welding inspectors, will help you determine which of our seven Airgas Gold Gas<sup>®</sup> mixes best fits your needs. And with nearly 800 Airgas locations nationwide, we can produce and distribute your Gold Gas, whether you have one facility across the street or many facilities across the nation. It's a unique combination of the right product, the right expertise—right where you need it.

## Seven superior choices to improve welding performance.

Protecting the molten metal from atmospheric contamination is the basic function of welding shielding gases. Choosing the right Airgas Gold Gas® mixture can have a dramatic, direct impact on the finished weld.

All seven of our proprietary Gold Gas mixtures are precisely formulated for specific applications and optimum results. We have simplified the range of premium shielding gas mixes to meet the stringent requirements for all MIG, TIG, flux-cored and robotic applications. Airgas customers find that the right Gold Gas mixture results in a welding process with fewer rejects, less spatter and less overweld. These benefits mean better quality welds in less time, with less rework and less post-weld cleanup.

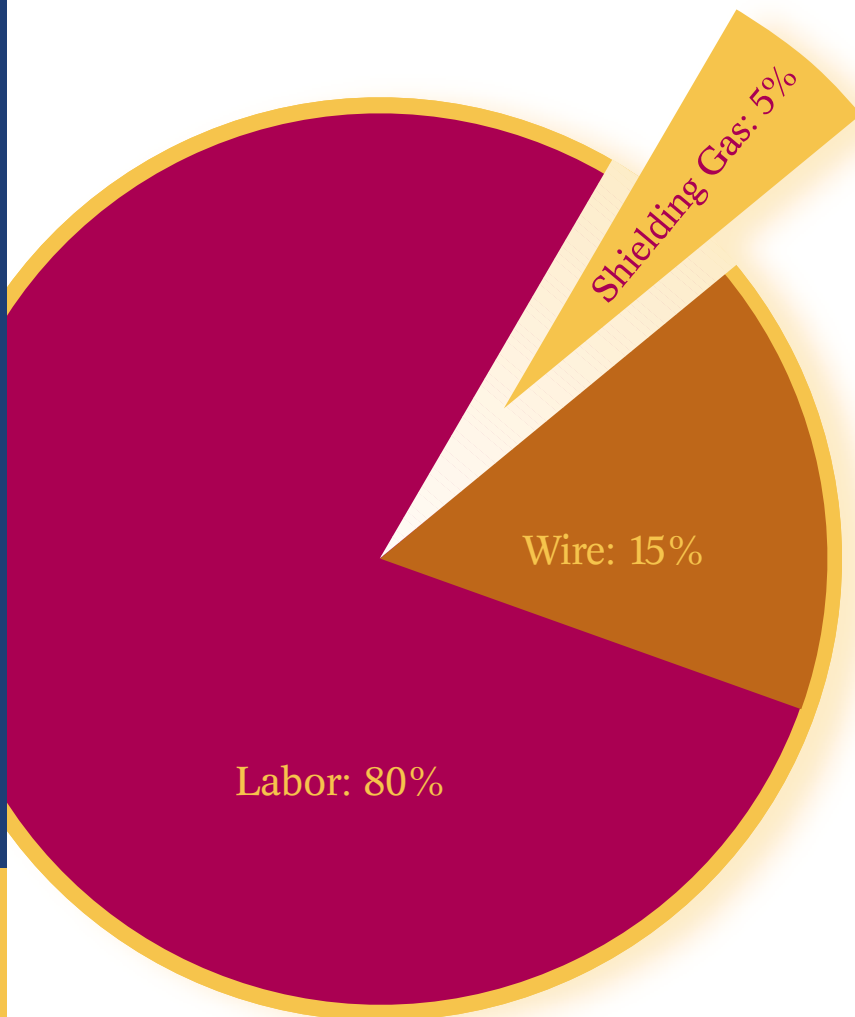
## Shielding gas: the smallest cost but a big factor in overall efficiency.

There are three major cost components of any welding job: labor, wire, and shielding gases, and by far, shielding gases are the smallest cost. Yet, picking the right shielding gas can greatly influence the major cost factor in welding—labor time—and can make a positive impact on your bottom line by improving welding productivity and quality.

A lower-cost, traditional shielding gas can lead to more dollars spent on labor and extra materials. It's a clear example of saving pennies and losing dollars.

Airgas Gold Gas products are backed by a team of application specialists who provide your business with a proven method of increasing weld quality and efficiency. And that means a positive impact on profitability. We also help you select the right mixture for your application.

Plus, Airgas can help you choose the right welding equipment, wire and other consumables, safety products and related MRO supplies to complete the job. As the largest U.S. distributor in the industry, we can provide comprehensive solutions to help you manage your supply chain more effectively.



## Welding Total Costs.

Although shielding gases represent the lowest cost in the welding process, they have a significant impact on your total cost. Airgas Gold Gas® shielding gases can help increase production and reduce your labor cost per weld.

## Selecting the Right Airgas Gold Gas® Premium Shielding Gas.

APPLICATIONS	SteelMIX® Extra	SteelMIX® 3	SteelMIX®	StainMIX™ 3	StainMIX™	StainMIX™ TIG	AluMIX™
<b>Metal Applications</b>	LOW ALLOY STEELS			STAINLESS AND HIGH ALLOY STEELS			ALUMINUM
<b>Application Notes</b>	Excellent three-part mix for all steel applications—solid, cored and metal-cored wires. Will outperform C25 and C10 on virtually all applications. Will outperform all gases on mill scale, painted, or oily material.	Low-energy, three-part mix ideal for thinner gauge steel. Will allow you to move into a spray transfer at a lower energy level. Leaves a very flat weld profile. Not recommended for thicker or dirty material.	A two-component mix that will spray transfer and out-perform traditional C25 while offering higher energy than C10 for better penetration in short arc transfer.	Excellent three-part mix for stainless steel. Much smoother arc characteristics than traditional Trimix and extremely versatile. Easier operation in all types of transfer with lower heat input and less spatter.	Good two-component pulse gas that is extremely versatile.	Excellent two-part gas mix for all 300-grade Austenetic stainless TIG applications. Allows for decreased heat input, cleaner weld and easier arc start and puddle formation than argon.	Excellent for all aluminum applications on 1/8" and thicker material. Much better than straight argon on oxidized aluminum. Faster puddle and much less ozone creation.
<b>Transfer Technique</b>	Short Arc/Spray/Pulse	Short Arc/Spray/Pulse	Short Arc/Spray	Short Arc/Spray/Pulse	Short Arc/Spray/Pulse	N/A	Short Arc/Spray/Pulse
<b>Spray Transfer—Thin</b>	Good	Best	Not recommended	Best	Good	N/A	Excellent
<b>Spray Transfer—Thick</b>	Best	Good	Better	Best	Good	N/A	Excellent
<b>Short Circuit Transfer</b>	Best	Good	Better	Best	Good	N/A	Excellent
<b>Pulse Transfer</b>	Best	Better	Good	Best	Better	N/A	Excellent

FEATURES	SteelMIX® Extra	SteelMIX® 3	SteelMIX®	StainMIX™ 3	StainMIX™	StainMIX™ TIG	AluMIX™
<b>Penetration</b>	Best	Good	Better	Best	Good	Excellent	Excellent
<b>Weld Travel Speed</b>	Best	Better	Good	Best	Good	Excellent	Excellent
<b>Wire Feed Speed</b>	Best	Better	Good	Best	Good	N/A	Excellent
<b>Ability to Weld Out of Position</b>	Best	Good	Better	Best	Good	Excellent	Excellent
<b>Spatter Reduction</b>	Best	Better	Good	Best	Good	N/A	Excellent
<b>Ozone Reduction</b>	Best	Better	Good	Best	Good	Excellent	Excellent
<b>Arc Stability</b>	Better	Best	Good	Best	Good	Excellent	Excellent
<b>Weld Profile</b>	Best	Good	Better	Best	Good	Excellent	Excellent
<b>Puddle Fluidity</b>	Best	Good	Better	Best	Good	Excellent	Excellent

You'll find it with us.

**Airgas**



## Discover the Airgas advantage for better productivity and greater cost-efficiency.

All it takes is a call to your local Airgas representative. Our welding process specialists and certified welding inspectors have years of experience with customers in all industry segments. That experience helps us better understand your business issues. And after conducting

a complete process and cost analysis of your welding operations, our experience enables us to recommend cost-effective solutions that will benefit your business for years to come.

**The right location. The right product. The right expertise.**

*For more information visit us  
on the web at [www.airgas.com](http://www.airgas.com),  
or call 800-255-2165.*

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