

**STARGON™ SS** GMAW ■ MIG ■ STAINLESS STEEL

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# Improve Productivity and Save Money.

## Argon-based blend enhances stainless steel welding.

Praxair's *Stargon* SS blend gives you an edge in today's competitive market for stainless steel welding. *Stargon* SS blend is a carefully controlled blend of argon, carbon dioxide and nitrogen that can help you achieve reduced costs, higher deposition rates, quality welds and improved weldability.

Even under the most challenging conditions, *Stargon* SS blend can help you produce high-quality welds with very light surface oxide and improved colour matching in all positions using short circuit, spray and pulsed spray transfer modes.




### Typical Applications

- Pulsed and spray welding of dump truck bodies.
- Joining thin gauge stainless in the food service industry.
- Duplex stainless steel pipe and other pipe alloys commonly used in the chemicals industry.
- Architectural applications where minimal distortion and appearance are of concern.
- Thin gauge applications where low base material distortion is required.

FEATURES	BENEFITS
Argon-based blend	<ul style="list-style-type: none"> <li>■ Readily available</li> <li>■ 30-50% lower flow rates</li> <li>■ 20% more product per cylinder</li> </ul>
Excellent chemistry control	<ul style="list-style-type: none"> <li>■ Maintained weld metal nitrogen levels for corrosion resistance</li> <li>■ Reduced weld metal carbon content for corrosion resistance</li> </ul>
Enhanced weldability	<ul style="list-style-type: none"> <li>■ Improved arc starts and good arc stability</li> <li>■ Less post weld cleanup</li> </ul>
Enhanced weld quality	<ul style="list-style-type: none"> <li>■ Improved penetration and bead shape</li> <li>■ Reduced heat input for less burn through and distortion</li> <li>■ Reduced heat affected zone</li> <li>■ Light surface oxide and surface appearance</li> <li>■ Enhanced colour matching</li> </ul>
Excellent performance in multiple processes	<ul style="list-style-type: none"> <li>■ Great weldability in short circuit mode</li> <li>■ Higher travel speeds and deposition rates in spray and pulsed spray modes</li> </ul>

*When compared to helium blends (see page 2)*

Engage with Praxair to put *Stargon* SS welding gas blend to work for you:

  
800.225.8247

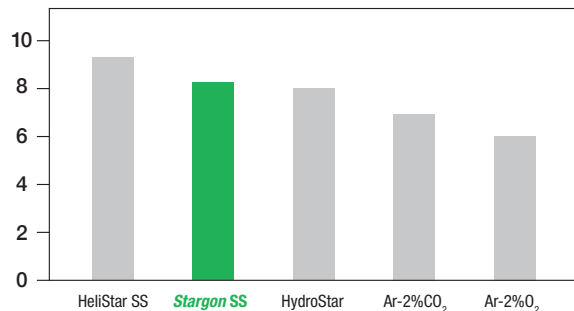
  
[praxair.ca/en/store-locator](http://praxair.ca/en/store-locator)

  
[praxair.ca](http://praxair.ca)

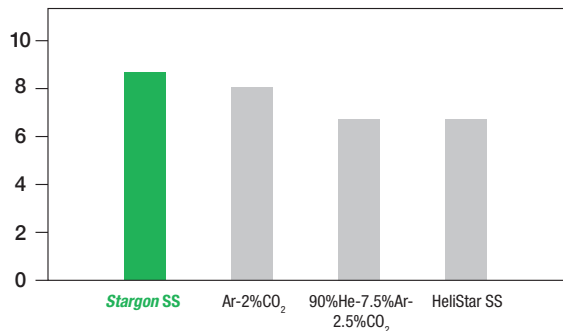
## Performance Characteristics

The charts below compare *Stargon SS* gas blend and other shielding gas blends using the MIG process and 308LSi filler wire in a range of operating conditions. To learn more about the best shielding gas options for your specific application, consult a Praxair representative.

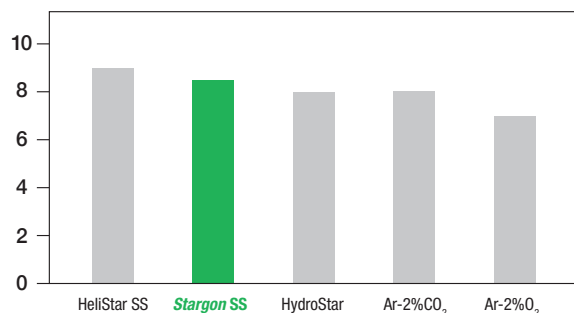
**Travel Speed - Pulsed Spray** (10 = most, 1 = least)



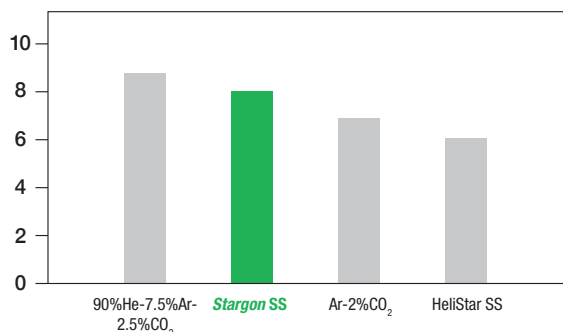
**Travel Speed - Short Arc** (10 = most, 1 = least)



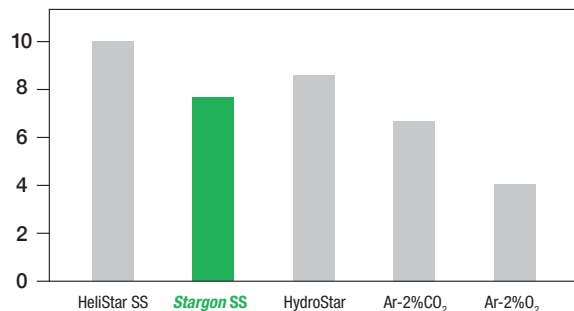
**Bead Shape - Pulsed Spray** (10 = most, 1 = least)



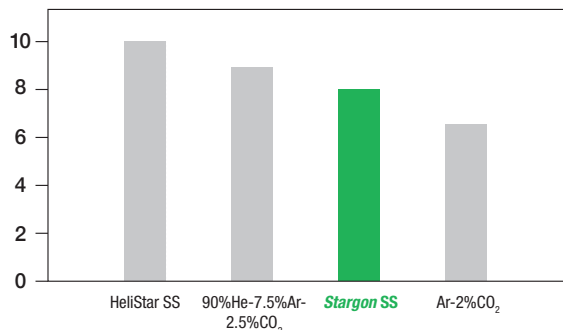
**Bead Shape - Short Arc** (10 = most, 1 = least)



**Colour Match - Pulsed Spray** (10 = most, 1 = least)



**Bead Colour - Short Arc** (10 = most, 1 = least)



### WELDING PARAMETERS SELECTION TABLE

Wire diameter	Wire feed speed (ipm)	Current level (amps)	Voltage (volts)*
0.035" (1.0 mm)	275-375	115-145 (short arc)	18-20
0.035" (1.0 mm)	250-350	90-120 (pulsed spray)	20-22
0.045" (1.2 mm)	200-275	150-195 (short arc)	19-21
0.045" (1.2 mm)	200-275	150-195 (pulsed spray)	21-23

\*Voltage level for 60 Hz power supply. Add 2-3 volts for 50 Hz models.