



# Shielding gas.

## Gases for all types of stainless steel.



### MAG welding.

#### CRONIGON 2

- General purpose mixture
- Smooth weld surface – improves corrosion resistance
- Low spatter levels – reduces clean up time

#### CRONIGON 2He38

- Good fusion and penetration – low reinforcement levels
- Low surface oxidation and improved corrosion resistance
- High welding speeds – reduces distortion

#### CRONIGON 2He55

- Fast welding speed – higher productivity
- Good penetration and fusion – lowers defect levels
- Good low temperature toughness and corrosion resistance

	Welding speed	Spatter control	Reduced surface oxide	Porosity control	Fusion	Penetration	Ease of use	Thickness range (mm)
CRONIGON 2	•	••	••	••	••	•	••	1 to 6
CRONIGON 2He38	••	•••	•••	•••	•••	•••	•••	3 to 15+
CRONIGON 2He55	•••	•••	•••	•••	•••	•••	••	1 to 12



### Flux and metal cored arc welding.

#### Carbon dioxide

- General purpose gas suitable for most wires
- Good fusion and penetration even in position
- Less stable arc can produce spatter – increases clean up time

#### CORGON 25

- Suitable for wires designed for mixed gases
- Less spatter – reduces clean up
- Lower particulate fume – improves workplace environment

#### CRONIGON 2

- Used with some metal cored wires
- Lower surface oxide – reduces clean up time
- Less spatter – reduces clean up

	Welding speed	Spatter control	Porosity control	Fusion	Penetration	Ease of use	Thickness range (mm)
Carbon dioxide	••	•	••	•••	•••	••	0 to >25
CORGON 25	••	••	•••	••	•••	•••	0 to >25
CRONIGON 2	••	••	••	••	••	•••	0 to >25



### TIG and plasma welding.

#### Argon 4.6

- Most commonly used gas
- Suitable for welding and purging all stainless steels
- Can have fusion problems on thicker materials

#### VARIGON H2

- Used on austenitic grades
- Fluid weld pool – increases welding speed
- Very clean weld surface – reduces need for cleaning

#### VARIGON H5

- Used for automatic welding of austenitic grades
- Good penetration and fusion – reduces defect risk
- Increases welding speed – improves productivity

#### VARIGON H10

- Primarily use plasma welding of austenitic grades
- Fluid weld pool – aids key hole formation
- High welding speed – helps control distortion

#### VARIGON N2.5

- Used for duplex grades
- Improved corrosion resistance
- Porosity issues with high N<sub>2</sub> wires

#### VARIGON He30

- Suitable for all stainless steels
- Good fusion reduces defect levels
- Higher welding speeds – improved productivity

	Types of stainless steel suitable	Welding speed	Porosity control	Fusion	Penetration	Ease of use	Thickness range (mm)
Argon 4.6	all	•	•	••	•	••	0 to 3
VARIGON H2	austenitic	••	•••	•••	••	•••	0 to 10
VARIGON H5	austenitic	•••	•••	•••	•••	••	1 to 10+
VARIGON H10	austenitic	•••	•••	•••	•••	•	6 to 10+
VARIGON N2.5	duplex	••	••	••	••	••	0 to 10
VARIGON He30	all	•••	•••	•••	•••	••	0 to 10

The greater the number of dots, the better the gas performs.  
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