THE LINDE GROUP

Linde



Shielding gas.

Gases for welding carbon and low-alloy steels.

MAG welding.

CORGON 10

- Good general purpose shielding gas
- Low spatter reduces
 cleaning cost
- Few slag islands reduces clean up
- Mostly used welding

clean up

• Low heat input -

reduces distortion

thinner materials

• Very stable arc gives

little spatter – reduces

CORGON 18

- Good penetration and sidewall fusion
- Low defect levels less rejects
- Produces more spatter and slag islands – increases clean up

CORGON 1252

- Fast welding speed high productivity
 Produces flat, smooth
- welds with low reinforcement

levels

 Good fusion and penetration – low defect

CORGON 10He30Primarily for automatic

- and robotic welding
 Fast welding speed –
- high production rates
- Fluid weld pool reduces porosity and reject rates

	Welding	Spatter	Reduced	Porosity				Thickness
	speed	control	surface oxide	control	Fusion	Penetration	Ease of use	range (mm)
ORGON 10	• •	••	••	••	•	•	••	1 to 8
ORGON 5S2	••	•••	•••	•	•	•	••	0.6 to 5
ORGON 18	•	•	•	•••	•••	•••	••	4 to 12+
ORGON 1252	•••	•••	••	•••	••	••	•••	2 to 12
ORGON 10He30	•••	•••	•••	•••	•••	•••	••	3 to 12+



Flux and metal cored arc welding.

Carbon dioxide

- Suitable for most wire brands
- Generally produces more spatter increases clean up times
- Particulate fume levels are higher increases hygienic burden

CORGON 10

- Used with metal cored wires
- Lower spatter reduces weld cleaning
- Less slag islands easier to clean

CORGON 25

- For flux cored wires developed for "mixed gases"
- Lower spatter levels reduces cleaning
- Lower particulate fume levels improves working environment

	Welding speed	Spatter control	Porosity control	Fusion	Penetration	Ease of use	
Carbon dioxide	• •	•	••	•••	•••	••	
CORGON 10	••	•••	••	••	••	•••	
CORGON 25	••	••	••	•••	•••	•••	



TIG and plasma welding.

Argon

- Most common gas
- Good arc initiation faster and easier to start welding
- Welding speeds can be low reduces productivity

VARIGON He30

- More fluid weld pool lower porosity
- Improved fusion and penetration improves quality
- Faster welding speeds than argon improves productivity

VARIGON He50

- Mostly used for automatic welding stations
- Fluid weld pool, best suited for welding thicker materials
- Good penetration and fusion reduces defects

	Welding speed	Ease of arc striking	Porosity control	Fusion	Penetration	Ease of use	Thickness range (mm)
Argon	•	•••	••	••	•	•••	0 to 5
VARIGON He30	•••	••	•••	•••	••	••	1.6 to 10+
VARIGON He50	•••	•	•••	•••	•••	•	3 to 10+

The greater the number of dots, the better the gas performs. CORGON[®] and VARIGON[®] are registered trademarks of The Linde Group.