

Shielding gases.

MISON[®] Ar

Ar + 0.03%NO An all-round choice for TIG welding that provides an easy-to-strike and stable arc. For the MIG welding of Aluminum, high-alloy stainless steels and Copper IKY and Nickel alloys. Stable process without spatter. Very good for the MIG brazing of galvanized steels.

Shielding gases EN ISO 14175-Z-Ar+NO-0.03

Corresponds to Group I1

MISON[®] H2

 $Ar + 2\%H_2 + 0.03\%NO$ For the TIG welding of austenitic stainless steels and Nickel alloys. Hydrogen provides a hotter, more constricted arc for better welding speed, better penetration and a smoother transition between weld and base metals. Hydrogen also reduces oxidation on the weld bead.

Shielding gases EN ISO 14175-Z-ArH+NO-2/0,03 Corresponds to Group R1

MISON[®] N2

PRAN

Ar + 1,8%N2 + 30%He + 0.03%NO For the TIG welding of duplex stainless steels and for austenitic stainless steel alloyed with Nitrogen. Nitrogen in the gas limits Nitrogen loss from the weld, providing better corrosion resistance and good mechanical properties. It can also be used for the MIG welding of super-austenitic and super-duplex steels.

Shielding gases EN ISO 14175-Z-ArHeN+NO-30/1,8/0,03 Corresponds to Group N2

MISON[®] 2

 $Ar + 2\%CO_2 + 0.03\%NO$ An all-round gas for the MAG welding of austenitic and ferric stainless steels, as well as for standard duplex steels. For short arc, spray arc and pulsed arc. Low spatter and surface slag. Flat weld beads.

Shielding gases	
EN ISO 14175-Z-ArC+NO-2/0,03	
Corresponds to Group M12	

MISON[®] 2He

Ar + 2%CO₂ + 30%He + 0.03%NO For the MAG welding of austenitic a ferric stainless steels and for standa duplex steels. For short arc, spray ar and pulsed arc. Low spatter and surface slag. Good penetration and high welding speed.

and ard rc	

IECTI

Shielding gases EN ISO 14175-Z-ArHeC+NO-30/2/0,03 Corresponds to Group M12

EK A



MISON[®] 25

MISON[®] He30



F

MISON[®] 8

$Ar + 8\%CO_2 + 0.03\% NO$

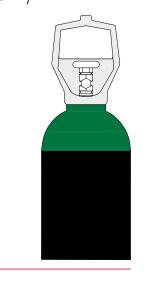
For the MAG welding of unalloyed and lowalloy steels with solid and metal-cored wires. It's mainly intended for spray arc and pulsed arc. Provides high welding speed, little spatter and surface slag, low weld reinforcement and efficient electrode consumption. It is the best choice for highproductivity welding with robots and other mechanized processes.

Shielding gases

EN ISO 14175-Z-ArC+NO-8/0,03 Corresponds to Group M20

Argon 4.6

Ar 4.6 (99.996% Ar) For applications demanding a high-purity shielding gas.



Shielding gases EN ISO 14175-I1-Ar

CORGON[®] 4

 $Ar + 2\% CO_2 + 3\% O_2 + 4\% He$

For MAG welding of unalloyed and lowllow steels. Gives a low-spatter, stable arc in spray-arc welding. Suitable also for MAG welding of alloyed steels in thickness up to 6 mm.

Ar + 18%CO₂ + 0.03% NO For the MAG welding of unalloyed and low-allow steel with solid and flux cored

wires. Suitable, with certain exceptions, for pulsed welding and for the welding of stainless steel with rutile flux cored wires. Low weld reinforcement and little patter in all modes of arc transfer. An all-round gas for a wide variety of applications.

Shielding gases EN ISO 14175-Z-ArC+NO-18/0,03 Corresponds to Group M21

CORGON[®] 8

$Ar + 8\% CO_{2}$

For the MAG welding of unalloyed and low-alloy steels with solid and metal-cored wires. It's mainly intended for spray arc and pulsed arc. Provides high welding speed, () IKXXI little spatter and surface slag, low weld reinforcement and efficient electrode consumption. It is the best choice for high-productivity welding with robots and other mechanized processes. When ozone reduction is essential, it is recommended to use MISON[®] 8 instead. Shielding gases EN ISO 14175-M20-Ar/C-88

For MAG welding of stainless steels. Provides

a good weldability in different modes of

arc transfer including also pulsed arc.

Weld pool flows out well. Suitable for

stainless ELC steels. Helium addition

increases penetration and welding

VARIGON[®] H7

CRONIGON® He

 $Ar + 30\% He + 1\% O_2$

speed.

$Ar + 25\%CO_2 + 0.03\%NO$

For the MAG welding of unalloyed and lowalloy steel with solid and flux cored wires and for the welding of stainless steel with rutile flux cored wires. Good fluidity of the weld pool in short-arc welding. Excellent resistance to impurities in spray -arc welding. Especially preferred in short-arc and spray-arc welding when there are tightness requirements set on the welds and when welding conditions are unfavorable.

IRX

Shielding gases EN ISO 14175-Z-ArC+NO-25/0,03 Corresponds to Group M21

CORGON[®] 18

Ar + 18% CO₂ For MAG welding of unalloyed and lowallow steels. An all-round gas for a wide variety of applications. Low weld reinforcement and little spatter in all modes of arc transfer. Suited for pulsed arc welding with certain limitations. When reduction of ozone is essential, it is recommended to use MISON[®] 18 instead.

Shielding gases EN ISO 14175-M21-ArC-18

CRONIGON[®] S2

$Ar + 2\% 0_2$

IR AN

Suited for spray arc and pulsed arc welding of stainless steels. No carbon pick-up, low spatter in spray arc. Relatively high oxide formation in welding beads, which FX increases pickling time etc.

Ar + 30%He + 0.03%NO For the TIG welding and MIG welding of some high-alloy stainless steels, Nickel alloys, Aluminum and Copper. Helium provides a very good fluidity of the weld pool, better penetration, higher welding speed and a reduced need for preheating.

Shielding gases EN ISO 14175-Z-ArHe+NO-30/0,03 Corresponds to Group I3

CORGON® 25

Ar + 25% CO₂ For MAG welding of unalloyed and low-

alloy steel. Good short-arc properties. Improves resistance to impurities in spray-arc welding. When reduction of ozone is essential, it is recommended to use MISON[®] 25 instead.

Shielding gases	
EN ISO 14175-M21-ArC-25	

VARIGON[®] He50

VARIGON[®] H35

Ar + 50% He

For TIG and MIG welding of aluminium and copper. Helium improves penetration and welding speed and reduces need for preheating. An excellent all-round gas **F** for aluminium and copper.

Ar 4.0 (99.990% Ar)

Gives an easy-to-strike, stable arc. Usable for TIG welding, and for MIG welding of aluminium and copper, and for plasma welding. Very applicable for root protection.



Shielding gases EN ISO 14175-I1-Ar

CORGON[®] 3

 $Ar + 5\% CO_2 + 5\% O_2$ For MAG welding of unalloyed and lowallow steels. Gives a low-sp arc in spray-arc welding. Su for MAG welding of alloyed corrosion resistance is not a

	allow steels. Gives a low-spatter, stable arc in spray-arc welding. Suitable also for MAG welding of alloyed steels when corrosion resistance is not a must.	
Shielding gases	Shielding gases	
EN ISO 14175-M23-ArCO-5/5	EN ISO 14175-M23-ArCO-5/5	

VARIGON[®] He70

VARIGON[®] NH

Ar + 70% He

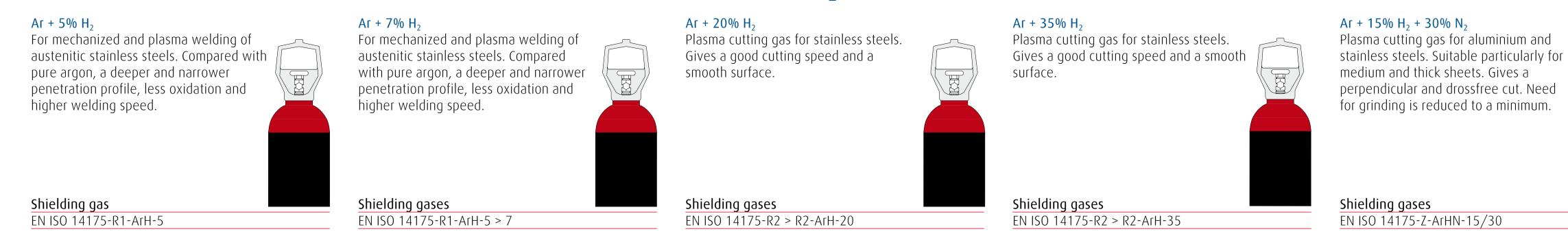
For TIG and MIG welding of aluminium and copper. Helium content serves to improve penetration and welding speed.





Shielding gases	Shielding gases	Shielding gases	Shielding gases	Shielding gases
EN ISO 14175-M14-ArCOHe-2/3/4	EN ISO 14175-M13-ArHeO-30/1	EN ISO 14175-M13-ArO-2	EN ISO 14175-I3-ArHe-50	EN ISO 14175-I3-ArHe-70

VARIGON[®] H5



VARIGON[®] H₂0

FORMIER 10

 $N_2 + 10\% H_2$ Suitable for root protection with austenitic steels but not with ferritic and martensitic steels due to risk of embrittlement caused by hydrogen. To be handled with special caution due to flammability of the gas mixture.

Shielding gases EN ISO 14175-N5-NH-10

Carbon dioxide

 $CO_2 2.7 (99.7 \% CO_2)$ For MAG welding of unalloyed and lowalloy steels. May give an unstable arc with spatter and an oxidized high weld reinforcement. Generates plenty of fume emissions. Relatively resistant to impurities, draughts and leakage in the gas distribution system.

Shielding gases

EN ISO 14175-C1

