Technical data sheet 011121MBA	Cored welding wire # CHROMECORE M 13 1-G	Welding Alloys

CLASSIFICATION

EN ISO 17633-A: T Z 13 1 M M12 1
EN 14700: T Fe7
Equivalent material number: 1.4018

DESCRIPTION

- Metal cored stainless steel wire for gas shielded metal arc welding
- 13% Cr- martensitic deposit
- Deoxidant additions optimize toughness, ductility and resistance to weld cracks

APPLICATIONS

- Surfacing on dealing faces of water, steam and gas valves
- Joining matching 13% Cr stainless steel wrought or cast grades

Examples of materials to be welded:

Material number	EN symbol	AISI/UNS	UNS
1.4000	X6Cr13	410S	S41008
1.4001	X7Cr14	429	S42900
1.4002	X6CrAl13	405	S40500
1.4006	X12Cr13	410	S41000
1.4008	G-X8Cr14	CA15	J91150
1.4024	X15Cr13	401	S41000
1.4021	X20Cr13	420	S42000

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si	Cr	Ni	Mo	S	P
0.05	0.8	0.5	12.0	1.4	0.5	0.01	0.01

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (with 98% Ar – 2% CO_2 shielding)

	Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
PWHT 10 hours at 685°C	650	450	15	+20°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (with 98% Ar – 2% CO_2 shielding)

	Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
PWHT 10 hours at 685°C	690	530	22	+20°C: 60

SHIELDING GAS

EN ISO 14175: M12 (Ar + 0.5 % < CO_2 ≤ 2.5)
Other shielding gases are possible: M12 with helium for increased impact toughness or M21 (Ar + 15 - 25% CO_2) / M20 (Ar + 5 - ≤ 15% CO_2) for maximum penetration

OPERATING CONDITIONS

Current type	Gas flow rate [l/min]	Stick-out [mm]	Current [A]	Voltage [V]	Recovery
DC+ or pulsed	15 - 20	10 - 20	120 - 360	16 - 36	98 %

WELDING POSITIONS

EN ISO 6947: PA, PB.
ASME IX: 1G, 1F, 2F.
CHROMECORE M 13 1-G is primarily used in the flat and horizontal-vertical positions. However, welds in other positions are also possible by using the pulsed arc technique.

PACKAGING

Diameter	1.2 mm – 1.6 mm
Spool type	EN ISO 544: BS300
Weight	15 kg

Other packaging: please consult us