

MG 3

Gas Metal Arc (MAG) Welding Wire - Non Alloyed Steels

Standards	
AWS/ASME SFA - 5.18	ER70S-6
EN ISO 14341 - A	G 46 4 M21 4Si1
EN ISO 14341 - A	G 46 4 C1 4Si1
TS EN ISO 14341 - A	G 46 4 M21 4Si1
TS EN ISO 14341 - A	G 46 4 C1 4Si1
DIN M. No.	1.5130

Properties and Applications

Unalloyed wire electrode for GMA (MIG/MAG) welding of general structural steels, pipes and cast steels by using CO₂ or mixed shielding gases can be used depending on thickness of the base metal. Generally used in steel construction, machine, tank, boiler production. Preheating is required, depending on the plate thickness and carbon equivalent of the base metal. A thin and homogeneous copper coating increases electrical conductivity and protects the wire from rusting.

Approvals & Certificates		
DNV-GL CE	HAKC TSE	TUV DB
Materials		
Width	DIN	
S185 - P355T1	St 33 - St 52.0	
S235JR - S355J0	St 37.2 - St 52.3	
P235TR2 - P355T2	St 37.4 - St 52.4	
P235G1TH - P265G1TH	St 35.8 - St 45.8	
P235GH, P265GH	H I, H II	
P295GH, P355GH	17Mn4, 19Mn5	
L210 - L360NB	StE 210.7 - StE 360.7	
S255N - S380N	StE 255 - StE 380	
GE 200 - GE 240	GS-38, GS-45	
-	A, B, D, E	

Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn
Welding Wire	0.07	0.95	1.70

Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	C1	460	570	30	-40°C → 70
As welded	M21	480	580	27	-30°C → 95

* Chemical composition and mechanical properties are valid when using shielding gas EN ISO 14175 - M21 (Ar + %20 CO₂) .

Application Information

Welding Positions

PA

PB

PC

PD

PE

PF

PG

Polarity:

Protection Gas:
M20 M24 M26 M21 C1

Welding Parameters & Efficiency

Diameter (mm)
0.60
0.80
1.00
1.20
1.60
2.40
3.20

Packaging Information

Product Code	Diameter (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
21003ANAM2	0.60	12 kg	12.60	1	12.60	Wire Basket Spool (K300)
21003B1GM2	0.80	250 kg	257.50	1	257.50	Fiber Drum
21003B1HM2	0.80	250 kg	257.50	1	257.50	Fiber Drum

21003BAKM2	0.80	1 kg	1.10	10	10.70	Plastic Spool (D100)
21003BBAM2	0.80	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003BBBM2	0.80	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003BHAM2	0.80	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003BHBM2	0.80	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003BJAM2	0.80	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003BJHM2	0.80	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003BNAM2	0.80	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003BNHM2	0.80	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003D0GM2	1.00	60 kg	64.00	1	64.00	Fiber Drum
21003D1GM2	1.00	250 kg	257.50	1	257.50	Fiber Drum
21003D1HM2	1.00	250 kg	257.50	1	257.50	Fiber Drum
21003DBAM2	1.00	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003DBBM2	1.00	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003DHAM2	1.00	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003DHBM2	1.00	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003DJAM2	1.00	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003DJHM2	1.00	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003DNAM2	1.00	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003DNHM2	1.00	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003E1GM2	1.20	250 kg	257.50	1	257.50	Fiber Drum
21003E1HM2	1.20	250 kg	257.50	1	257.50	Fiber Drum
21003EBAM2	1.20	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003EBBM2	1.20	5 kg	5.30	1	5.30	Plastic Spool (D200)
21003EHAM2	1.20	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003EHHM2	1.20	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003EJAM2	1.20	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003EJHM2	1.20	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003ENAM2	1.20	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003ENHM2	1.20	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003ERAM2	1.20	18 kg	18.70	1	18.70	Wire Basket Spool (K300MS)
21003G1GM2	1.60	250 kg	257.50	1	257.50	Fiber Drum
21003GHAM2	1.60	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003GHBM2	1.60	15 kg	15.80	1	15.80	Plastic Spool (D300)
21003GJAM2	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003GJHM2	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21003GNAM2	1.60	15 kg	15.20	1	15.20	Wire Basket Spool (K300)
21003GRAM2	1.60	18 kg	18.70	1	18.70	Wire Basket Spool (K300MS)
21003I2GM2	2.40	400 kg	416.00	1	416.00	Fiber Drum
21003L2GM2	3.20	400 kg	416.00	1	416.00	Fiber Drum
21003L3GM2	3.20	600 kg	616.00	1	616.00	Fiber Drum

Storage & Re-Drying Information

Shouldn't be exposed to high statical load and impact.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.