

## MG 2

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

### Standards

AWS/ASME SFA - 5.18	ER70S-6
EN ISO 14341 - A	G 42 4 M21 G 3Si1
EN ISO 14341 - A	G 42 3 C1 G 3Si1
TS EN ISO 14341 - A	G 42 3 C1 G 3Si1
TS EN ISO 14341 - A	G 42 4 M21 G 3Si1
DIN M. No.	1.5125

### Approvals & Certificates

TL	DB	HAKC
RINA	DNV-GL	TUV
CWB	TSE	ABS
CE		

### Materials

Width	DIN
S185 - P355T1	St 33 - St 52.0
S235JR - S355J0	St 37.2 - St 52.3
S235JR - S355J2	
P235G1TH - P265G1TH	St 35.8 - St 45.8
P235GH, P265GH	H I, H II
P235TR2 - P355T2	St 37.4 - St 52.4
E295	St 50.2
L210 - L360NB	StE 210.7 - StE 360.7
S255N -S380N	StE 255 - StE 380
GE 200 - GE 240	GS-38, GS-45
P295GH, P355GH	17Mn4, 19Mn5
FL E70T-5/30	A, B, D, E

### Properties and Applications

Unalloyed wire electrode for GMA (MIG/MAG) welding of general structural steels, pipe steels, and cast steels using CO<sub>2</sub> or mixed shielding gases, depending on thickness of the base metal. Generally used in steel construction, shipbuilding, machine, tank, boiler production, automotive industry. 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.



### Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn
Welding Wire	0.07	0.90	1.45

### Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	C1	430	540	29	-30°C → 70
As welded	M21	460	560	27	-40°C → 75

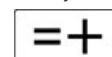
\* Chemical composition and mechanical properties are valid when using shielding gas EN ISO 14175 - C1 (%100 CO<sub>2</sub>) ve M21 (Ar + %20 CO<sub>2</sub>).

### Application Information

#### Welding Positions



#### Polarity:



#### Protection Gas:

M20 M24 M26 M21 C1

#### Welding Parameters & Efficiency

Diameter (mm)	Current (A)
0.60	30-120
0.80	50-180

0.90	
1.00	80-230
1.20	120-280
1.40	
1.60	200-400
2.00	
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
21002AAKM2	0.60	1 KG	1.10	14	15.70	Plastic Spool (D100)
21002ABAM2	0.60	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002ABBM2	0.60	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002AHAM2	0.60	12 KG	12.60	1	12.60	Plastic Spool (D300)
21002AJAM2	0.60	12 KG	12.70	1	12.70	Wire Basket Spool (K300MS)
21002B0GM2	0.80	60 KG	64.00	1	64.00	Fiber Drum
21002B1GM2	0.80	250 KG	257.50	1	257.50	Fiber Drum
21002B1HM2	0.80	250 KG	257.50	1	257.50	Fiber Drum
21002BAKM2	0.80	1 KG	1.10	14	15.70	Plastic Spool (D100)
21002BBAM2	0.80	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002BBBM2	0.80	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002BFAM2	0.80	15 KG	15.70	1	15.70	Plastic Spool (D270)
21002BHAM2	0.80	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002BHBM2	0.80	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002BJAM2	0.80	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002BJHM2	0.80	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002BKAM2	0.80	15 KG	15.20	1	15.20	Wire Basket Spool (K300MS)
21002BNAM2	0.80	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002BNHM2	0.80	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002BVAM2	0.80	15 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002BVAM5	0.80	0 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002C1GM2	0.90	250 KG	257.50	1	257.50	Fiber Drum
21002C1HM2	0.90	250 KG	257.50	1	257.50	Fiber Drum
21002CALM2	0.90	1 KG	1.10	14	15.70	Plastic Spool (D100)
21002CBBM2	0.90	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002CFAM2	0.90	15 KG	15.70	1	15.70	Plastic Spool (D270)
21002CHAM2	0.90	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002CHHM2	0.90	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002CJAM2	0.90	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002CSAM2	0.90	20 KG	20.90	1	20.90	Plastic Spool (D300)
21002CVAM2	0.90	0 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002D0GM2	1.00	60 KG	64.00	1	64.00	Fiber Drum
21002D1GM2	1.00	250 KG	257.50	1	257.50	Fiber Drum
21002D1HM2	1.00	250 KG	257.50	1	257.50	Fiber Drum
21002D2GM2	1.00	400 KG	416.00	1	416.00	Fiber Drum
21002DAKM2	1.00	1 KG	1.10	14	15.70	Plastic Spool (D100)
21002DBAM2	1.00	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002DBBM2	1.00	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002DFAM2	1.00	15 KG	15.70	1	15.70	Plastic Spool (D270)
21002DHAM2	1.00	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002DHHM2	1.00	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002DJAM2	1.00	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002DJHM2	1.00	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002DKAM2	1.00	15 KG	15.20	1	15.20	Wire Basket Spool (K300MS)

21002DNAM2	1.00	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002DNHM2	1.00	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002DVAM2	1.00	15 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002DVAM5	1.00	0 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002E0GM2	1.20	60 KG	64.00	1	64.00	Fiber Drum
21002E1GM2	1.20	250 KG	257.50	1	257.50	Fiber Drum
21002E1HM2	1.20	250 KG	257.50	1	257.50	Fiber Drum
21002E2GM2	1.20	400 KG	416.00	1	416.00	Fiber Drum
21002EAKM2	1.20	1 KG	1.10	14	15.70	Plastic Spool (D100)
21002EBAM2	1.20	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002EBBM2	1.20	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002EFAM2	1.20	15 KG	15.70	1	15.70	Plastic Spool (D270)
21002EHAM2	1.20	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002EHHM2	1.20	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002EJAM2	1.20	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002EJHM2	1.20	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002EKAM2	1.20	15 KG	15.20	1	15.20	Wire Basket Spool (K300MS)
21002ENAM2	1.20	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002ENHM2	1.20	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002ESAM2	1.20	20 KG	20.90	1	20.90	Plastic Spool (D300)
21002EVAM2	1.20	15 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002EVAM5	1.20	0 KG	0.00	1	0.00	Wire Basket Spool (K300MS)
21002F1GM2	1.40	250 KG	257.50	1	257.50	Fiber Drum
21002F1HM2	1.40	250 KG	257.50	1	257.50	Fiber Drum
21002FJAM2	1.40	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002G0GM2	1.60	60 KG	64.00	1	64.00	Fiber Drum
21002G1GM2	1.60	250 KG	257.50	1	257.50	Fiber Drum
21002G1HM2	1.60	250 KG	257.50	1	257.50	Fiber Drum
21002G2GM2	1.60	400 KG	416.00	1	416.00	Fiber Drum
21002GBAM2	1.60	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002GBBM2	1.60	5 KG	5.30	1	5.30	Plastic Spool (D200)
21002GFAM2	1.60	15 KG	15.70	1	15.70	Plastic Spool (D270)
21002GHAM2	1.60	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002GHHM2	1.60	15 KG	15.80	1	15.80	Plastic Spool (D300)
21002GJAM2	1.60	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002GJHM2	1.60	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002GNAM2	1.60	15 KG	15.20	1	15.20	Wire Basket Spool (K300)
21002HJAM2	2.00	15 KG	15.70	1	15.70	Wire Basket Spool (K300MS)
21002L2GM2	3.20	400 KG	416.00	1	416.00	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.