

# MG 102

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

Standards	
AWS/ASME SFA - 5.18	ER70S-2
EN ISO 14341 - A	G 42 3 C1 2Ti
EN ISO 14341 - A	G 42 3 M21 2Ti
TS EN ISO 14341 - A	G 42 3 C1 2Ti
TS EN ISO 14341 - A	G 42 3 M21 2Ti

**Properties and Applications**

Micro-alloyed wire electrode for GMA (MIG/MAG) welding of unalloyed and low-alloy steels. Characterized by a reduced slag formation and smooth welding deposit. Due to its Al and Ti micro-alloy content, particularly suitable for single pass welding of galvanized, pre-painted, rusty and dirty steels, welding low alloy steels in pipe-lines, boilers and tank production. Suitable also welding in thin metal plates and repair welds. CO<sub>2</sub> or mixed shielding gases can be used depending on the thickness of the base metal. A thin and homogeneous copper coating increases electrical conductivity and protects the wires from rusting.

Approvals & Certificates	
CWB	
Materials	
Width	DIN
S185 - P275T1	St 33 - St 44.0
P235G1TH - P265G1TH	St 35.8 - St 45.8
P235GH, P265GH	H I, H II
-	A, B, D, E

**Typical Chemical Features of the Welding Wire**

Type of Analysis	C	Si	Mn	Ti	Al	Zr
Welding Wire	0.04	0,50	1.10	0.13	0.10	0.08

**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	460	530	25	-30°C → 60

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

**Application Information**

**Welding Positions**

PA PB PC PD PE PF PG

**Polarity:**

**Protection Gas:**  
M20 M21 C1

**Welding Parameters & Efficiency**

Diameter (mm)
0.60
0.80
0.90
1.00
1.20
1.60

**Packaging Information**

Product Code	Diameter (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
21000ABAM2	0.60	5 kg	5.30	1	5.30	Plastic Spool (D200)
21000AJAM2	0.60	12 kg	12.70	1	12.70	Wire Basket Spool (K300MS)
21000BOGM2	0.80	60 kg	64.00	1	64.00	Fiber Drum
21000B1GM2	0.80	250 kg	257.50	1	257.50	Fiber Drum
21000BBAM2	0.80	5 kg	5.30	1	5.30	Plastic Spool (D200)

21000BJAM2	0.80	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21000CSAM2	0.90	20 kg	20.90	1	20.90	Plastic Spool (D300)
21000D1HM2	1.00	250 kg	257.50	1	257.50	Fiber Drum
21000DBAM2	1.00	5 kg	5.30	1	5.30	Plastic Spool (D200)
21000DJAM2	1.00	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21000E0GM2	1.20	60 kg	64.00	1	64.00	Fiber Drum
21000E1GM2	1.20	250 kg	257.50	1	257.50	Fiber Drum
21000EJAM2	1.20	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21000GJAM2	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)

#### Storage & Re-Drying Information

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