

MG 20

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

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

Properties and Applications

Non-copper coated and unalloyed GMA (MIG/MAG) wire electrode, especially produced for welding without spatter or very low level of spatter. Suitable for welding of general structural steels, boiler steels, pipe steels and cast steels. Due to its special coating provides stable arc and no spatter especially with mixed shielding gases which can be used depending on the thickness. Generally preferred in robotic applications, due to its high welding performance without spatter and cleaning needs. Also provides cost advantages in cleaning after welding, torch spare part consumptions like, contact tip, spiral, driving wheel, anti-spatter spray. Due to these advantages preferably used in automotive, machine and steel furniture production.

Approvals & Certificates	
CE	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
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
-	A, B, D, E

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 ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)	
As welded	C1	430	540	29	-20°C → 90	-30°C → 70
As welded	M21	460	560	27	-30°C → 95	-40°C → 75

* Chemical composition and mechanical properties are valid when using shielding gas.

Application Information

Welding Positions

PA PB PC PD PE PF PG

Polarity:

Protection Gas:
M20 M24 M26 M21 C1

Welding Parameters & Efficiency

Diameter (mm)	Current (A)
0.80	50-180
1.00	
1.20	
1.40	
1.60	200-400

Packaging Information

Product Code	Diameter (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
21020B1GM2	0.80	250 kg	257.50	1	257.50	Fiber Drum
21020BBAM2	0.80	5 kg	5.30	1	5.30	Plastic Spool (D200)
21020BJAM2	0.80	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21020D0GM2	1.00	60 kg	64.00	1	64.00	Fiber Drum

21020D1GM2	1.00	250 kg	257.50	1	257.50	Fiber Drum
21020DJAM2	1.00	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21020E0GM2	1.20	60 kg	64.00	1	64.00	Fiber Drum
21020E1GM2	1.20	250 kg	257.50	1	257.50	Fiber Drum
21020EBAM2	1.20	5 kg	5.30	1	5.30	Plastic Spool (D200)
21020EHAM2	1.20	15 kg	15.80	1	15.80	Plastic Spool (D300)
21020EJAM2	1.20	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)
21020F1GM2	1.40	250 kg	257.50	1	257.50	Fiber Drum
21020G1GM2	1.60	250 kg	257.50	1	257.50	Fiber Drum
21020GJAM2	1.60	15 kg	15.70	1	15.70	Wire Basket Spool (K300MS)

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.