

## MIG/MAG Welding Wire for High Strength and Low Alloyed Steels

### Classification

EN ISO 21952-A : G MoSi  
 ISO 14341-A : G2Mo  
 AWS A5.28 : ER70S-A1 (ER80S-G\*)

(\* ) Nearest classification

### General Description

It is a low alloyed GMA welding wire, used for the welding creep resistant 0.5 % Mo steels and fine grained steels. It gives a weld metal that is used in operating temperatures between – 40°C and 500°C. It is used in the welding of steel construction applications, boiler and pressure vessels, gas pipes and turbin rotors.

**Industry:** Ship building, heavy machinery, petro-chemical, power generation, metal fabrication industry.

### Chemical Composition (w%), Wire

C	Si	Mn	Mo	Cr	Cu
0.085 - 0.09	0.60 - 0.70	1.15 - 1.20	0.50	< 0.15	< 0.25

### Mechanical Properties, Typical, All Weld Metal

Yield Strength : 530 N/mm<sup>2</sup>  
 Tensile Strength : 640 N/mm<sup>2</sup>  
 Elongation (L=5d) : 27 %  
 Impact (ISO-V) : 150 J (+20°C)  
 90 J (–20°C)

### Shielding Gases (ISO 14175 / EN 439)

MIG : M21 - Ar + 5-25% CO<sub>2</sub>  
 C1 - CO<sub>2</sub> (100%)  
 Current Type and Polarity : DC (+)

### Materials to be Welded

	DIN	EN
<b>Fine Grained Steels</b>	StE 255 - StE 460 ; WStE 255 - WStE 460 -	S255N - S460N ; P255NH - P460NH S275ML ; S355M - S420M
<b>Pipe Materials</b>	StE 320.7 - StE 415.7 StE 360.7 TM - StE 480.7 TM X52, X56, X60, X65 (API 5LX) -	L320 - L415NB L360MB - L485MB -
<b>Boiler and Pressure Vessel Steels</b>	15Mo3, 17Mn4, 19Mn6 22Mo4, 20MnMoNi55 -	16Mo3, P295GH, P310GH -
<b>Elevated Temperature Steels</b>	St 35.8 - St 45.8	P235G1TH - P255G1TH
<b>Cast Steels</b>	GS-45, GS-52, GS-60 -	GE240, GE260, GE300 G20Mo5
<b>Creep Resistant Steels</b>	17MnMoV6-4, 15NiCuMoNb5 -	- 20MnMoNi4-5

### Packing and Diameter Informations

Diameter	0.8	1.0	1.2	1.6	2.0	2.4	3.2	Spool Weight
MIG/MAG Wire	X	X	X	-	-	-	-	15 kg