



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

### Classification

EN ISO 16834 : G Mn3Ni1CrMo  
AWS A5.28 : ER110S-G

### General Description

It is a low alloyed GMA welding wire, used for the welding fine-grained and high strength steels with a yield strength up to 690 N/mm<sup>2</sup>. It gives a weld metal that is used in operating temperatures down to -40°C with a high toughness value. Especially used for low temperature applications that are manufactured from Ni-Cr-Mo steels.

**Industry:** Ship building, petro-chemical, construction, crane and bridge fabrication industry.

### Chemical Composition (w%), Typical, Wire

C	Si	Mn	Ni	Cr	Mo	V	Cu
0.09	0.60	1.65	1.50	0.30	0.30	0.10	< 0.25

### Mechanical Properties, Typical, All Weld Metal

Yield Strength : 770 N/mm<sup>2</sup>  
Tensile Strength : 880 N/mm<sup>2</sup>  
Elongation (L=5d) : 21 %  
Impact (ISO-V) : 180 J (+20°C)  
70 J (-50°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 420 - StE 500	S420N ; S500N
	TStE 420	S420NL
	WStE 420 - WStE 500	P420NH - P500NH
	TStE 690 V	S690QL
	-	S690Q
	StE 690.7 TM	L690M
<b>Heat Treated Fine Grained Structural Steels</b>	N-A-XTRA 56, N-A-XTRA 63, N-A-XTRA 70	S550QL1, S620QL1, S690QL1
	T1, T1A, T1B	-
	HSB 77V, Weldox 700, BH70V	-
	HY 90, HY 100, Welten 80, Bisalloy 80	-
<b>Pipe Materials</b>	X65, X70, X80 (API 5LX)	-
	-	L485MB, L555MB

### 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	-	-	-	-	15 kg