ER 110 SG

Standards

TS EN ISO 16834-A	: G 69 4 M Mn 4 Ni2 Cr Mo
EN ISO 16834-A	: G 69 4 M Mn 4 Ni2 Cr Mo
AWS A5.28	: ER 110S-G

Chemical Composition of Welding Wire % (Typical)

C	Si	Mn	Mo	Ni	Cr	Cu
0.09	0.75	1.70	0.50	2.0	0.30	0.20

Mechanical Properties

Yield Strength (N/mm^2)	Tensile Strength (N/mm^2)	Impact Strength (ISO-V/-30°C)	Elongation ($(L_o=5d_o)$ (%))
min. 690	min. 760	min. 47 J	19

Typical Base Material Grades

- High strength structural steels and fine grained steels
- S690Q, L690M, N-A-XTRA 70, USS-T1, BH 70 V, HY 100, ASTM A514 Gr.F

Features and Applications

- ER 110 SG is low alloyed and high strength GMAW wire and GTAW rods
- It is used for joining of the high strength low alloy steels and the fine grained constructional steels with minimum yield strength of 690 N/mm^2, especially Hardox and Weldox sheets
- Boilers, pressure vessels, pipelines, structure steels are the other application areas
- Weld metal has high impact and toughness at low temperatures
- Pre-heat can be according to the base material
- Shielding gases - MAG: (Ar+% 15-25 CO_2) / TIG: (Ar)

Welding Positions

Current Type

MAG D.C.(+) / TIG D.C.(-)

Operating Data

Product Code		Diameter x Length (mm) / (inch)		Weight (Kg)	Package Type
BS 300	D 300				BS/D/300
3010203706	3010203729	0.8	0.030”	15	D 200
3010203708	3010203731	1.0	0.040”	15	D 100
3010203710	3010203733	1.2	0.047”	15	EGO PACK
3010203711	3010203735	1.6 (0,6,0.9, 1.14,1.4)	0.062”	15 (1,5,15,18,50,250,400)	BIG PACK
3010300470		1,60 x 1000	1/16 x 39”	5	Carton Box
3010300471		2,00 x 1000	5/64 x 39”	5	
3010300472		2,40 x 1000	3/32 x 39”	5	

Approvals: CE, SEPRO