BÖHLER NiCrMo 2.5-IG

Solid wire, low-alloyed, high strength

Classifications			
EN ISO 16834-A	**EN ISO 16834-B**	**AWS A5.28**	**AWS A5.28M**
G 69 6 M21 Mn3Ni2.5CrMo	G 76A 6 M21 N5M3	ER110S-G	ER76S-G
G 69 4 C1 Mn3Ni2.5CrMo	G 76A 4 C1 N5M3		

Characteristics and typical fields of application

GMAW Wire for joint welding of high- strength fine- grained constructional steels with stringent requirement on low-temperature toughness down to -60°C depending on the shielding gas. e.g in marine engineering for the manufacture of LPG tankers.

Base materials

Quenched and tempered fine-grained steels with high requirements for low-temperature toughness

S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1

ASTM A 514 Gr. F, H, Q ; A 709 Gr. 100 Type B, E, F, H, Q ; A 709 Gr. HPS 100W

Typical analysis of solid wire (wt.-%)

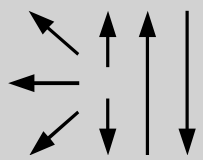
	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.08	0.6	1.4	0.3	2.5	0.4

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J		
	MPa	MPa	%	+20°C	-40°C	-60°C
u	**810** (≥ 690)	**910** (770 – 960)	**18** (≥17)	**120**		≥ 47
u2	**780** (≥ 690)	**890** (770 – 960)	**17** (≥17)		≥ 47	

u untreated, as welded – shielding gas Ar + 15 – 25% CO_2
u2 untreated, as welded – shielding gas 100% CO_2

Operating data



Polarity:	Shielding gases:	ø (mm)
DC (+)	Argon + 15 – 25% CO_2	1.0
	100% CO_2	1.2

Preheating and interpass temperature as required by the base metal.

Approvals

DB (42.014.07), ABS (XYQ690X-5), BV (UP), DNV (5 Y69), GL (4Y69S), SEPROZ, CE