

Classifications

EN ISO 14341-A	EN ISO 14341-A	EN ISO 14341-B	AWS A5.28	AWS A5.28M
G3Ni1	G 42 5 M21 3Ni1	G 49A 5U M21 G0	ER80S-G	ER55S-G

Characteristics and typical fields of application

GMAW wire micro alloyed, designed for high quality automatic welding of pipelines. An optimum balanced alloying concept ensures good weld metal properties to fulfil the high requirements in the on-offshore pipeline industry.

The deposit is extremely crack resistant and the weld metal offers high impact values down to -50°C .

Base materials

API5L:	X 42 - X 60
EN 10208-2:	L290MB – L415MB

Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Ni	Ti
wt-%	0.06	0.7	1.5	0.9	+

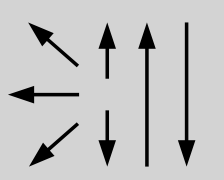
Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V KV J	
	MPa	MPa	%	+20 °C	-50 °C
u	500 (≥ 420)	590 ($\geq 550-640$)	24 (≥ 20)	150	80 (≥ 47)
u1	470	560	25	110	45

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

u1 untreated, as welded shielding gas: 100 % CO_2

Operating data

	Polarity: DC (+)	Shielding gases: Argon + 15 – 25 % CO_2 Argon + 0 – 5 % CO_2 + 3 – 10 % O_2 100 % CO_2	ø (mm)
			0.9
1.0			
1.2			

Preheating and interpass temperature as required by the base metal.

Approvals

DNV, (IV Y46 MS)