

Low alloy solid wire

Classification

AWS A5.28	:ER80S-Ni1
EN 1668	:W 42 6 W3Ni1
EN 440	:G 46 5 M G3Si1

General Description

Solid wire for welding fine grained steel and low alloyed nickel steels

High impact value at low temperature (-60°C)

Typical offshore applications

Stable arc and excellent feedability

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar 100%
GMAW	M21	Mixed gas Ar+ >5-25% CO ₂

Approvals

	GL	TÜV
GTAW	4Y42	+
GMAW		+

Chemical composition (w%), typical, all weld metal

C	Mn	Si	Ni
0.09	1.2	0.6	0.9

Mechanical properties, all weld metal

	Process	Shielding gas	Condition	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Impact (ISO), J
Typical values after welding	GTAW	I1	AW	480	560	24	-60°C
	GMAW	M21	AW	480	580	31	80

Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S275, S355
Ship plates	ASTM A131	Grade A, B, D, E, AH32 to EH36
Cast steel	EN10213-2	GP240R
Pipe material	EN 10208-1	L290 GA, L360 GA
	EN 10208-2	L290, L360, L415
	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1
	EN 10217-1	P275T2, P355N
Fine grained steel	EN 10113-2	S275, S355, S420
	EN 10113-3	S2274, S355, S420

Packaging, available sizes and identification

Process	Unit:	Sizes, mm					
		0.8	1.0	1.2	1.6	2.0	2.4
GTAW	2 and 5 kg tube				X	X	X
GMAW	15 kg spool B300	X	X	X			
	5 kg spool S200		X				

Other sizes and packaging on request

Identification Imprint: Revis®80S-Ni1

Tip colour:

Revis®80S-Ni1: rev.EN 20