Revishield® 71T8-Ni2

Self-shielded cored wire

Classification

AWS A5.29/A5.29M :E71T8-Ni2 (also meets: E81T8-Ni2)

General description

Self shielding: easiest equipment
Higher strength level, yield strength up to 450 N/mm
Excellent impact toughness at -40°C
CTOD tested, offshore constructions

Welding positions

ISO/ASME PA/1G PB/2F PC/2G PF/3G up PE/4G PF/5G up

Current type / Shielding gases

DC -

Approvals

ABS	GL	LR
3SA, 3YSAH10	3YSH10	3S, 3YSH10

Typical chemical composition of all weld metal, (w%)

C	Mn	Si	P	S	Al	Ni
0.07	0.26	0.06	0.004	0.002	0.88	2.44

Mechanical properties of all weld metal

		Shielding gas	Condition	Yield strength (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)	Impact (ISO), J		
							+20°C	-29°C	-40°C
Required	AWS A5.29			min 400	480-620	20		27	
Typical values after welding			AW	500	570	28		88	84

Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm) 2.0
Coils 14C	6.35	X

Identification Imprint: Revishield®71T8 Ni2

Revishield®71T8-Ni2: rev. EN 20

Suggestions for use

Off-shore oil equipment, piping, storage tanks
General plate fabrication including bridge construction on ships and barges
Circumferential groove welds for heavy wall, large diameter tubular construction

Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S185, S235, S275, S355
Ship plates	ASTM 131	Grade A, B, D, AH32 to EH36
Cast steel	EN 10213-3	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360, L415, L445
	EN 10208-2	L240, L290, L360
	API 5LX	X42, X46, X52, X60
	EN 10216-1/	P235T1, P235T2, P275T1
	EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	EN 10113-2	S275, S355, S420
	EN 10113-3	S275, S355, S420

Calculation data

Diameter mm	Electrode Stick-out (mm)	Wire feed speed cm/min	Current (A)	Voltage (B)	Deposition Rate (kg/h)	kg Wire/kg weld metal
2.0	19	125	145	16	1.10	1.30
		230	235	20	1.95	1.30
		355	310	23	3.15	1.30
2.4	19	125	215	18	1.60	1.20
		240	315	21	3.25	1.20
		330	385	24	4.30	1.20

Calculation data

Diameter mm	Electrode Stick-out (mm)	Wire feed speed cm/min	Current (A)	Voltage (B)	Deposition Rate (kg/h)	kg Wire/kg weld metal
2.0	19	150	140	16.5	1.18	1.44
		230	200	19.5	1.90	1.51
		280	225	20.5	2.35	1.33