

Innershield® NR®-550-H

Self-shielded cored wire

Classification

AWS A5.29-98 : E81T8-Ni2 H8

General description

Self shielding: easiest equipment
Higher strength level, yield strength up to 450 N/mm²
Excellent impact toughness at -40°C
CTOD tested, offshore constructions

Welding positions



Current type

DC -

Approvals

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

C	Mn	Si	P	S	Ni	Al
0.05	1.14	0.07	0.010	0.003	2.35	0.7

Mechanical properties, all weld metal

	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation %	Impact ISO-V(J) -18°C	-29°C
Required:	AWS A5.29-98	min. 400	480-620	20		27
Typical values		490	585	25	113	100

Packaging and available sizes

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

Innershield® NR®-550-H: rev. EN 15

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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 A131	Grade A, B, D, AH32 t/m EH36
Cast steel	EN 10213-2	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/ EN 10217-1	P235T1, P235T2, P275T1 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 at normal setting

Diameter (mm)	Electrical Stick-out (mm)	Wire feed speed inch/min	cm/min	Current (approx. A)	Arc Voltage (V)	Deposition Rate (kg/h)	kg Wire/ kg Weldmetal
2.0	19	60	150	140	16.5	1.18	1.44
		90	230	200	19.5	1.90	1.51
		110	280	225	20.5	2.35	1.33

Welding parameters, optimum fill passes