

Innershield® NR®-203 NiC

Self-shielded cored wire

Classification

AWS A5.29-98 : E61T8-K6

General description

Self shielded: easiest equipment arrangement

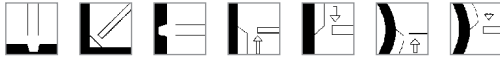
All position welding

Easy to weld in vertical up position

All passes

Good impact and CTOD toughness

Welding positions



ISO/ASME PA/1G PB/2F PC/2G PF/3G up PG/3G down PF/5G up PG/5G down

Current type

DC -

Approvals

ABS	DNV	LR
3SA	IIIMSH15	3SH15

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

C	Mn	Si	P	S	Ni	Cr	Al	V	Mo
0.06	0.83	0.05	0.004	0.003	0.57	0.08	0.73	<0.1	<0.1

Mechanical properties, all weld metal

	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation %	Impact ISO-V(J) -29°C
Required:	AWS A5.29-98	min. 340	410-550	22	27
Typical values	AW	400	490	29	95

Packaging and available sizes

Unit type	Net weight/unit (kg)	Diameter (mm)
Coils 14C	6.35	X
Coils 50C	22.68	X

Innershield® NR®-203 NiC: rev. EN 15

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Suggestions for use

For mild and higher strength steel not exceeding the yield strength range
 Roundabout groove welds, especially for large diameter heavy tubular constructions
 General plate fabrication, including bridge construction, hull plate and stiffener welding on ships and barges, offshore

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 to DH36
Cast steel	EN 10213-2	GP240R
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240, L290, L360
	API 5LX	X42, X46, X52
	EN 10216-1/ EN 10217-1	P235T1, P235T2, P275T1 P275T2, P355N
	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Boiler & pressure vessel steel	EN 10113-2	S275, S355
Fine grained steel	EN 10113-3	S275, S355

Calculation data at normal setting

Diameter (mm)	Electrical Stick-out (mm)	Wire feed speed		Current (approx. A)	Arc Voltage (V)	Deposition Rate (kg/h)	kg Wire/ kg Weldmetal
		inch/min	cm/min				
2.0	19	50	125	145	16	1.10	1.32
		90	230	235	20	1.95	1.32
		110	280	275	21	2.40	1.32

Welding parameters, optimum fill passes

Diameter (mm)	Wire feed speed/ Current/ Voltage	Welding position				
		PA/1G PB/2F	PC/2G	PF/3G up PF/5G up	PG/5G down PG/5G down	PE/4G
2.0	(cm/min.)	280	230	200	200	200
	(A)	275	235	215	215	215
	(V)	21	20	19	18	19

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