

Innershield® NR®-207

Self-shielded cored wire

Classification

AWS A5.29-98 : E71T8-K6

General description

Self shielded: easiest equipment arrangement
Vertical down filling semi-automatic pipe welding
High quality construction welding in all positions
Good impact and CTOD toughness

Welding positions



ISO/ASME PA/1G PB/2F PC/2G PG/3G down PE/4G PG/5G down

Current type

DC -

Approvals

BV	DNV	GL	TÜV
SA3YMH	IIYMSH15	3YH15S	+

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

C	Mn	Si	P	S	Ni	Al
0.07	0.9	0.20	0.005	0.003	0.85	1.0

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. 400	490-620	20	27
Typical values	AW	420	535	25	110

Packaging and available sizes

Unit type	Net weight/unit (kg)	Diameter (mm)	
		1.7	2.0
Coils 14C	6.35	X	X
Coils 50C	22.68		X

Innershield® NR®-207: rev. EN 15

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Suggestions for use

High productivity welding
Where arctic mechanical properties are required in general construction welding
Semi-automatic pipe welding

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
Pipe material	EN 10208-1	L210, L240, L290, L360
	EN 10208-2	L240, L290, L360, L415
	API 5LX	X42, X46, X52, X60
	EN 10216-1/ EN 10217-1	P235T1, P235T2, P275T1 P275T2, P355N
	Fine grained steel	EN 10113-2 EN 10113-3

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	70	180	175	17.5	1.4	1.27
		90	230	220	18.5	1.7	1.27
		130	250	260	19.5	2.5	1.27

Welding parameters, optimum fill passes

Diameter (mm)	Wire feed speed/ Current/ Voltage	Welding position			
		PA/1G PB/2F	PC/2G	PG/3G down PG/5G down	PE/4G
2.0	(cm/min.)	280	230	230	190
	(A)	240	220	220	185
	(V)	21	19	19	19