Innershield® NR®-208-H

Self-shielded cored wire

Classification

AWS A5.29/A5.29M : E91T8-G

General description

Self shielded: easiest equipment arrangement
Semi-automatic fill and cap pass welding of X-80 pipe steel in vertical down position
Excellent low temperature toughness
Low hydrogen content (H_{DM} < 8 ml/100g)

Welding positions

ISO/ASME PG/5Gdown

Current type

DC -

Approvals

TÜV
+

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

C	Mn	Si	P	S	Al	Ni
0.05	1.65	0.25	0.007	<0.003	0.85	0.8

Mechanical properties, typical, all weld metal

		Condition	Yield strength (N/mm^2)	Tensile strength (N/mm^2)	Elongation %	Impact ISO-V(J) -30°C
Required:	AWS A5.29		min. 540	620-760	17	
Typical values		AW (1G)	585	650	26	115

Packaging and available sizes

Unit type	Diameter (mm) 1.7	2.0
6.35 kg coil 14C	X	X

FCAW

Materials to be welded

Steel grades/Standard	Type
Pipe material	
API5LX	X60, X70
EN 10208-2	L 415, L445, L480, L550

Calculation data at normal setting

Diameter (mm)	Electrical Stick-out (mm)	Wire feed speed cm/min	Current (approx. A)	Arc Voltage (V)	Deposition Rate (kg/h)	kg Wire/ kg Weldmetal
1.7	19	150	145	15.5	1.0	-
		205	180	17.5	1.3	-
		270	215	18.5	1.8	-
		370	255	20.5	2.4	-

Remarks/ Application advice

Preheat and interpass temperature depending on steel quality
For root pass welding of X-60 to X-80 the Innershield NR-204-H electrode is recommended