

Innershield® NR®-211MP

Self-shielded cored wire

Classification

AWS A5.20-95 : E71T-11

General description

Self shielding: easiest equipment arrangement

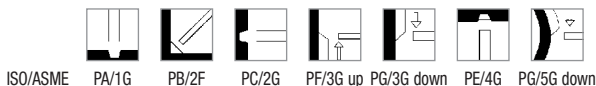
General purpose welding

Easy handling and welding versatility

Recommended for sheets from 2.5 to 12mm

With electrode diameter 0.9mm: excellent for sheets from 1.2mm

Welding positions



Current type

DC -

Approvals

BV	DB	FORCE	LR
+	+	+	AWS

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

C	Mn	Si	P	S	Al
0.21	0.60	0.18	0.008	0.007	1.50

Mechanical properties, all weld metal

	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation %	Impact ISO-V(J)
Required:	AWS A5.20-95	min. 400	480	20	not required
Typical values	AW	450	580	23	

Packaging and available sizes

Unit type	Net weight/unit (kg)	Diameter (mm)			
		0.9	1.2	1.7	2.0
Coils 14C	4.54	X	X		
Coils 14C	6.35			X	X
Coils 25RR	11.34	X	X		
Coils 50C	22.68			X	X

Innershield® NR®-211MP: rev. EN 15

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Suggestions for use

Fabricating and repair of machinery parts, truck bodies, saddles, tanks, hoppers, etc.
Racks, scaffolding, light angle structurals, joints, small roundabouts, etc.
Short assembly welds on brackets, dips, etc.
Galvanized steel

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
Boiler & pressure vessel steel	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	EN 10113-2	S275, S355
	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				
0.9	10	50	125	30	14	0.3	1.22
		90	230	90	16	0.6	1.22
		110	280	120	16.5	0.8	1.22
1.1	14	70	180	120	15	0.5	1.22
		110	280	160	17	1.0	1.22
		130	330	170	18	1.2	1.22
1.7	19	40	100	120	15	0.8	1.22
		75	190	190	18	1.5	1.22
		175	440	320	23	3.5	1.22
2.0	19	50	130	180	16	1.4	1.09
		75	190	250	18	2.2	1.09
		150	380	350	22	4.3	1.09
2.4	19	50	130	235	16	2.0	1.10
		55	140	250	18	2.3	1.10
		100	250	370	20	4.2	1.10

Welding parameters, optimum fill passes

Diameter (mm)	Wire feed speed/ Current/ Voltage	Welding position				
		PA/1G PB/2F	PC/2G	PF/3G up	PG/3G down PG/5G down	PE/4G
0.9	(cm/min.)	180	180	150	230	230
	(A)	65	65	50	85	85
	(V)	15	15	14.5	16	16
1.1	(cm/min.)	230	230	200	280	280
	(A)	140	140	130	160	160
	(V)	16	16	16	17	17
1.7	(cm/min.)	440	250	190	300	300
	(A)	320	230	190	280	280
	(V)	23	19.5	18	21	21
2.0	(cm/min.)	330	190		230	190
	(A)	320	250		320	250
	(V)	21	18		19.5	18
2.4	(cm/min.)	230	180		230	140
	(A)	350	275		350	250
	(V)	19.5	19		19.5	18