

Self-shielded cored wire

Classification

AWS A5.20/A5.20M :E70T-4
EN758 :T 42 Z V N 3

General description

Revishield® 70T-4 is a self shielded wire for high deposition rate downhand welding where impact properties are not required

Recommended for heavy sections or crack-sensitive applications

Can be used for rail joint welding

Welding positions



ISO/ASME PA/1G PB/2F

Current type / Shielding gases

DC +

Typical chemical composition of all weld metal, (w%)

C	Mn	Si	P	S	Al
0.23	0.45	0.26	0.006	0.006	1.40

Mechanical properties of all weld metal

	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact (ISO), J
						+20°C
Required	AWS A5.20		min 400	480		not required
Typical values after welding		AW	450	570	26	

Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm)		
		2.0	2.4	3.0
Coils 14C	6.35	X		
Spool 25RR	12.5	X		
Coils 50C	22.8	X	X	X

Suggestions for use

Multi-pass fillet and lap welds

Single passes 4.5 to 9mm fillet and lap welds

Crack resistant fillets on higher strength steels where required joint strength can be obtained by using the proper fillet size

Joint welding of rail steel profiles with placed copper-backing.

Materials to be welded

Steel	Code	Type
General structural steel	EN 10025	S 185, S235, S275, S355
Ship plates	ASTM 131	Grade A, B, D, AH32 to DH36
Cast steel	EN 10213-2	G P 240R
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	S275, S355, S420
	EN 10113-3	S275, S355, S420

Calculation data

Diameter mm	Electrode Stick-out (mm)	Wire feed speed cm/min	Current (A)	Voltage (B)	Deposition Rate (kg/h)	kg Wire/kg weld metal
2.0	50	500	250	29	5.0	1.18
		635	290	30	6.3	1.18
		760	320	31	7.6	1.18
2.4	70	280	250	28	3.8	1.16
		580	400	31	8.1	1.16
		700	450	32	10.0	1.16
3.0	70	380	400	28	7.7	1.23
		450	450	29	9.0	1.23
		570	550	31	12.0	1.23
2.0	95	530	450	35	11.3	1.23
		900	600	38	17.9	1.23

Welding parameters, optimum fill, Shielding gases Ar+ (>5-25)%CO₂

Diameter (mm)	Current / Voltage	Welding position						
		PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PF/5G up	PG/5G down
2.0	(A)	290	290					
	(V)	30	30					
2.4	(A)	400	400					
	(V)	31	31					
3.0*	(A)	445	445					
	(V)	29	29					
3.0**	(A)	550						
	(V)	37						

* - Stick-out 70 mm;

** - Stick-out 95 mm.