

Mild steel rutile cored wire

Classification

AWS A5.20/A5.20M :E71T-1M- JH4
 EN 758 :T 46 3 P M 1 H5

General description

All position gas shielded flux cored wire for high quality welding
 Excellent operator appeal due to superior welding characteristics
 Full out-of-position capability with higher deposition rates
 Exceptional mechanical properties
 Low hydrogen $H_{DM} < 5 \text{ ml/100g}$
 Superior product consistency with optimal alloy control
 Excellent wire feeding
 Very suitable for welding of root runs on ceramic backing and welding of prime plate

Welding positions



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

Current type / Shielding gases

DC +
 Ar+(>5-25%) CO₂ (EN 439:M21)
 15-25 l/min

Approvals

Shielding	ABS	BV	DB	DNV	FORCE	GL	LR	RINA	RMRS
M21	3YSA, H5	SA3YMHH	+	IIIYMSH5	+	3YH5S	3S,3YSH15	3YS	3S,3YSH5
C1	3YSA, H5	SA3YMHH	+	IIIYMSH5		3HH5S		2YS	

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

Shielding gases	C	Mn	Si	P	S	$H_{DM} \text{ ml/100g}$
M21	0.04	1.4	0.6	0.013	0.010	3

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	-30°C	-40°C
Required	AWS A5.20 EN 758		min.400 min.460	min.480 530-680	min. 22 min. 20			min. 27
Typical values after welding	M21	AW	570	620	25	90	65	40

Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm)
Plastic spool S200	4.5	X
Wire reel B300	15	X
WUTPACK®Profi	200	X

Identification Imprint: Revicod®71T-9M

Revicod®71T-9M: rev. EN 20

Materials to be welded

Steel	Code	Type	
General structural steel	EN 10025	S185, 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	L240NB, L290NB, L360NB, L360QB, L240MB L290MB, L360MB, L415MB, L415NB	
	API 5LX	X42, X46, X52, X60	
	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 EN 10113-3	S275, S275, S355, S420 S275M, S275ML, S355M, S355ML, S420M, S420ML

Calculation data

Diameter mm	Electrode Stick-out (mm)	Wire feed speed (cm/min)	Current (A)	Arc Voltage (B)	Deposition Rate (kg/h)	kg Wire/kg weld metal
1.2	20	445	130	21-23	1.5	1.20
		700	180	22-24	2.3	1.20
		955	220	25-27	3.2	1.20
		1270	265	27-29	4.3	1.20
		1590	305	30-32	5.4	1.20

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

Diameter (mm)	Current (A) Voltage	Welding position					
		PA/1G	PB/2F	PC/2G	PF/3Gup	PG/3Gdown	PE/4G
1.2	(A)	230-260	230-260	200-240	200-240	160-220	160-220
	(V)	26-32	26-32	25-30	25-28	23-26	23-26