Revicod® 81T1-A1M

High strenght rutile cored wire

Classification

AWS A5.29/A5.29M	:E81T1-A1M-H4
EN 12701	:T MoL P M 2 H5

General description

All position gas shielded 0,5% Mo flux cored wire
Superior weldability, low spatter, good bead appearance
Outstanding operators appeal
Exceptional mechanical properties
Very low hydrogen HDM <5 ml/100g
Superior product consistency with optimal alloy control
Excellent wire feeding

Welding positions

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

Current type / Shielding gases

DC +
Ar+(>5-25)% CO_2 (EN 439:M21)
15-25 l/min

Approvals

TÜV
expected

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

Shielding gases	C	Mn	Si	P	S	Mo	H_{DM} ml/100g
M21	0.065	0.8	0.2	0.014	0.010	0.46	3

Mechanical properties of all weld metal

		Shielding gas	Condition	Yield strength (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Impact (ISO), J +20°C	Impact (ISO), J -20°C
Required	AWS A5.29		SR [1]	min 470	550-690	min 19	not required	
	EN 12071		SR [2]	min 355	min 510	min 22	47	
Typical values after welding		M21	SR [3]	540	600	26	160	79

Stress relieve: SR [1] = 620 ± 15°C/1h, SR[2] = 570-620°C/1h, SR[3] = 620°C/1h

Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm) 1.2
Wire reel B300	15	X

Identification	Imprint: Revicod®81T1-A1M	**Revicod®81T1-A1M: rev. EN 20**

Materials to be welded

Steel	Code	Type
Creep resistant steel	EN 10028-2	P295 G H, P355 G H, 16 Mo 3
	EN 10222-2	17 Mo 3, 14 Mo 6
	EN 10113-2	S275, S355, S420
Fine grained steel	EN 10113-3	S275, S355, S420

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	20-22	1.6	1.20
		700	180	23-25	2.5	1.20
		950	220	25-27	3.4	1.20
		1270	265	27-29	4.5	1.20
		1590	305	30-32	5.9	1.20

Welding parameters, optimum fill, Shielding gases Ar+ (>5-25)%CO_2

Diameter	Current /	Welding position				
(mm)	Voltage	PA/1G	PB/2F	PC/2G	PF/3G up	PE/4G
1.2	(A)	230-280	230-280	200-240	200-240	160-220
	(V)	26-32	26-32	25-32	25-28	23-28

Application advice

The recommended temperature after welding heat treatment 570-630°C
Time depends on material thickness