

High strenght rutile cored wire

Classification

AWS A5.29/A5.29M :E101T1-K3M-JH4
 EN 12535 :T 55 4 Z P M 1 H5

General description

All position gas shielded rutile flux cored wire, for high strength steel grades for welding pipes and plates

Outstanding operators appeal

Excellent mechanical properties

Very low hydrogen $H_{DM} < 5 \text{ ml/100g}$

Superior product consistency with optimal alloy control

Good wire feeding

Welding positions



ISO/ASME PA/1G PB/2F PC/2G PF/3G up PG/3G down PE/4G PF/5G up PG/5G down

Current type / Shielding gases

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

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

Shielding gases	C	Mn	Si	P	S	Ni	Mo	$H_{DM} \text{ ml/100g}$
M21	0.04	1.4	0.2	0.012	0.010	2.0	0.3	3

Mechanical properties of all weld metal

	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact (ISO), J		
						-40°C	-50°C	-60°C
Required	AWS A5.29		min 610	690-800	min 16	min 27		
	EN 758		min 550	640-820	min 18	min 47		
Typical values after welding	M21	AW	700	730	19	60		

Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm)
Wire reel S200	4.5	X
Wire reel B300	15	X

Identification Imprint: Revicod® 101T1

Revicod®101T1: rev. EN 20

Materials to be welded

Steel	Code	Type
Pipe material	API 5LX	X52, X60, X60, X65, X70, X80
Fine grained steel	EN 10137-2	S500-S550

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)%CO₂

Diameter (mm)	Current / Voltage	Welding position				
		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