

Rutile Coated Electrode for Mild Steels

Classification

EN ISO 2560-A : E 42 0 RR 12
AWS A5.1 : E6013

General Description

AS R-143 is a heavily coated rutile electrode. As its basic component quantity is higher than AS R-116, weld metal properties are superior accordingly. Weld metal has a high resistance to cracking. The slag is easy to remove, and it gives high quality, smooth and excellent weld beads. It is easy to strike and re-strike and thus an ideal, easy to use electrode.

Chemical Composition (w%), Typical, All Weld Metal

C	Si	Mn
0.08	0.35	0.65

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 480 N/mm²
Tensile Strength : 550 N/mm²
Elongation (L=5d) : 25 %
Impact (ISO-V) : 60 J (0°C)
40 J (-20°C)

Approvals

CE, DB, GOST, SEPRO, TSE, TÜV

ABS	BV	DNV	LRS	RINA	TL
2	2	2	2m	2	2

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : AC min 50 V ; DC (-)

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]	Export Box Box Weight [kg]
2.00	300	50 - 70	1050	2.1 / 195	2
2.50	350	65 - 90	2070	2.1 / 100	5
3.25	350	90 - 140	3230	3.2 / 100	5
4.00	350	140 - 200	4770	4.8 / 100	5
4.00	450	140 - 190	6690	6.7 / 100	6
5.00	350	180 - 240	7550	4.9 / 65	5
5.00	450	180 - 230	9910	6.4 / 65	6



1G/PA

2F/PB

2G/PC

4G/PE

3G/PF

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Applications and Materials to be Welded

AS R-143 is a general purpose electrode especially used for the welding of low and medium carbon structural steels ranging between St 33 and St 52.3. Machinery fabrications, bridge constructions; welding of boiler vessels, automotive bodies, steel furnitures, metal plate works, thin plates and small repairs are among its application areas.

	DIN	EN
General Structural Steels	St 33, St 34, St 37, St 44, St 44-2, St 44-3, St 52, St 52-3 St 37-4, St 44-4, St 52-4	S185, S235, S275, S355 P235TR2 - P355T2
Fine Grained Steels	StE 255 - StE 420 WStE 255	S255N - S420N P255NH
Pipe Materials	StE 210-7 - StE 360-7 StE 290-7 TM - StE 360-7 TM X42, X46, X52, X60 (API 5LX)	L210 - L360NB L290MB - L360MB —
Boiler and Pressure Vessel Steels	17 Mn 4, 19 Mn 6 H1, H11, H111	P295GH, P355GH P235GH, P265GH, P285NH
Elevated Temperature Steels	St 35-8, St 45-8	P235G1TH - P255G1TH
Ship Plates	A, B, D AH32 - EH36	— —
Cast Steels	GS-38, GS-45, GS-52	GE200, GE240, GE260