

Basic Coated Electrode for Mild Steels

Classification

EN ISO 2560-A : E 42 3 B 42 H10
AWS A5.1 : E7018

General Description

AS B-248 is a basic coated electrode. It is used particularly to weld rigidly restrained mass structures where high welding stresses are unavoidable. Weld metal has a high resistance to cracking. The slag is easy to remove and it gives excellent quality, smooth weld beads. It is also suitable for welding in vertical upwards position at a high welding speed. It has 125% metal recovery.

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

C	Si	Mn
0.07	0.50	0.90

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 460 N/mm²
Tensile Strength : 530 N/mm²
Elongation (L=5d) : 28 %
Impact (ISO-V) : 110 J (−30°C)
80 J (−40°C)

Redrying Temperature : 250-400°C / 2-3 hrs

Approvals

CE, DB, GOST, NAKS, SEPRO, TSE, TÜV

ABS	BV	DNV	GL	LRS	RINA	RMRS	TL
3H10, 3Y	3YHH	3YH10	3YH10	3m 3Ym H10	3YH10	3Y40HH	3YH10

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : 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 - 80	1400	1.8 / 130	2
2.50	350	80 - 110	2420	2.2 / 90	5
3.25	350	110 - 145	3800	3.4 / 90	5
4.00	450	130 - 190	7230	6.5 / 90	6
5.00	450	190 - 245	10700	6.4 / 60	6



1G/PA



2F/PB



2G/PC



4G/PE



3G/PF

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Applications and Materials to be Welded

AS B-248 is suitable for steel constructions and machines operating under dynamic forces. Ship building, boiler and pressure vessel manufacturing and pipe connections are among its application areas. It is recommended for the welding of high carbon, high strength low alloyed steels having high (P) and (S) content; high strength ship's plate of A-, D- and E- quality and vessel plates of 17 Mn 4 and 19 Mn 5 type. AS B-248 can join steel parts to steel casts and can be used in welding of thick parts. It is suitable for the root pass and welding in difficult positions. It gives excellent weld beads with high impact strength values at subzero temperatures. It is also very suitable for welding of GALVANIZED plates.

	DIN	EN
General Structural Steels	St 33, St 34, St 37, St 44, St 44-2, St 44-3, St 52 St 37-4, St 44-4, St 52-4 St 50-2, St 60-2 C 55, Ck 55	S185, S235, S275, S355 P235TR2 - P355T2 E295, E335 C55
Fine Grained Steels	StE 255 - StE 420 WStE 255 - WStE 420 TStE 255 - TStE 420	S255N - S420N P255NH - P420NH S255NL - S420NL / P275NL1 - P355NL1
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, D, E AH32 - EH36	— —
Cast Steels	GS-38, GS-45, GS-52, GS-60 GS-62	GE200, GE240, GE260, GE300 —