

AS B-255 H4R



Basic Coated Electrode for Mild Steels (Vacuum Pack)

Classification

EN ISO 2560-A : E 46 5 B 32 H5
AWS A5.1 : E7018-1 H4R

General Description

AS B-255 H4R has a basic coated and moisture resistant coating. Vacuum pack enables electrode coating to keep its moisture content on production levels unless the package is not damaged or opened.

Weld metal has high impact strength at low temperatures. As the weld metal is very resistant to hot cracking, it is used particularly to weld rigidly restrained mass structures where high welding stresses are unavoidable. The slag is easy to remove and it gives very high quality, smooth weld beads. It has 125 % metal recovery.

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

C	Si	Mn
0.07	0.50	1.20

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 490 N/mm²
Tensile Strength : 590 N/mm²
Elongation (L=5d) : 30 %
Impact (ISO-V) : 92 J (-50°C)

Re-drying Temperature : 350-400°C / 3 hrs
(Should be applied if the vacuum pack damaged or opened)

Approvals

ABS	BV	DNV	GL	LRS
4YH5, 4Y400H5	4Y40H5	4Y40H5	4Y40H5	4Y40mH5

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : DC (+) ; AC min 65 V

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]
2.50	350	80 - 110	2439	2.0 / 82
3.25	350	110 - 145	3846	2.0 / 52
4.00	450	140 - 190	8519	2.3 / 27
5.00	450	180 - 240	13333	2.4 / 18



1G/PA

2F/PB

2G/PC

4G/PE

3G/PF

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Applications and Materials to be Welded

AS B-255 H4R is especially suitable for fine grained structural steels having high yield strength values. It is designed for steel constructions and machines operating under dynamic forces at low temperatures. Welding of ship's plate of A-, D- and E- quality, boiler and pressure vessel manufacturing and pipe connections are among its application areas. AS B-255 H4R can join steel parts to steel casts and can be used in the 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.

	<u>DIN</u>	<u>EN</u>
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, St 70-2 C 60, Ck 60	S185, S235, S275, S355 P235TR2 - P355T2 E295, E335, E360 C60
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 L415NB -
Boiler and Pressure Vessel Steels	17 Mn 4, 19 Mn 6 HI, HII HIII	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-70 GS-62	GE200, GE240, GE260, GE300, S355JOC -