

Coated Electrode for High Strength Low Alloyed Steels

Classification

EN ISO 3580 : E CrMo 1 B 12
AWS A5.5 : E8018-B2

General Description

AS DA-774 is a basic coated electrode. It gives a Cr-Mo alloyed weld metal that is used in the welding of creep resistant pressure vessels and pipe steels operating under high temperatures. AS DA-774 is especially used for 13 CrMo 44 type steels that are frequently used in operating temperatures up to 570°C. It gives a root pass free of porosity with a minimum amount of spatter. It is recommended to use the electrode in DC (+).

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

C	Si	Mn	Cr	Mo
0.06	0.50	0.80	1.20	0.50

Mechanical Properties, Typical, All Weld Metal

Yield Strength	: 540 N/mm ²
Tensile Strength	: 620 N/mm ²
Elongation (L=5d)	: 22 %
Impact (ISO-V)	: 90 J (+20°C)

Approvals

GOST, SEPRO, TSE

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : AC min 70 V ; DC (+)

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]	Export Box Box Weight [kg]
2.50	350	80 - 100	2030	3.9 / 190	5
3.25	350	90 - 140	3270	4.7 / 145	5
4.00	450	130 - 190	6420	6.1 / 95	6
5.00	450	150 - 240	10000	6.5 / 65	6



1G/PA



2F/PB



2G/PC



4G/PE



3G/PF

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Applications and Materials to be Welded

AS DA-774 is used for the welding of vapor pipes and boiler and pressure vessels that are manufactured from Cr-Mo steels. It can also be used in welding similarly alloyed cementation steels, heat treatable steels and cast steels. It is an ideal electrode in the multi-pass welding of thick sectioned and rigidly restrained mass structures.

	<u>DIN</u>	<u>EN</u>	<u>Werkstoff Nr.</u>
Heat Resistant Steels	15 CrMo 3	–	1.7205
	–	25CrMo4	1.7218
	–	42CrMo4 *	1.7225
	24 CrMo 5	–	1.7258
	15 CrMo 5	–	1.7262
	13 CrMo 4 4	13CrMo4-5	1.7335
	16 CrMo 4 4	–	1.7337
	22 CrMo 4 4	–	1.7350
	13 CrMoV 4 2	–	1.7709
	16 CrMoV 4	–	1.7728
Cast Steels	GS-25 CrMo 4	G25CrMo4	1.7218
	GS-22 CrMo 5	G22CrMo5	1.7252
	GS-22 CrMo 5 4	G22CrMo5-4	1.7354
	GS-17 CrMo 5 5	G17CrMo5-5	1.7357
Cementation Steels	15 Cr 3	–	1.7015
	–	16MnCr5	1.7131
	–	20MnCr5	1.7147

(*) Mechanical properties should be considered.