

S2 CrMo1

CATEGORY SAW Arc Submerged

TYPE Submerged Arc wire for welding temperature resistant boiler steels and base metals.

APPLICATIONS Typical applications in power generation plant include steam piping, turbines and boilers; the alloy also finds applications in the chemical and petro-chemical industries.

PROPERTIES Submerged arc welding wire for high temperature creep resistant 1.25%Cr 0.5%Mo ferritic steel. These steels are used for creep resisting applications up to ~550°C. The wire has low levels of tramp elements (eg. Sn, As, Sb and P) providing a low Bruscati Factor ($X < 10$ ppm) for temper embrittlement resistant applications.

CLASSIFICATION

AWS	A 5.23: EB2 R
EN ISO	24598-A: S CrMo1
DIN: W.Nr.	1.7346
DIN	8575: S2 CrMo1

SUITABLE FOR heat and creep resistant steel, GS 22CrMo54, G17CrMo5-5, G22CrMo5-4, 13CrMo 4-5, 16CrMo 4-4, G-17CrMo 5-5, 24CrMo5, 25CrMo4, 21 CrMo 3, 25 CrMo 4, 17CrMo55
ASTM: A182 grades F11/F12, A199/A200 grade T11, A217 grades WC6/WC11, A234 grades WP11/WP12, A335 grades P11/P12, A387 grades 11/12

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	Cr	Cu	Mo
0.10	0.95	0.25	1.20	0.20	0.55

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				20°C	40°C	60°C	
AW	> 460	> 550	> 20	> 60			

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spool type	kg / spools / drums	kg / pallet
1.6	27-30	150-300	K-415 / Drum	25-27 / 350	
2.0	28-34	180-320	K-415 / Drum	25-27 / 350	
2.4	28-38	250-500	K-415 / Drum	25-27 / 350	
3.0	28-40	400-800	K-415 / Drum	25-27 / 350	
4.0	28-40	500-900	K-415 / Drum	25-27 / 350	

REDRYING TEMPERATURE not required