

## S2 CrMo1

**CATEGORY** SAW Submerged arc

**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 Brucato 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	Rp0,2 (N/mm <sup>2</sup> )	Rm (N/mm <sup>2</sup> )	A5 (%)	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