

## SACW CrMoWV-12

**CATEGORY** SAW Arc Submerged

**TYPE** Flux-cored wire for submerged-arc welding creep resistant steels.

**APPLICATIONS** Suited for analogous and similar creep resistant steels in turbine and steam boiler construction as well as in the chemical industry. Recommended for long-term periods up to +650 °C

**PROPERTIES** Preheating and interpass temperature 400-450 °C (austenitic welding) or 250-300 °C (martensitic welding). Root passes should principally be welded in the martensitic range. Lower preheat and interpass temperatures are possible, yet must be approved by practical welding tests and process qualification tests. After welding cooling to 90±10 °C, followed by tempering at 760 °C for three minutes / mm wall thickness at least for 2 hours. Tempering, if specified, at 1050 °C for 1/2 hour/oil and annealing at 760 °C for 2 hours.

**CLASSIFICATION** EN ISO 24598-A: SCrMoW12

**SUITABLE FOR** 1.4935 X20CrMoW12-1, 1.4922 X20CrMoV12-1, 1.4923 X22CrMoV12-1, 1.4913 X19CrMoVNb11-1 (Turbotherm, 20 MVNb), 1.4931 GX22CrMoV12-1

**APPROVALS** CE approved

**WELDING POSITIONS:**



### TYPICAL WELD DEPOSIT ANALYSIS WITH FL 880 (WEIGHT %)

C	Mn	Si	Cr	Ni	Mo	V	W
0.18-0.25	0.75-0.80	0.25-0.30	11.4-11.5	0.45-0.6	0.85-0.90,5	0.3	0.5

### ALL WELD MECHANICAL PROPERTIES WITH FL 880

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	-40°C	-60°C	
annealed*	>550	>650	>16	>47			

\*760 °C/4 h/furnace down to 300 °C/air

### WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / spool / drum	kg / pallet
1.6	28-32	180-300	BS-300 / Drum	15 / 300	
2,4	28-38	250-500	K-415 / Drum	25 / 300	
3,2	28-40	350-700	K-415 / Drum	25 / 300	

**REDRYING TEMPERATURE** 150°C / 24hr