

9CrMoV SAW

TOP FEATURES

- SAW Solid wire with Mn+Ni \leq 1.0%, non-copper coated, for SAW of T91/P91
- Specifically designed for high integrity structural service at elevated temperature

CLASSIFICATION

AWS A5.23M	EB 91
EN ISO 24598-A	S S CrMo91
EN ISO 24598-B	SU 9C1MV

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	V	N	Cu	Al
Min.	0.08	0.40	0.15			8.5	0.10	0.85	0.03	0.15	0.03		
Max.	0.13	0.80	0.50	0.010	0.010	9.5	0.40	1.10	0.08	0.25	0.07	0.10	0.04
Typical	0.10	0.5	0.35	0.004	0.008	9.0	0.3	1.0	0.05	0.2	0.05	0.03	<0.01

*Mn+Ni \leq 1.0%. Nickel is below 0.4% (as parent material) although AWS allows up to 1.0%Ni.

See 9CrMoV-N for variant with 0.4–0.8%Ni conforming to ISO suffix "A" specification.

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

PWHT 760°C/2h		Min.	Typical with LA490 flux
Tensile strength	(MPa)	620	690
0.2% Proof strength	(MPa)	415	580
Elongation (%)	4d	17	25
	5d	17	23
Reduction of area (%)			70
Impact ISO-V (J)	+20°C	*	65
Hardness (HV)	(mid)		220

* Minimum impact required by ISO is 47 J.

PWHT: Post Weld Heat Treatment

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
2.4	SPOOL	25.0	SA9CRMV-24
3.2	SPOOL	25.0	SA9CRMV-32

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.