

9CrMoV-N SAW

TOP FEATURES

- Designed to provide creep strength for high integrity structural service at elevated temperatures
- Superior corrosion resistance with high strength toughness

CLASSIFICATION

AWS A5.23M	EB91
EN ISO 24598-A	S S CrMo91

TYPICAL APPLICATIONS

- Main Steam Piping
- Oil Refineries
- Coal Liquefaction and Gasification Plants
- Power Generation Plants
- Turbine Castings

APPROVALS

TÜV

+

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	0.40	0.85	0.03	0.15	0.03		
Max.	0.13	0.80	0.50	0.010	0.010	9.5	0.80	1.10	0.08	0.25	0.07	0.10	0.04
Typical	0.10	0.45	0.25	0.004	0.008	9.2	0.45	1.0	0.05	0.2	0.05	0.03	<0.01

* Mn+Ni ≤ 1.0%, typical <0.9%.

For nickel below 0.4%, see 9CrMoV.

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

PWHT 760°C/2h		Min.	Typical with LA490 flux
Tensile strength	(MPa)	620	720
0.2% Proof strength	(MPa)	415	610
Elongation (%)	4d	17	25
	5d	16	23
Reduction of area (%)			70
Impact ISO-V (J)	+20°C	*	60
Hardness (HV)	(mid)		230

* 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-N-24
3.2	SPOOL	25.0	SA9CRMV-N-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.