

Chromet® 92

TOP FEATURES

- B9 (P92) alloyed steel: 9Cr steel designed to weld equivalent 'type 92' steels modified with tungsten, vanadium, niobium, nitrogen, and a small addition of boron to give improved long term creep properties
- Excellent tensile strength in creep regime
- Moisture resistant coating provides low amounts of weld metal hydrogen levels for a superior weld
- Specifically designed for high integrity structural service at elevated temperature

TYPICAL APPLICATIONS

- Headers
- Main Steam Piping
- Turbine Castings
- Power Generation Plants

CLASSIFICATION

AWS A5.5 E9015-B92 H4
EN ISO 3580-A E Z CrMoWVNb9 B 4 2 H5

CURRENT TYPE

DC+/AC

WELDING POSITIONS

All positions, except vertical down

APPROVALS

TÜV

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

	C	Mn*	Si	S	P	Cr	Ni*	Mo	W	Nb	V	N	B	Al	Cu
Typical	0.11	0.6	0.25	0.01	0.01	9	0.5	0.45	1.7	0.05	0.2	0.05	0.003	<0.01	<0.05

*Mn + Ni ≤ 1.2%

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	Temperature	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)		Reduction of area (%)	Impact ISO-V (J) +20°C	Hardness (HV)
					4d	5d			
Required: AWS A5.5			530	620	17	16	-	-	-
Typical values	PWHT	20°C	630	740	22	19	50	60	230-260
		550°C	419	511	15	14	64	-	-
		600°C	320	422	19.5	18	73	-	-
		650°C	229	340	19.5	18	80	-	-

PWHT = Postweld Heat treatment 760°C / 2-4h

- = not specified

OPERATING CURRENT RANGE

Diameter x Length (mm)	Current range (A)
3.2 x 350	90-120
4.0 x 350	125-155
5.0 x 450	140-240

AVAILABLE SIZES AND PACKAGING INFORMATION

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 300	CBOX	195	3.5	CH92-25-3
3.2 x 350	CBOX	116	3.9	CH92-32-3
4.0 x 350	CBOX	83	4.1	CH92-40-3
5.0 x 450	CBOX	48	4.9	CH92-50-3

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.