

Chromet® 5 (SL502)

TOP FEATURES

- B6 alloyed steel: 5% chromium, 0.5% molybdenum alloyed steel for elevated temperature service up to 600°C (1112°F)
- Designed for high strength and improved corrosion resistance in superheated steam, hot hydrogen gas and high sulphur crude oils
- Moisture resistant coating provides low amounts of weld metal hydrogen levels for a superior weld
- Weld metal chemistry is low in impurity elements allowing it to respect the X Factor (<15ppm) and J-factor (<120ppm)

TYPICAL APPLICATIONS

- Boiler Superheaters
- Heat Exchangers
- Piping
- Pressure vessels

CLASSIFICATION

AWS A5.5	E8015-B6 H4
EN ISO 3580-A	E CrMo5 B 3 2 H5
EN ISO 3580-B	E 6216-5CM

CURRENT TYPE

DC+/AC

WELDING POSITIONS

All position, except vertical down

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

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Min.	0.05	0.50	not specified	not specified	not specified	4.0	not specified	0.45	not specified
Max.	0.10	1.00	0.80	0.025	0.030	6.0	0.40	0.65	0.3
Typical	0.06	0.8	0.4	0.01	0.015	5	0.2	0.55	0.05

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Properties after PWHT*		Min.	745°C/1h	Typical 740°C/2h	745°C/3h
Tensile strength	(MPa)	550**	610	610	540
0.2% Proof strength	(MPa)	460	500	480	360
Elongation (%)	4d	19	25	23	28
	5d	18	22	20	25
Reduction of area (%)		not specified	69	71	74
Impact ISO-V (J)	+20°C	not specified	150	130	140
	-10°C	not specified	80	50	50
Hardness, cap/mid	(HV)	not specified	210/205	210/200	205/160

*PWHT: AWS A5.5 is 740 +/- 15°C/1h. ISO 3580-A is 730-760°C/1h

**ISO 3580-A is 590MPa. There are no base material grades requiring such a high tensile strength ASTM is 414-552MPa dependent on grade.

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 350	70-110
3.2 x 350	80-140

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	VPMD	88	2.1	CHROMET5-25-2
3.2 x 350	VPMD	54	2.0	CHROMET5-32-2

CHROMET® 5-EN-20/01/25

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.