5CrMo TIG

TOP FEATURES

- Developed for 5%Cr-0.50%Mo creep resisting steels
- Designed for high strength and improved corrosion resistance with hot hydrogen gas, super-heated steam, and Sulphur crude oil
- This weld metal has also been used successfully for subsequent nitriding, for example in the repair of 3Cr- 1Mo-V and 2Cr-Mo-1A1 (BS En40C, En41) steels used for molds for injection-molding of plastics.

CLASSIFICATION

AWS A5.28M	ER80S-B6
EN ISO 21952-A	W CrMo5Si

SHIELDING GASES (ACC. EN ISO 14175)

I1	Inert gas Ar (100%)

TYPICAL APPLICATIONS

- Pressure vessels
- Piping
- Heat Exchangers

CHEMICAL COMPOSITION (WEIGHT %), WIRE

	C	Mn	Si	S	P	Cr	Mo	Ni	Cu	V
Min.	0.03	0.40	0.30			5.5	0.50			
Max.	0.10	0.70	0.50	0.020	0.020	6.0	0.65	0.30	0.3	0.03
Typical	0.07	0.5	0.4	0.01	0.01	5.7	0.55	0.1	0.2	0.02

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Properties after PWHT		Min.	Typical	
			745°C/1h	740°C/2h
Tensile strength	(MPa)	590	640	570
0.2% Proof strength	(MPa)	470	530	440
Elongation (%)	4d	17	28	25
	5d	17	25	20
Reduction of area (%)			72	78
Impact ISO-V (J)	+20°C		240	
Hardness, cap/mid			195/215	

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	T5CRMO-16
2.4	PE Tube	5.0	T5CRMO-24

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.