

**Technical data sheet**

011121MBA

**Cored welding wire****CHROMECORE 417 4Cu-G****CLASSIFICATION**

EN 14700: T ZFe11  
 ASME IIC SFA 5.9 / AWS A 5.9: (EC630)  
 Material number: 1.4542

**DESCRIPTION**

- Tubular wire for gas shielded metal arc hardfacing and reconstitution
- Martensitic precipitation hardening stainless steel deposit
- In the as welded condition, the deposit can be machined to the exact profile required. It is hardenable to 48 HRc by heat treatment. In that condition, it withstands cavitation and corrosion very well
- Heat treatment at 430 – 470°C is recommended after welding and machining in order to achieve a tempered martensitic structure containing Ni/Cu precipitates

**APPLICATIONS**

CHROMECORE 417 4Cu-G is used for hardfacing rolls, rebuilding hydro turbine components, shafts, impellers etc.

**TYPICAL ALL-WELD METAL ANALYSIS**

C	Mn	Si	Cr	Ni	Cu	Mo	Ti + Nb
0.04	0.6	0.5	16.6	5.0	3.7	0.7	0.5

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES**

Hardness – as welded: 30 – 37 HRc  
 Hardness – Post weld heat treated (6 hours at 450°C): 46 – 50 HRc

**CONDITIONS OF USE**

Current type	Shielding gas	Gas flow
DC+ or pulsed	EN ISO 14175: M12, I1, M13, M21, Z	10 - 20 l/min

**OPERATING CONDITIONS**

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 - 250	220	17 - 32	28	10 - 20	15
1.6	120 - 350	250	17 - 33	28	10 - 20	15

Recovery: 98%

**WELDING POSITIONS**

CHROMECORE 417 4Cu-G is primarily used in the flat and horizontal-vertical positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

**PACKAGING**

Diameter	1.2 mm	1.6 mm
Spool type	EN ISO 544 : BS300 basket spool	
Weight	15 kg	

Other packaging and other diameters: please consult us