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| Technical data sheet <small>011121MBA</small> | Cored welding wire CHROME CORE 417 4Cu-S |  |
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CLASSIFICATION

EN 14700: T ZFe11
ASME IIC SFA 5.22 / AWS A 5.22: (EC630)

DESCRIPTION

- Stainless steel tubular wire for submerged arc cladding
- 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

CHROME CORE 417 4Cu-S 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 | 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

FLUX DESCRIPTION

| | WA FLUX 325 | WA FLUX 385 | WA FLUX 415 | WA ULTRAFLUX |
|--------------------|-------------|-------------|-------------|--------------|
| EN ISO 14174 class | S A AB 1 65 | S A AF 2 64 | S A FB 1 55 | S A FB 1 55 |

OPERATING CONDITIONS

| Diameter [mm] | Current [A] | | Voltage [V] | | Stick-out [mm] | |
|---------------|-------------|---------|-------------|---------|----------------|---------|
| | Range | Optimum | Range | Optimum | Range | Optimum |
| 3.2 | 300 - 650 | 450 | 28 - 32 | 31 | 25 - 35 | 30 |

Current type/polarity: DC+ or DC-

WELDING POSITIONS

Flat

PACKAGING

| Diameter | ≥ 2.4 mm | |
|--------------------|------------|--------------|
| Standard packaging | B 450 coil | Drum |
| Weight | 25 kg | Up to 330 kg |

Other packaging and other diameters: please consult us