

**Technical  
data sheet**

011121MBA

Cored welding wire

**CHROMECORE 592-S****CLASSIFICATION**

EN 14700: T ZFe7

**DESCRIPTION**

- Tubular cored wire for submerged arc hardfacing
- 17% chromium martensitic stainless steel deposit with improved hardness stability at high temperature
- Offers good high-temperature corrosion resistance and resists oxidation up to 900°C
- Suitable for use in the presence of sulphurous gas
- Excellent combination of hardness, strength and toughness coupled with temper resistance and resistance to oxidation
- Machinable weld deposit

**APPLICATIONS**

- Cladding / hardfacing alloy on many types of steel industry rolling mill rolls such as table rolls, pinch rolls, scale breaker rolls, coiler rolls, leveller rolls and runout table rolls
- Hardfacing sealing faces of gas, water and steam valves and fittings made from unalloyed or low-alloy steels
- Welding martensitic or martensitic-ferritic stainless steels when matching properties are required.

**TYPICAL ALL-WELD METAL ANALYSIS (with WA ULTRA FLUX)**

| C   | Mn  | Si  | Cr | Ni  | Mo  | Nb   | V    |
|-----|-----|-----|----|-----|-----|------|------|
| 0.3 | 0.8 | 0.5 | 17 | 0.7 | 0.7 | 0.25 | 0.25 |

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES**

Hardness – 3-layer deposit as-welded: 42 - 48 HRC  
Hardness depends on base material composition, dilution level and preheat temperature.  
Preheat at 200 - 400°C is recommended, followed by cooling in quiet air.  
Fabrication welds should be annealed at 650 - 750°C.

**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<br>[mm] | Current [A] |         | Voltage [V] |         | Stick-out [mm] |         |
|------------------|-------------|---------|-------------|---------|----------------|---------|
|                  | Range       | Optimum | Range       | Optimum | Range          | Optimum |
| 2.4              | 200 - 450   | 350     | 26 - 30     | 30      | 25 - 40        | 30      |
| 2.8              | 250 - 550   | 400     | 28 - 32     | 30      | 25 - 40        | 30      |
| 3.2              | 300 - 650   | 500     | 28 - 32     | 32      | 25 - 40        | 30      |

Recovery: 95%

**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

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.