

Classifications

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| DIN 8555 | EN 14700 | AWS A5.13 |
| E 20-UM-55-CSTZ | E Co3 | E CoCr-C |

Characteristics and field of use

UTP CELSIT 701 is suited for highly wear-resistant hardfacings on parts subject to severe abrasion in combination with corrosion and high temperatures up to 900° C, such as working parts in the chemical industry, running and sealing faces on fittings, valve seats and cones for combustion engines, cutting and crushing tools, hot working tools exposed to severe stresses without thermal shock, milling, mixing and drilling tools.

Excellent gliding characteristics, good polishability, slightly magnetic.

Properties of the weld metal

Machining by grinding or with tungsten carbide cutting tools.

Welding properties

UTP CELSIT 701 has excellent welding properties, a homogeneous, finely rippled seam due to spray arc and very easy slag removal.

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|----------------------------------------|----------------|
| Hardness of the pure weld metal | 54 - 56 HRC |
| Hardness at 600° C | approx. 42 HRC |
| Hardness at 800° C | approx. 34 HRC |

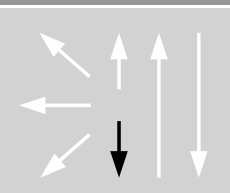
Typical analysis in %

| C | Cr | W | Co |
|-----|------|------|---------|
| 2.3 | 32.0 | 13.0 | balance |

Welding instruction

Clean welding area, preheating temperature 500 – 600°C, very slow cooling. Hold stick electrode vertically with a short arc and lowest possible amperage. Re-dry damp stick electrodes for 2 h / 300°C.

Welding positions



Current type DC (+) / AC

Recommended welding parameters

| | | |
|-----------------------|-----------|-----------|
| Electrodes Ø x L [mm] | 3.2 x 350 | 4.0 x 350 |
| Amperage [A] | 70 – 110 | 90 - 130 |