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| International standards | AWS A5.13 | ECoCr-B |
| | DIN 8555 | E 20-UM-50-CTZ |

Approvals ---

Characteristics AC-weldable hardfacing electrode with an alloyed core and a recovery of 160 %. The deposit is a cobalt base alloy of austenitic-ledgeburitic structure with embedded CrW carbides.
The weld metal is highly resistant to corrosion, impact, abrasive wear as well as thermal shocks and heavy mechanical impact.
.The deposit is only machinable by hard faced tools.

Welding instructions Working temperature should be kept between 400° and 600°C, depending on base material and type of construction. Slow cooling, if necessary oven cooling, is recommended for low alloyed and austenitic steels. Subsequent heat treatment (stress relief at 700°C approx.) is not necessary, except on large structures.

Operating temperature From room temperature up to + 600° C

Typical applications Hardfacing of cutting edges of long knives and other tools used in the wood, plastic, paper, carpet and chemical industry.

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|--|-----------------------|------------------------|------------------------|------------------------------|-------------------------------------|
| Mechanical properties of all-weld metal (typical values) | At Rt. HRc | + 300°C HRc | + 600°C HRc | Melting- range °C | Density g/cm³ |
| | ca. 48 | ca. 37 | ca. 32 | 1280-1320°C | 8,7 |

| | | | | | | | | |
|--|----------|-----------|-----------|-----------|----------|-----------|-----------|---------------|
| Weld metal analysis (typical, wt. %) | C | Si | Mn | Cr | W | Fe | Co | Others |
| | 1,4 | 1 | 1 | 287 | 8,5 | 3 | Base | < 3 |

Current = + / ~ 42 V

Welding positions PA, PB, PC

Rebaking 1 h, 350 + / - 10 °C (if required)

Flux-cored wire equivalent

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| CARBO F- S 12 |
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| Dia./Length | Amperage (A) | Pcs./packet | Pcs./carton | kg/1000 | kg/packet | kg/carton |
|-------------|--------------|-------------|-------------|---------|-----------|-----------|
| 3,2 x 350 | 90 - 130 | 84 | 336 | 59,5 | 5,0 | 20,0 |
| 4,0 x 350 | 120 - 170 | 62 | 247 | 81,0 | 5,0 | 20,0 |
| 5,0 x 350 | 150 - 200 | 38 | 152 | 131,2 | 5,0 | 20,0 |