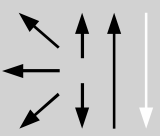


| Classification  |  |  |   |                           |                   |               |
|---|--|--|---|---------------------------|-------------------|---------------|
| EN ISO 2560-A   | EN ISO 2560-B  | AWS A5.5   | AWS A5.5M   |                           |                   |               |
| E 46 4 Z1NiCrCu B 42 H5   | E4918-NCC1 A H5 (mod.)                                   | E8018-W2H4R  | E5518-W2H4R   |                           |                   |               |
| Characteristics and typical fields of application   |  |  |   |                           |                   |               |
| <p>NiCuCr alloyed basic electrode for welding weathering resistant constructional steels. Excellent mechanical properties and high crack resistance even when subjected to restraint.</p> <p>Metal recovery approx. 115 %. Easily welding in all positions except vertical-down. Very low hydrogen contents (acc. AWS condition HD &lt; 4 ml/100 g weld metal).</p> |  |  |   |                           |                   |               |
| Base materials  |  |  |   |                           |                   |               |
| <p>Weather- resistant constructional steels<br/>           S235JRG2Cu, S235J2G4Cu, S235J0Cu, S235JRW, S355J0Cu, S355J2G3Cu, S355J0W,<br/>           235J2W-S355J2W, S355K2W<br/>           ASTM A 588 Gr. A, B, C, K; A 618 Gr. II; 709 Gr. C</p>   |  |  |   |                           |                   |               |
| Typical analysis of all-weld metal  |  |  |   |                           |                   |               |
|   | C  | Si   | Mn  | Cr                        | Cu                | Ni            |
| wt.-%   | 0.05   | 0.4  | 0.7   | 0.6                       | 0.45              | 0.6           |
| Mechanical properties of all-weld metal – typical values (min. values)  |  |  |   |                           |                   |               |
| Condition   | Yield strength<br>R <sub>p0,2</sub>                      | Tensile strength<br>R <sub>m</sub>                         | Elongation<br>A (L <sub>0</sub> =5d <sub>0</sub> )                    | Impact work<br>ISO-V KV J |                   |               |
|   | MPa  | MPa  | %   | +20 °C                    | -40 °C            |               |
| u   | <b>520</b> (≥ 460)                                       | <b>570</b> (≥ 530 – 680)                                   | <b>27</b> (≥ 20)  | <b>200</b>                | <b>130</b> (≥ 70) |               |
| s   | <b>500</b>   | <b>550</b>   | <b>27</b>   | <b>190</b>                |                   |               |
| u   | untreated, as-welded                                     |  |   |                           |                   |               |
| s   | stress relieved 580 °C/2h / furnace down to 300 °C / air |  |   |                           |                   |               |
| Operating data  |  |  |   |                           |                   |               |
|    | <b>Polarity:</b><br>DC (+)                               | <b>Redrying if necessary:</b><br>300 – 350 °C,<br>min. 2 h | <b>Electrode identification:</b><br>FOX NiCuCr 8018-<br>W2 E 46 4 Z B | <b>ø mm</b>               | <b>L mm</b>       | <b>Amps A</b> |
|   |  |  |   | 2.5                       | 350               | 80 – 110      |
|   |  |  |   | 3.2                       | 350               | 130 – 150     |
|   |  |  |   | 4.0                       | 450               | 150 – 190     |
| Approvals   |  |  |   |                           |                   |               |
| RMR (3 YHH), CE   |  |  |   |                           |                   |               |