


CEWELD FL 165

TYPE	Medium basic SAW flux for Single and multi-wire in layer/counter layer or multiple layers.								
APPLICATIONS	<p>CEWELD® FL 165 is a medium base powder for joint welding of low alloy structural steels, fine grained structural steels, boiler steels and especially all pipe and marine steels. Excellent weldability with single and multiple wires (up to 5 wires), in layer/counter-layer or multi-layer passes. Also in combination with cored wire and solid wire.</p> <p>Typical applications: Shipbuilding, spiral and longitudinal tube production of structural pipe steels from L360 or X52 to L555 or X80 according to ISO3183 / API-5L. Unalloyed and low-alloyed structural steels according to EN 10025; fine-grained structural steels up to 700 MPa yield strength while maintaining material-specific properties; boiler structural steels such as 16Mo3 and 13CrMo4-5.</p>								
PROPERTIES	<p>CEWELD® FL 165 has a very low hydrogen content of less than 5 ml/100 g in the weld metal, an oxygen content of around 350 ppm and a low nitrogen content of less than 70 ppm. This, together with the constant metallurgical flux behaviour, is the decisive reason for the consistently good mechanical quality values with high toughness values at low temperatures. Also suitable for sour gas requirements due to low hardness values (max. 240 HV10).</p> <p>Boniszewski: ~1,7 Powder bulk density: 0.95 kg / dm³ (l) Grain size according to ISO 14174: 2 - 20 (Tyler 8 x 65) Current carrying capacity: up to 1000 A AC or DC with single wire</p>								
CLASSIFICATION	EN ISO 14174: SA FB 1 65 AC H5								
SUITABLE FOR	S355, S420, S460, S690, P500, P550, X65, X70, X80, Weldox 700, Naxtra 70, Hardox 400, Dilimax, P91, P24 A, B, D, E, A 32-E 36								
APPROVALS									
WELDING POSITIONS									
TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">CaF₂</td> <td style="width: 25%;">CaO+MgO</td> <td style="width: 25%;">SiO₂+TiO₂</td> <td style="width: 25%;">Al₂O₃+MnO</td> </tr> <tr> <td>17</td> <td>30</td> <td>20</td> <td>30</td> </tr> </table>	CaF ₂	CaO+MgO	SiO ₂ +TiO ₂	Al ₂ O ₃ +MnO	17	30	20	30
CaF ₂	CaO+MgO	SiO ₂ +TiO ₂	Al ₂ O ₃ +MnO						
17	30	20	30						
MECHANICAL PROPERTIES									
REDRYING	300°C / 2 hr								
GAS ACC. EN ISO 14175									