



CEWELD SACW 890

| TYPE | High- basicity flux-cored wire for submerged-arc welding | | | | | | | | | | | | | | | | |
|---|--|----------------|-------------------------|----------------------|-------------------------------|-------------------------|----------|--------------------|-------------------------|----------|-----|-----|-------|-------|---|-----|-----|
| APPLICATIONS | Crane, automobile, equipment and steel construction, pipeline, foundries. | | | | | | | | | | | | | | | | |
| PROPERTIES | Crack resistant weld metal conditioned by the high-basicity slag in combination with very low hydrogen content. Well suited for the economic joining of high strength steels and cryogenic fine grain structural steels with $R_{p0,2} > 890$ MPa (129 ksi). To reach the optimal mechanical properties, the energy absorbed per unit length of weld 15 kJ/cm should not be exceeded. The working temperature should be between 100°C (212 °F) and 150°C (302 °F) . As welding flux FL 155 should be used because of its high basicity and low hydrogen content. | | | | | | | | | | | | | | | | |
| CLASSIFICATION | <table border="0"> <tr> <td>AWS</td> <td>A 5.23: F12AB-ECG</td> </tr> <tr> <td>EN ISO</td> <td>26304-A: S 89 FB T3Ni2,5Cr1Mo</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>2</td> </tr> </table> | AWS | A 5.23: F12AB-ECG | EN ISO | 26304-A: S 89 FB T3Ni2,5Cr1Mo | F-nr | 6 | FM | 2 | | | | | | | | |
| AWS | A 5.23: F12AB-ECG | | | | | | | | | | | | | | | | |
| EN ISO | 26304-A: S 89 FB T3Ni2,5Cr1Mo | | | | | | | | | | | | | | | | |
| F-nr | 6 | | | | | | | | | | | | | | | | |
| FM | 2 | | | | | | | | | | | | | | | | |
| SUITABLE FOR | <p>Reh < 890 Mpa Iso 15608: 3.2 (Reh > 690 MPa) 1.8796, 1.8925, 1.8940, 1.8983, 1.8797, 1.8933, 1.8934, 1.8941, 1.8997 S690Q-S890Q, S690QL-S890QL, S720MC ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W N-A-XTRA M 700, PAS 700, alform 700 M, alform 900 x-treme, alform® 890 x-treme, Strenx 700-890, DILLIMAX 700-890</p> | | | | | | | | | | | | | | | | |
| APPROVALS | CE | | | | | | | | | | | | | | | | |
| WELDING POSITIONS | | | | | | | | | | | | | | | | | |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | <table border="1"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> </tr> </thead> <tbody> <tr> <td>0.08</td> <td>0.4</td> <td>1.6</td> <td>0.015</td> <td>0.015</td> <td>1</td> <td>2.4</td> <td>0.6</td> </tr> </tbody> </table> | C | Si | Mn | P | S | Cr | Ni | Mo | 0.08 | 0.4 | 1.6 | 0.015 | 0.015 | 1 | 2.4 | 0.6 |
| C | Si | Mn | P | S | Cr | Ni | Mo | | | | | | | | | | |
| 0.08 | 0.4 | 1.6 | 0.015 | 0.015 | 1 | 2.4 | 0.6 | | | | | | | | | | |
| MECHANICAL PROPERTIES | <table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R_{p0,2} (MPa)</th> <th rowspan="2">R_m (MPa)</th> <th rowspan="2">A₅ (%)</th> <th>Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th>-40°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>900</td> <td>960</td> <td>16</td> <td>55</td> <td>HRc</td> </tr> </tbody> </table> | Heat Treatment | R _{p0,2} (MPa) | R _m (MPa) | A ₅ (%) | Impact Energy (J) ISO-V | Hardness | -40°C | As Welded | 900 | 960 | 16 | 55 | HRc | | | |
| Heat Treatment | R _{p0,2} (MPa) | | | | | R _m (MPa) | | A ₅ (%) | Impact Energy (J) ISO-V | Hardness | | | | | | | |
| | | -40°C | | | | | | | | | | | | | | | |
| As Welded | 900 | 960 | 16 | 55 | HRc | | | | | | | | | | | | |
| REDRYING | Not required | | | | | | | | | | | | | | | | |
| GAS ACC. EN ISO 14175 | | | | | | | | | | | | | | | | | |