



# CEWELD E 6013 Root

TYPE	Rutile basic electrode for SMAW welding. (Type E 38 2 )														
APPLICATIONS	CEWELD® E 6013 is a classic rutile- basic stick electrode preferably for welding in the weld root area. Areas of application are: Shipbuilding, construction, buildings, pipe welding														
PROPERTIES	CEWELD® E 6013 Root is a thick basic-rutile coated electrode for welding low alloyed steels with tensile strength up to 510 MPa. Recommended for root welding in pipelines due to excellent welding properties. The weld metal deposit has high mechanical properties and can be used for a wide range of materials.														
CLASSIFICATION	AWS                                    A 5.1: E 6013 EN ISO                                2560-A: E 38 2 RB 12 F-nr                                    2 FM                                      1														
SUITABLE FOR	<b>Rp &lt; 380 MPa (52 ksi) ISO 15608: 1.1 ReH &lt; 275 MPa, 1.2 275 &lt; ReH &lt; 360 MPa , (1.3 ReH &gt; 360 MPa &lt; 380MPa)</b> 1.0035, 1.0038, 1.0039, 1.0044, 1.0112, 1.0116, 1.0130, 1.0145, 1.0253, 1.0254, 1.0255, 1.0258, 1.0259, 1.0319, 1.0345, 1.0345, 1.0345, 1.0348, 1.0352, 1.0418, 1.0420, 1.0425, 1.0425, 1.0425, 1.0451, 1.0452, 1.0453, 1.0457, 1.0459, 1.0460, 1.0460, 1.0461, 1.0486, 1.0490, 1.0491, 1.0619, 1.1100, 1.0409, 1.0421, 1.0426, 1.0429, 1.0430, 1.0436, 1.0473, 1.0481, 1.0482, 1.0484, 1.0505, 1.0545, 1.0546, 1.0562, 1.0566, 1.0570, 1.0578, 1.0581, 1.0582, S235JR-S355JR, S235JO-S355JO, P195TR1-P265TR1, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, A, B, D, E, A 32-E 36 ASTM A 106, Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 501, Gr. B; A 573, Gr. 58, 65; A 633, Gr. A, C; A 711 Gr. 1013; API 5 L Gr. B, X42, X52														
APPROVALS	CE														
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%;">C</td> <td style="width: 25%;">Si</td> <td style="width: 25%;">Mn</td> <td style="width: 25%;">P</td> <td style="width: 25%;">S</td> </tr> <tr> <td>0.1</td> <td>0.2</td> <td>0.5</td> <td>0.02</td> <td>0.02</td> </tr> </table>	C	Si	Mn	P	S	0.1	0.2	0.5	0.02	0.02				
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ALL WELD MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R<sub>p0,2</sub> MPa</th> <th rowspan="2">R<sub>m</sub> MPa</th> <th rowspan="2">A<sub>5</sub> (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> </tr> <tr> <th>-20°C</th> <th>0°C</th> </tr> <tr> <td>As Welded /</td> <td>400</td> <td>500</td> <td>25</td> <td>50</td> <td>65</td> </tr> </table>	Heat Treatment	R <sub>p0,2</sub> MPa	R <sub>m</sub> MPa	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		-20°C	0°C	As Welded /	400	500	25	50	65
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		-20°C	0°C												
As Welded /	400	500	25	50	65										
REDRYING TEMPERATURE	140°C / 1 hr														
GAS ACCORDING EN 14175															



# CEWELD E 6013 Root

E 6013 ROOT 2,5 X 300MM	Type	KG/unit	EANCode
	Can	2,6	8720663400277
E 6013 ROOT 3,2 X 350MM	Type	KG/unit	EANCode
	Can	2,6	8720663400284
E 6013 ROOT 4,0 X 450MM	Type	KG/unit	EANCode
	Can	3,3	8720663400291