



# CEWELD 316H

TYPE	Solid stainless steel welding wire with high carbon content. (Type 19 12 3 H, 1.4403)												
APPLICATIONS	<p><b>CEWELD® 316H</b> exhibits corrosion resistance similar to matching, stabilized, austenitic <b>17Cr-12Ni-2Mo</b> steels. It is specifically designed for high-temperature service ( <b>500-800°C</b>) under long-term creep conditions.</p> <p><b>CEWELD 316H is intended for welding:</b> Steam pipelines and superheater headers, Furnace parts, Specific gas and steam turbine components, Applications in the petrochemical industry, Fossil-fuelled and nuclear power plants.</p>												
PROPERTIES	<p><b>CEWELD® 316H</b> is designed for welding austenitic 316/316H steels at high temperatures ( <b>500-800°C</b>) under long-term creep conditions. This filler metal can also be used for welding 321/321H and 347/347H in high-temperature applications. This is particularly important for thick, highly restrained weld joints, as the risk of premature failure due to intergranular <b>HAZ (Heat Affected Zone)</b> cracking is reduced by using more ductile weld metal instead of 347H.</p>												
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.9: ER316H</td> </tr> <tr> <td>EN ISO</td> <td>14343-A: G 19 12 3 H</td> </tr> <tr> <td>W.Nr.</td> <td>1.4403</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>5</td> </tr> </table>	AWS	A 5.9: ER316H	EN ISO	14343-A: G 19 12 3 H	W.Nr.	1.4403	F-nr	6	FM	5		
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W.Nr.	1.4403												
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SUITABLE FOR	<p><b>ISO 15608: 8.1 Austenitic ≤ 19 % Cr</b>            1.4401, 1.4404 , 1.4409 , 1.4429, 1.4432, 1.4435, 1.4436, 1.4571, 1.4580, 1.4583, 1.4919            X5CrNiMo17-12-2, X2CrNiMo17-12-2, GX2CrNiMo19-11-2, X2CrNiMoN17-12-3, X2CrNiMo17-12-3,            X2CrNiMo18-14-3, X3CrNiMo17-12-3, X6CrNiMoTi17-12-2, X6CrNiMoNb17-12-2, X10CrNiMoNb18-12            UNS S31600, S31603, S31635, S31640, S31653            AISI 316L, 316Ti, 316Cb, 347, 347H, 321, 321H, CF10M, BS 316S51, 316S52, 316S53, 316C16, 316C71</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>Cr</th> <th>Ni</th> <th>Mo</th> </tr> </thead> <tbody> <tr> <td>0.06</td> <td>0.5</td> <td>1.8</td> <td>19</td> <td>13</td> <td>2.5</td> </tr> </tbody> </table>	C	Si	Mn	Cr	Ni	Mo	0.06	0.5	1.8	19	13	2.5
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MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th>Heat Treatment</th> <th>R<sub>P0,2</sub> (MPa)</th> <th>R<sub>m</sub> (MPa)</th> <th>A<sub>5</sub> (%)</th> <th>Hardness</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>450</td> <td>650</td> <td>35</td> <td>HRc</td> </tr> </tbody> </table>	Heat Treatment	R <sub>P0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Hardness	As Welded	450	650	35	HRc		
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As Welded	450	650	35	HRc									
REDRYING	Not required												
GAS ACC. EN ISO 14175	M11, M13, M12												



# CEWELD 316H

316H 1,0MM

Packaging	KG/unit	EanCode
BS-300	15	8720663414878

316H 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663414915