


CEWELD 310

TYPE	High heat resistant stainless steel welding wire. (310, 25 20)																
APPLICATIONS	CEWELD® 310 for joining and build-up welding on heat-resistant steels/cast steels of the same or similar type. Somewhat more susceptible to hot cracking due to fully austenitic weld metal. Typical applications include industrial furnaces, annealing chambers, salt bath treatment equipment, boiler parts, and heat exchangers.																
PROPERTIES	CEWELD® 310 is a corrosion-resistant and heat-resistant solid wire for welding austenitic steels with a Cr content of 25% and a Ni content of 20%. Due to its high Cr content, CEWELD® 310 has good general oxidation resistance, especially at high temperatures. The alloy is fully austenitic and therefore sensitive to hot cracking. The temperature limits for use in intermittent oxidation depend on the cycle frequency. Under no circumstances should a temperature of 1000°C be exceeded. This alloy can withstand relatively severe thermal shocks and is superior to type 309 L.																
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.9: ER310</td> </tr> <tr> <td>EN ISO</td> <td>14343-A: G 25 20</td> </tr> <tr> <td>W.Nr.</td> <td>1.4842</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>5</td> </tr> </table>	AWS	A 5.9: ER310	EN ISO	14343-A: G 25 20	W.Nr.	1.4842	F-nr	6	FM	5						
AWS	A 5.9: ER310																
EN ISO	14343-A: G 25 20																
W.Nr.	1.4842																
F-nr	6																
FM	5																
SUITABLE FOR	<p>ISO 15608: 8.1 Austenitic ≤ 19 % Cr , TÜV 1000: Gr. 21-30, Type: 25% Cr, 22%Ni 1.4710, 1.4713, 1.4724, 1.4726, 1.4742, 1.4745, 1.4762, 1.4823, 1.4826, 1.4828, 1.4832, 1.4835, 1.4837, 1.4840, 1.4841, 1.4845, 1.4846, 1.4848, 1.4849, 253MA, X15CrNiSi 25 20, G-X40CrNiSi 25 12, G-X15CrNi 25 20, X8CrNi25-21, GX40CrNiSi22-10, X15CrNiSi20-12, 310, 310S, CK20, 305, 314, 725LN, 316L ASTM A297 HF / A297HJ UNS: S31000, S31008, S31050, S31603</p>																
APPROVALS	CE																
WELDING POSITIONS																	
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 16.6%;">C</th> <th style="width: 16.6%;">Si</th> <th style="width: 16.6%;">Mn</th> <th style="width: 16.6%;">Cr</th> <th style="width: 16.6%;">Ni</th> <th style="width: 16.6%;">Mo</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.5</td> <td>1.8</td> <td>26</td> <td>21</td> <td>0.3</td> </tr> </tbody> </table>	C	Si	Mn	Cr	Ni	Mo	0.1	0.5	1.8	26	21	0.3				
C	Si	Mn	Cr	Ni	Mo												
0.1	0.5	1.8	26	21	0.3												
MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <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 colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th>RT</th> <th>-196°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>395</td> <td>560</td> <td>45</td> <td>130</td> <td>40</td> <td>HRc</td> </tr> </tbody> </table>	Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	RT	-196°C	As Welded	395	560	45	130	40	HRc
Heat Treatment	R _{P0,2} (MPa)					R _m (MPa)	A ₅ (%)		Impact Energy (J) ISO-V		Hardness						
		RT	-196°C														
As Welded	395	560	45	130	40	HRc											
REDRYING	Not required																
GAS ACC. EN ISO 14175	M13																



CEWELD 310

310 0,8MM

Packaging	KG/unit	EanCode
BS-300	15	8720663415998
D-200	5	8720663415837

310 1,0MM

Packaging	KG/unit	EanCode
BS-300	15	8720663416001
D-200	5	8720663416025
Drum	250	8720663416018

310 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663416032
D-200	5	8720663416049

310 1,6MM

Packaging	KG/unit	EanCode
BS-300	15	8720663416056