

## AA 310

**CATEGORY** FCAW Flux-Cored

**TYPE** Rutile flux cored stainless steel welding wire for M21 and Co2 gas

**APPLICATIONS** Common applications include industrial furnaces, annealing chambers, fused salt treatment installations and boiler parts, as well as heat exchangers

**PROPERTIES** For welding heat-resistant austenitic steels of the 25% Cr, 20% Ni types. AA 310 has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. The temperature limits for use under intermittent oxidation depend on cycle frequency. In no case shall a temperature of 1000°C be exceeded. This alloy can withstand relatively severe thermic shock, and is superior to type 309L.

**CLASSIFICATION**

AWS	A 5.22: E 310 T 0-1/4
EN ISO	12073: T 25 20 R C/M 1
DIN: W.Nr.	1.4842
DIN	8556: 25 20

**SUITABLE FOR** Stainless and high temperature steels : NF A 35-578 : Z 12 CN 25.20, Z 12 CNS 25.20, Z 15 CN 24.13. AISI : 305, 310, 314 DIN + Werkstoffblatt 470 : X 12CrNi 25.21, X15CrNiSi 25.20, X15 CrNiSi 20.12 Werkstoff Nr : 1.4826, 1.4828, 1.4835, 1.4837, 1.4840, 1.4841, 1.4845, 1.4846, 1.4847, 1.4848, 1.4710, 1.4713, 1.4724, 1.4726, 1.4742, 1.4745, 1.4762, 253MA, UGINE : NS 30, R 31.

**APPROVALS** CE approved

**WELDING POSITIONS:**



**ALL-WELD METAL ANALYSES % (TYPICAL)**

C	Mn	Si	Cr	Ni	FN (WRC)
0.18	2.10	0.58	25.5	20.36	<1

**ALL WELD METAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	-40°C	-60°C	
AW	>410	>600	35	>70			

AW: as welded

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A)	spool type	kg / spool	kg / pallet
1,2	23-35	100-270	K-300	12.5	

**REDRYING TEMPERATURE** 150°C / 24hr.

**GAS ACC. EN ISO 14175:** M21