



# CEWELD E NiCr 825

**TYPE** Rutile-basic nickel based electrode for DC+ and AC current. (Type 825, 383, E Ni8025)

**APPLICATIONS** **CEWELD® E NiCr 825** is used for welding alloy 825 and other nickel-iron-chromium-molybdenum-copper alloys of similar composition. The weld metal is highly resistant to corrosion, especially in reducing chemicals such as sulphuric acid and phosphoric acid. It is also suitable for cladding carbon steels and low-alloy steels. Applications include pressure vessels, piping, heat exchangers, valves and other components for the chemical processing, offshore and oil and gas industries.

**PROPERTIES** **CEWELD® E NiCr 825** has excellent weldability with a fully austenitic weld metal that exhibits high resistance to stress corrosion cracking and pitting in media containing chloride ions. It shows good corrosion resistance to reducing acids due to the combination of Ni, Mo and Cu. Sufficient resistance to oxidizing acids. The weld metal is corrosion resistant in seawater.

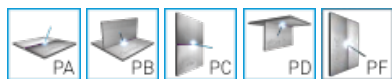
**CLASSIFICATION**

AWS	A 5.4: ~E 383-16
EN ISO	14172: E Ni 8025 (NiCr29Fe30Mo)
W.Nr.	2.4652
F-nr	5
FM	6

**SUITABLE FOR** **E 27 31 4 Cu, E383, E Ni 8025**  
 1.4500, 1.4529, 1.4539 (904L), 2.4858, 1.4563, 1.4465, 1.4577 (310Mo), 1.4133, 1.4500, 1.4503, 1.4505, 1.4506, 1.4531, 1.4536, 1.4585, 1.4586, 24858  
 G-X7NiCrMoCuNb 25 20, X1NiCrMoCuN25 20 6, X1NiCrMoCuN25 20 5, NiCr21Mo, X1NiCrMoCu 31 27 4,  
 N08926, N08904, ALLOY 825, N08028, UNS N08825

**APPROVALS**

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)**

C	Si	Mn	Cr	Ni	Mo	Ti	Fe	Cu
0.02	0.5	2	25	40	5.5	0.2	25	2

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>P0.2</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		Hardness
				-196°C		
As Welded	425	630	30	70		HRc

**REDRYING** 300°C / 2 hr

**GAS ACC.** EN ISO 14175