

E Nicro 825

CATEGORY SMAW Stick Electrodes

TYPE Rutile-basic nickel based electrode for DC+ and AC current

APPLICATIONS The excellent corrosion-resistant properties of Alloy 825 make the alloy a suitable choice for a variety of difficult applications. Uses include fabricated equipment found in chemical and petro- chemical processing, pulp and paper manufacturing, flue gas desulphurization systems and metal pickling operations.

PROPERTIES Excelent weldability with fully austenitic weld metal with high resistance against stress corrosion cracking and pitting in media containing chloride ions. Good corrosion resistance against reducing acids due to the combination of Ni, Mo and Cu. Sufficient resistance against oxidizing acids. The weld metal is corrosion resistant in sea water.

CLASSIFICATION

AWS	A 5.11: no standard
EN ISO	14172: E Ni 8165 (NiFe30Cr25Mo)
DIN: W.Nr.	2.4652
DIN	1736: EL NiCr 26 Mo

SUITABLE FOR G-X7NiCrMoCuNb 25 20, X1NiCrMoCuN25 20 6, X1NiCrMoCuN25 20 5, NiCr21Mo, X1NiCrMoCu 31 27 4, N08926, N08904, ALLOY 825, N08028, UNS N08825 W.Nr: 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

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

Ni	C	Mn	Fe	Si	Cu	Cr	Mo
rem	< 0.03	2-2.5	20-22	< 0.4	1.5-2	23-25	4-5

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				-20°C	-40°C	-196°C	
AW	425	630	30			70	

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A)	kg / can	kg / 6 pack	kg / 1000
2.5	300	60-90			
3.2	350	80-130			
4.0	350	100-150			

REDRYING TEMPERATURE 300°C/2hr