



CEWELD SA Alloy 825

TYPE Nickel - Chromium - Molybdenum - Copper alloy for SAW welding.

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 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. CEWELD® SA Alloy 825 is best to be used with CEWELD® FL 838 or CEWELD® FL 839 flux.

CLASSIFICATION

AWS	A 5.14: ERNiFeCr-1
EN ISO	18274: S Ni 8065(NiFe30Cr21Mo3)
W.Nr.	2.4858
F-nr	45
FM	6

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

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo	Ti	Fe	Cu
0.03	0.4	0.8	0.02	0.02	22.5	42	3	0.8	28	2.8

MECHANICAL PROPERTIES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness
				RT	-196°C	
As Welded	425	630	30	100	70	HRc

REDRYING Not required

GAS ACC. EN ISO 14175