

CATEGORY SAW Arc Submerged

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)
F-nr	45
FM	6
W.Nr.	2.4858

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 No Approvals Found

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	

ALL WELD MECHANICAL PROPERTIES

Heat Treatment	R _{p0.2} MPa	R _m MPa	A ₅ (%)	RT	Impact Energy (J) ISO-V -196°C
As Welded /	425	630	30	100	70

WELDING PARAMETERS / PACKING

WELDING PARAMETERS	WELDING PARAMETERS	WELDING PARAMETERS	WELDING PARAMETERS
D (MM)	VOLTAGE (V)	CURRENT (A)	TRAVEL SPEED (CM/MIN)
1,6	26-29	225-325	35-60
2,4	29-33	300-400	35-60
3,2	29-33	350-500	35-60

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175