CEWELD[®]

SA Alloy 825 strip

ESAW Electroslag
Nickel-Chromium-Molybdenum alloyed strip for cladding overlay applications
SA Alloy 825 is a nickel-iron-chromium-molybdenum-copper cladding alloy for use in extremely corrosive environments.
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. The nickel content of this alloy makes it resistant to chloride-ion stress-corrosion cracking. Additions of molybdenum and copper give alloy 825 resistance to pitting and to corrosion in reducing acid environments such as sulphuric or phosphoric acid solutions. The alloys chromium content gives it resistance to various oxidizing environments, such as nitrates, nitric acid solutions and oxidizing salts. 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. SA Alloy 825 strip is developed for cladding lower alloyed or steel parts to obtain protection against the earlier mentioned attacs for high quality tank and apparatus construction in the chemical industry.
AWS A 5.14: ~ER NiFeCr-1 EN ISO 18274: B Ni 8065 (NiFe30Cr21Mo3Cu3)
SA Alloy 825 is specially designed for cladding lower alloyed parts to obtain a high quality clad layer against corrosion. Designations: 825 (2.4858, UNS N08825). 1.4500, 1.4529, 1.4539, 2.4858, 1.4563, G- X7NiCrMoCuNb 25 20, X1NiCrMoCuN25 20 6, X1NiCrMoCuN25 20 5, NiCr21Mo, X1NiCrMoCu 31 27 4, N08926 N08904, ALLOY 825, N08028, UNS N08825
CE approved

С	Mn	Si	Cr	Ni	Мо	Fe	Ti	Cu	al
<0.025	<1.0	<0.5	19.5-23.5	38-46	2.5-3.5	bal.	1,0	1.5-3.0	<0.2

MECHANICAL PROPERTIES

Heat	R _{P0,2}	Rm		A5	In	npact	Energy (J) ISO-	V	Hardness
Treatment	(N/mm ²)	(N/mm ²)	Ē	(%)	+20°C		-40°C	-60°C	HRc / HV
AW	 420	610		34	>110				

AW: as welded

WELDING PARAMETERS WITH FL 860 ESHC

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		Welding Paramet	ters		Packing
D (mm)	Voltage (V)	Current (A)	Travel speed (Cm/min)	kg / coil	internal coil size (mm)
30 x 0,5	22-25	450-650	15-27	25-50	500
60 x 0,5	22-25	900-1250	15-27	25-50	500
90 x 0,5	22-25	1350-1900	15-27	25-50	500

REDRYING TEMPERATURE	not required