

Exaton Ni41Cu

Exaton Ni41Cu welding wire is suitable for overlay welding when a deposit with chemistry corresponding to UNS N08825 is required. The weld deposit is a nickel-iron-chromium-molybdenum-copper alloy suitable for use in corrosive environments. Exaton Ni41Cu has very good resistance to stress corrosion cracking (SCC) in chloride containing environments and is particularly suited for use in reducing environments such as those containing sulphuric and phosphoric acids. Exaton Ni41Cu is used for corrosion resistant alloy surfacing of components in the chemical, pollution control, oil & gas and petrochemical industries and often in connection with sour gas service. Typical components are tanks, heat exchangers, evaporators, transport pipes and scrubbers etc.

Specifications

Classifications

SFA/AWS A5.14 : ERNiFeCr-1
 EN ISO 18274 : S Ni 8065 (NiFe30Cr21Mo3)

Alloy Type

Alloyed nickel (Ni + 22% Fe, 27% Cr, 3% Mo)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	338 MPa	546 MPa	47 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
ISO		
As Welded	-196 °C	190 J

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	Ti
0.02	0.8	0.15	0.003	0.01	43.0	22.0	3.0	1.9	1.0

Typical Wire Composition %

Fe
24.4

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.02	0.6	0.3	0.001	0.016	42	22.4	2.9	0.1	2.2

Typical Weld Metal Analysis %

Ti	PRE	Fe
1	28	24