PRODUCT DATA SHEET

Metrode TIG 80CuNiAl

Metrode TIG 80CuNiAl is a 9% aluminium-5% nickel bronze filler wire for welding similar nickel aluminium bronzes. Metrode TIG 80CuNiAl filler wire deposits nickel aluminium bronze and is suitable for welding wrought and cast parent materials of similar composition. These alloys have high strength and resistance to stress corrosion, cavitation erosion, corrosion fatigue and attack by acids and chlorides. Metrode TIG 80CuNiAl should be shielded with pure argon but pure helium provides deeper penetration, higher travel speeds and allows preheat to be reduced.

Applications

Applications include corrosion resistant and spark resistant pumps, ship propellers, heat exchangers for offshore, marine and mining equipment.

Classifications				
AWS	A5.7	ERCuNiAl		
DIN	1733	SG-CuAl8Ni6		
BS	2901Pt3	C26		

Typical Chemical Analysis (Wire analysis)					
% Copper	Bal.	% Nickel	4,0 - 5,5		
% Aluminium	8,5 - 9,5	% Zinc	0,1 max		
% Silicon	0,1 max	% Lead	0,02 max		
% Manganese*	0,6 - 3,5	% Iron	3,0 - 5,0		
* DIN has 1,0 - 2,0% manganese					

Typical Mechanical Properties (All weld metal in the as welded condition)			
0,2% Proof Stress	400 MPa		
Tensile Strength	740 MPa		
% Elongation on 4d	19		
% Reduction of Area	23		
Hardness	220 HV		

Packing Data				
Diameter (mm)	Consumable Length (mm)	Pack Mass (kg)	Item Number	
2,4	1 000	2,5 (tube)	W077583	

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