

Alloy B3

CATEGORY GMAW-GTAW Solid wires

TYPE A nickel-base alloy solid wire

PROPERTIES Alloy B3 is a nickel-base alloy with excellent resistance tot hydrochlorid acid at all concentrations and temperatures. It also withstands hydrogen chloride, sulfuric, acetic, hydrofluoric nd phosphoric acids. The alloy has improved thermal stability, fabricability and stress corrosion cracking resistance.

CLASSIFICATION

AWS	A 5.14: ER NiMo-10
EN ISO	18274: ~NiMo29Cr
DIN: W.Nr.	2.4600
DIN	1736:

SUITABLE FOR Hastelloy B2, Hastelloy B3, dissimilar welding Hasteloy to nickel- of iron-based corrosion alloys, for weld overlay cladding

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Fe	P	S	Si	Cu	Co	Cr	Mo	W	Al	Ti	Nb+Ta	V	Others	Ni
<0.01	<3.0	1.0-3.0	<0.03	<0.01	<0.10	<0.20	<3.0	1.3-3.0	27.0-32.0	<3.0	<0.50	<0.20	<0.20	<0.20	<0.50	bal.

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				20°C	-40°C	-60°C	
	544	824	45	195			

WELDING PARAMETERS PACKING

D (mm)	Welding Parameters			Voltage (V)	Packing kg / pack
	Length (mm)	Current (A)			
0.9 (GMAW)		50-125		17-22	13.6 /spool
1.6 (GTAW)	915	30-60		9-12	4.54
2.4 (GTAW)	915	60-95		9-12	4.54