



AMPCO-TRODE® 46

Nickel-Aluminium-Bronze

Classifications

AWS A5.7	: E CuNiAl
ASME SFA 5.7	: ER CuNiAl
MIL-E-23765/3A	: MIL-CuNiAl

*Note: A weld test is required on each Heat/lot of material to conform to MIL-E23765/3A

Approvals

ABS Certified	: ERCuNiAl
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Description

- AMPCO-TRODE® 46 nickel-aluminium bronze was developed for the welding of cast and wrought nickel-aluminium bronze
- AMPCO-TRODE® 46 is also recommended for weld repairing NiBral boat propellers
- Typical applications include ship fittings, power plant valves, intake screens, welding AMPCO® 45, oil recovery pumps, propeller gear housings, marine propulsion systems, ship propellers, piping systems and welding AMPCO® 483

Typical Applications

Ship fittings, ship propellers, power plant valves, piping systems, intake screens, welding AMPCO® 483, welding AMPCO® 45, marine propulsion systems, propeller gear housings and oil recovery pumps.

Limiting chemical composition of all-weld metal (%)

Cu*	Al	Fe	Ni	Mn	Si	Other
Rem.	8.50-9.50	3.0-5.0	4.0-5.50	0.60-3.50	0.10 max	0.50 max

*Including silver

Mechanical properties (nominal all-weld metal values)

	Yield Strength	Tensile Strength	Elongation	Area Reduction	BHN (3000 kg)
	(MPa)	(MPa)	(% in 51mm)	%	6.4 mm deposit
Example	407	718	23	22	196

Sizes available

Diameter	(mm)	0.9	1.2	1.6
Spool size	(kg)	0.68 & 13.6	0.68 & 13.6	13.6

Recommended welding parameters

Refer to AMPCO® welding products brochure or website for recommended welding parameters.