



# AMPCO-TRODE® 46

Nickel-Aluminium-Bronze

## Classifications

AWS A5.7 Class E CuNiAl

ABS Certified: ER CuNiAl

ASME SFA 5.7 Class ER CuNiAl

\*MIL-E-23765/3A Type MIL-CuNiAl

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

## 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.

## Limiting chemical composition of all-weld metal (%)

Cu*	Al	Fe	Ni	Mn	Si	Others
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)

	Y.S. (MPa)	T.S. (MPa)	El. (% in 51mm)	Area Reduction %	BHN (3000 kg) (6.4 mm deposit)
Example	407	718	23	22	196

## Sizes available

	(mm)	1.6	2.4	3.2	4.0	4.8
Diameter	(mm)	1.6	2.4	3.2	4.0	4.8
Length	(mm)	914	914	914	914	914
Tube size	(kg)	4.5	4.5	4.5	4.5	4.5

## Recommended welding parameters

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