

**Data Sheet** 

## TH246 Nickel Aluminum Bronze

#### **DESCRIPTION**

TH246 Nickel Aluminum Bronze is known for its high bond strengths and its ability to produce a dense and wear resistant coating. Nickel has been added to this material to increase its hardness as well as aid in its ability to resist mechanical and thermal shock. Additionally characteristics of this material would be its resistance to cavitation and high corrosion resistance.

#### TYPICAL DEPOSIT CHARACTERISTICS:

Bond Strength 7000 psiTypical Hardness HRB 30-35

• Deposit Rate 18 lbs./hr./150-200 Amps

• Deposit Efficiency 85%

• Wire Coverage 2 sq. ft./lbs. @ 12 mils

Surface Texture VariableMachinability Good

#### **SURFACE PREPARATION:**

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. NOTE: It is best not to handle surfaces after cleaning. Recommended method of preparation is, to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe. \*Thermion recommends a 3.5 mil minimum anchor tooth profile.

#### **Applications:**

- Saltwater Pumps
- Natural Gas Compression Piston and Cylinder Liner

#### NOMINAL CHEMICAL COMPOSITION (wt. %):

Cu	Al	Ni	Mg	Remain
81.5	9	4	1.5	.5

# **RECOMMENDED SPRAY PARAMETERS:**

Diameter	Air Pressure	Voltage	Amperage	Standoff
I/I6" (I.6mm)	80-100 psi	28-32	100-300	4-7" (10-17cm)

Parameters are typical and may vary depending on equipment used.

### STANDARD SIZES & PACKAGING:

Diameter Packaging

I/I6 (I.6mm) 33#