



### TH500 Silicon Bronze

#### DESCRIPTION

TH500 or Silicon Bronze is a copper based material with added silicone. This material is used in applications such as bearing surfaces that require a degree of lubricity.

#### TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 5800 psi
- Typical Hardness HRB 95-100
- Deposit Rate 18 lbs./hr./150-200 Amps
- Deposit Efficiency 80%
- Wire Coverage 2 sq. ft./lbs. @ 12 mils
- Surface Texture Variable
- Machinability 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:

- Cosmetic repair
- Decorative Coating

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

Si	Mn	Fe	Zn	Cu
2.91	0.89	0.01	.005	Bal

#### RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	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
1/16 (1.6mm)	33#
3/32 (2.3mm)	33#