

**TH204 NiCrAl****DESCRIPTION**

TH204 produces a self-bonding nickel-chromium-aluminum deposit with excellent high temperature oxidation and corrosion resistance. TH204 can be used for dimensional restoration of parts and is widely used in aircraft repair market. The coating can be used as an undercoat for ceramics.

TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 9500 psi
- Typical Hardness HRB 85-95
- Deposit Rate 18 lbs./hr./150-200 Amps
- Deposit Efficiency 70%
- Wire Coverage 2 sq. ft./lbs. @ 12 mils
- Corrosion Resistance Good
- 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:

- Bond coat
- Dimensional restoration

NOMINAL CHEMICAL COMPOSITION (wt. %):

| Ni | Cr | Al |
|------|-----|-----|
| 20.0 | 7.0 | 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) | 25# Spool |