



## TH006 Cobalt Chrome

### DESCRIPTION

TH006, is the most commonly used of the cobalt alloys. TH006 provides superb resistance to chemical and mechanical degradation over a wide temperature range. TH006 qualities are its capabilities for self-mated anti-galling properties, making its use in a wide range of hard facing applications and arc spray applications on valve seats and bearing areas. Applicable to all weldable steels, including stainless steels.

### 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. 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.

### APPLICATIONS:

Valve Seats

Bearing Areas

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

| Cr   | W   | C   | Co  |
|------|-----|-----|-----|
| 28.0 | 4.0 | 1.0 | Bal |

### RECOMMENDED SPRAY PARAMETERS:

| Diameter      | Air Pressure | Voltage | Amperage | Standoff       |
|---------------|--------------|---------|----------|----------------|
| 1/16" (1.6mm) | *50-60 psi   | 26-28   | 280-300  | *4-8 (10-20cm) |

\*Parameters are typical and may vary depending on equipment used.

### STANDARD SIZES & PACKAGING:

| Diameter     | Packaging |
|--------------|-----------|
| 1/16 (1.6mm) | 33#       |