

EXTREME 2000

CERAMIC COATINGS

PRODUCT DATA

Internal Product Bulletin:

Flame sprayed ceramic, thermal barrier coating.
Jet Hot Code: 2000

General information:

The coating provides high heat resistance. It requires a nickel-chrome bonding layer that also provides thermal oxidation resistance to steel substrates. It can be topcoated with any of the available ceramic topcoats for different appearances. The surface appearance is rough textured which is typical of a flame sprayed product.

Selection criteria:

Not intended to provide corrosion resistance to mild steel substrates. Application is line-of-sight. High temperature of the coating process may result in part distortion. Rough surface texture.

Surface preparation:

Thermal degrease/cleaning, masking, grit blasting

Typical thickness:

7-10 mils

Appearance:

Silver-gray, rough texture

Typical properties:

Service temperature:

2000F+

Adhesion (ASTM # D3359):

5B

Reverse impact resistance (ASTM # D2794):

>30<40 inch pounds

Direct impact resistance (ASTM # 2794):

>160 inch pounds

Mandrel bend (ASTM # B489):

< $\frac{3}{8}$ "

Chemical resistance:

Same as for 316 stainless steel.

Thermal shock and cycle, (ASTM # C1525):

No change from as-applied properties, 1100F/5X

Thermal conductivity (ASTM # D5470):

.039 W/mK

Heat reduction (temperature drop):

~8%