

Bulletin



Praxair Surface Technologies
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Praxair Surface Technologies
TAFE Incorporated
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File: 1.9.2.2CH-1376T
Issue: K10313
Original Issue

COATING PROPERTIES

TAFE 1376T PREMIUM CHROME CARBIDE - 25% NICHROME

Spray Conditions:

Excellent coatings of TAFE 1376T can be obtained at spray rates from 2 to over 10 lb/hr with the JP-5000. For typical starting conditions see bulletin 1.9.2.2SH-1376T-1.

| | |
|-----------------|---|
| | <u>Spray Rate</u> 10 lb/hr (4.5 kg/hr) |
| Coverage | 78 ft ² /hr/0.001" (0.2 m ² /hr/mm) |
| Powder Required | 0.13 lb/ft ² -0.001" (25.1 kg/m ² -mm) |

Finishing Procedures:

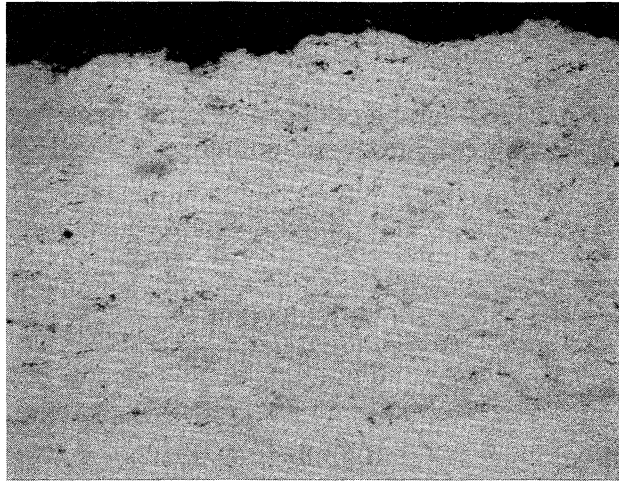
Use good quality, precision grinding equipment with coolant.

Typical setup:

| | | |
|---------------|------------------------|--------|
| Diamond Wheel | 150 grit | Rough |
| Diamond Wheel | 400 grit | Finish |
| Wheel Speed: | 5500 sfpm | |
| Infeed: | 0.0005" per pass | |
| Feedrate: | 400 sfpm (cylindrical) | |

Coatings:

| | | |
|---------------------|----------------------|---|
| Thickness (maximum) | | Over 0.125" (3.2 mm) |
| Finish - | As Sprayed Ground | 220 μ -in AA Less than 10 μ -in AA |
| Bond Strength | | Over 10,000 psi (Epoxy failure) at 0.020" Coating Thickness |
| Hardness - | Superficial Micro | 87-89 R _{15N} (53-57 R _c converted) 1000 - 1100 DPH ₃₀₀ |
| Microstructure - | Porosity Oxides | Less than 2% Less than 2% |



**TAFA 1376T CrC - 25 NiCr
As Sprayed at 10 lbs/hr**

**Magnification: 200 X
Etchant: None (As Polished)**

The coating data provided herein was generated by skilled operators using equipment in good working condition. The information is believed to be accurate and reliable; however, thermal spray results may vary. TAFE is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TAFE warrants that the equipment and powder is furnished free of defects in material and workmanship. No other warranty is expressed or implied.

Hazards:

Observe normal spraying practices. Respiratory and hearing protection is advised. For general guidelines see AWS Publication C2.1-73, and AWS TSS-85. Thermal spraying is a safe process when performed in accordance with proper safety measures.

For further information on HVOF coatings, equipment and supplies, as well as other thermal spray processes and custom automated systems, contact:

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