

**Technical Data****Bulletin**

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**File:** 1.9.2.2CH-1276F  
**Issue:** K10315  
**Supersedes:** J10901

**COATING PROPERTIES****TAFE 1276F NICKEL-TUNGSTEN-CHROMIUM Self-Fluxing Alloy****Spray Conditions:**

Excellent coatings of TAFE 1276F can be obtained at spray rates from 2 to over 20 lb/hr with the JP-5000. For typical starting conditions see bulletin 1.9.2.2SH-1276F-1 & 2

	<b><u>Spray Rate</u></b>	
	10 lb/hr (4.5 kg/hr)	20 lb/hr (9.07 kg/hr)
Coverage	110 ft <sup>2</sup> /0.001"/hr (0.3 m <sup>2</sup> /mm/hr)	200 ft <sup>2</sup> /0.001"/hr (0.5 m <sup>2</sup> /mm/hr)
Powder Required	0.091 lb/ft <sup>2</sup> -0.001" (17.7 kg/m <sup>2</sup> -mm)	0.101 lb/ft <sup>2</sup> 0.001" (19.5 kg/m <sup>2</sup> -mm)

**Finishing Procedures:**

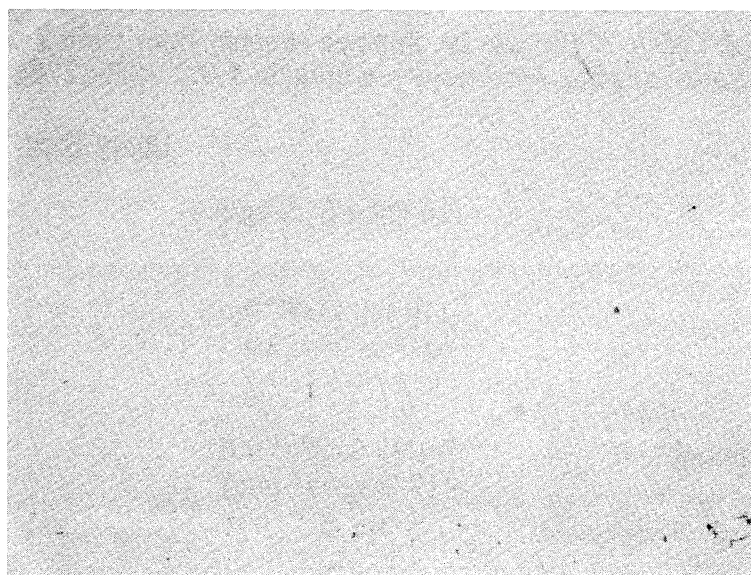
Use good quality, precision grinding equipment with coolant.

## Typical setup:

Silicon carbide wheel (Green)	150 grit - Rough
Wheel Speed:	5500-6500 sfpm
Infeed:	0.0005-0.001" per pass
Feedrate:	70-100 sfpm (cylindrical)

Coatings

Thickness (maximum)		Over 0.100" (2.5mm)
Surface Finish -	As Sprayed	175-200 microinch AA
	Ground	Less than 10 microinch AA
	Superfinish	Less than 2 $\mu$ -in
Tensile Bond Strength		9000+ psi (Epoxy failure at 0.015" thickness)
Hardness -	Superficial	91 R <sub>15N</sub>
	Macro	61 R <sub>C</sub> (Converted)
	Micro	740 DPH <sub>300</sub>
Microstructure -	Porosity	Less than 0.5%
	Oxide Content	Insignificant



**Tafa 1276F Ni-W-Cr SF Alloy**  
**Sprayed at 20 lb/hr**

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

**The information provided herein is believed to be accurate and reliable; however, results may vary with workpiece preparation and operator technique. Tafa warrants only that the powders are 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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