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COATING PROPERTIES**TAFE 1256F COBALT-CHROMIUM-TUNGSTEN-IRON-NICKEL (No. 6)****Spray Conditions:**

Excellent coatings of TAFE 1256F 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-1256F

	<u>Spray Rate</u>	
	10 lb/hr (4.5 kg/hr)	20 lb/hr (9.07 kg/hr)
Coverage	135.4 ft ² /hr/0.001" (0.32 m ² /hr/mm)	248.2 ft ² /hr/0.001" (0.586 m ² /hr/mm)
Powder Required	0.074 lb/ft ² -0.001" (14.41 kg/m ² -mm)	0.081 lb/ft ² -0.001" (15.72 kg/m ² -mm)

Finishing Procedures:

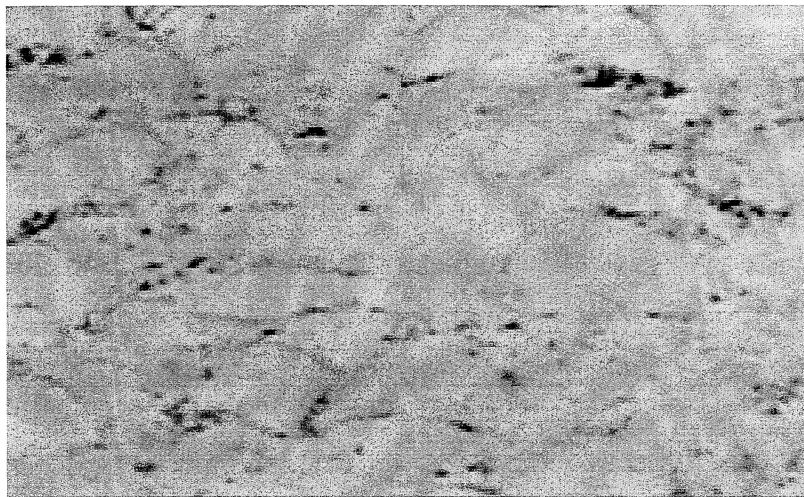
Coatings of TAFE 1256F can be ground to high finishes. Use good quality, precision grinding equipment with coolant. For grinding, the following setup is typical:

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"
Surface Finish -	As Sprayed	200-250 microinch AA
	Ground	Less than 10 microinch AA
	Superfinish	Less than 2 μ -in
Tensile Bond Strength		9000+ psi
Hardness -	Superficial	85 R _{15N}
	Macro	49 R _C
	Micro	775 DPH ₃₀₀
Microstructure -	Porosity	<2%
	Oxide Content	<2%



TFAFA 1256F Co-Cr-W-Fe-Ni Magnification: 200 X
Sprayed at 15 lb/hr Etchant: None (As Polished)

The information provided herein is believed to be accurate and reliable; however, results may vary with part preparation and operator technique. TFAFA is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TFAFA 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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