

File: 1.9.2.2CH-1275H
Issue: J10901
 Original Issue

COATING PROPERTIES**TAFE 1275H Nickel-Chromium Self-Fluxing Alloy****Spray Conditions:**

Excellent coatings of TAFE 1275H 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-1275H-1&2.

	<u>Spray Rate</u>	
	10 lb/hr (4.5 kg/hr)	20 lb/hr (9.07kg/hr)
Coverage	124 ft ² /0.001"/hr (0.3 m ² /mm/hr)	249 ft ² /0.001"/hr (0.6 m ² /mm/hr)
Powder Required	0.08 lb/ft ² /0.001" (15.7 kg/m ² /mm)	0.08 lb/ft ² /0.001" (15.7 kg/m ² /mm)

Finishing Procedures:

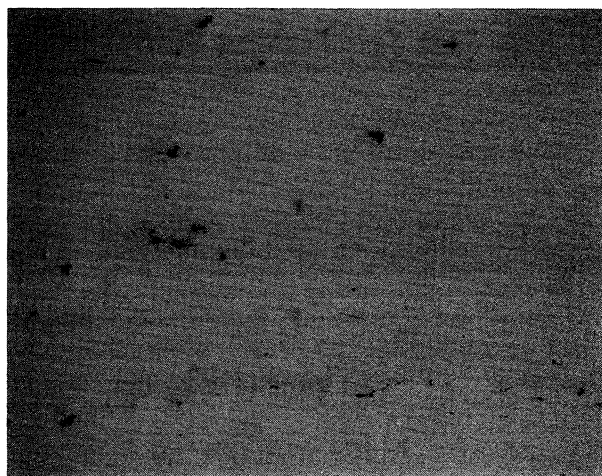
Use good quality, precision grinding equipment with coolant.

Typical setup:

Silicon carbide wheel	150 grit	Rough
Diamond Wheel	400 grit	Finish
Wheel Speed:	5500-6500 sfpm	
Infeed:	0.08-0.17" per pass	
Feedrate:	70-100 sfpm (cylindrical)	

Coatings:

Thickness (maximum)	Over 0.100"
Surface Finish - As Sprayed	175-200 microinch AA
Ground	Less than 10 microinch AA
Tensile Bond Strength	9000+ psi (Epoxy failure at 0.015" thickness)
Hardness - Superficial	87 R _{15N}
Macro	52 R _C
Micro	828 DPH ₃₀₀
Microstructure - Porosity	Less than 1%
Oxide Content	Less than 1%



TFA 1275H Ni-Cr SF Alloy Coating Magnification: 200 X
Sprayed at 20 lb/hr 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. TFAA is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TFAA 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:

TFAA Incorporated
 146 Pembroke Road, Concord, NH 03301
 (603) 224-9585
 (603) 225-4342