

Bulletin

File: 1.9.2.2CH-1265F
Issue: P10523
Supersedes: L11031

COATING PROPERTIES **TAFE 1265F ALLOY 625**

Spray Conditions:

Excellent coatings of TAFE 1265F 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-1265F.

	<u>Spray Rate</u>	
	10 lb/hr (4.5 kg/hr)	20 lb/hr (9.07 kg/hr)
Coverage	130 ft ² /hr/0.001" (0.3 m ² /hr/mm)	250 ft ² /hr/0.001" (0.6 m ² /hr/mm)
Powder Required	0.08 lb/ft ² x 0.001" (15.1 kg/m ² x mm)	0.08 lb/ft ² x 0.001" (15.6 kg/m ² x mm)

Finishing Procedures:

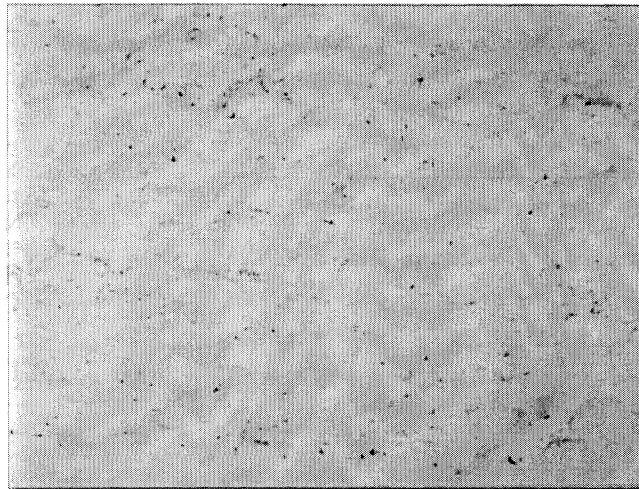
Coatings of TAFE 1265F are readily machined with carbide tools. Light cuts and high work speeds produce the best finishes. The coatings can also be ground to a very smooth finish. Use good quality, precision machining and grinding equipment with coolant.

Typical setup:

Wheel:	60 grit Silicon Carbide
Wheel Speed:	5500-6500 sfpm
Traverse/pass/rev:	0.080-0.170"
Infeed/pass/rev:	0.0004 - 0.0008"

Coating Properties:

Thickness (maximum)		Over 0.325" (8.25 mm)
Finish -	As Sprayed	200 μ -in AA
	Machined	100 μ -in AA
	Ground	Less than 16 μ -in AA
	Polished	8 μ -in AA
Bond Strength		Over 8,000 psi
Hardness -	Superficial	78 R _{15N}
	Macro	35 R _C
	Micro	657 DPH _{300g}
Microstructure -	Porosity	Less than 1%
	Oxides	Less than 3%



TAFAlloy 1265F Alloy 625 Coating Magnification: 200 X
As Sprayed at 20 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. TAFAlloy is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TAFAlloy 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:

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