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POWDER CHARACTERISTICS

TAFE 1241F COBALT - NICKEL - CHROMIUM - ALUMINUM - YTTRIUM ALLOY

Summary:

The TAFE 1241F powder is made exclusively for thermal spraying. Spraying with TAFE 1241F produces protective coatings suitable for use in hot corrosive or oxidizing environments up to 1850°F (1000°C). TAFE 1241F coatings are dense and extremely low in oxides and may be suitable to replace coatings currently applied by either plasma in air, Vacuum Plasma (VPS) or Low Pressure Plasma (LPPS) spraying. TAFE 1241F coatings are suitable to be used as the bond coat for Thermal Barrier Coatings (TBC's) in the aerospace industry and other applications.

CAUTION: All TAFE's powders are produced to exacting specifications and have been optimized for use in the JP-5000 HP/HVOF and PlazJet plasma spray processes. Use of other powders may not produce the properties listed in this Technical Data Bulletin.

Applications:

This material when used, with TAFE's JP-5000 HP/HVOF system, does not exhibit the thickness limitations of other thermal spray processes. Coating thicknesses of up to 0.100" (2.5 mm) are sprayed on a variety of applications, including:

Aircraft Engines

- Bond Coats for:
turbine blades
vanes
combustion liners
burner cans

Conforms to Powder Specification
RR 9507/47

Commercial

- Boiler walls
- Fans

Consult your TAFE coatings application engineer for help in solving your specific coating requirements.

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Composition:

	<u>WEIGHT %</u>
Cobalt	Remainder
Nickel	32
Chromium	21
Aluminum	8
Yttrium	0.5

Particle Size: -270 mesh/D

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.

The information provided herein is believed to be accurate and reliable; however, results may vary with part preparation and operator technique. TAFE is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TAFE warrants only that the powders are free of defects in material and workmanship. No other warranty is expressed or implied.

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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