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POWDER CHARACTERISTICS

TAFE 1375VM CHROMIUM CARBIDE - 25% NICHROME

Summary:

This powder is made exclusively for thermal spraying. Spraying with TAFE 1375VM powder results in a dense, well bonded and very hard coating which is well suited for fretting or abrasive wear and hard surfacing. The coating is also resistant to corrosion, heat and oxidation in temperatures up to 1500°F (815°C). Coatings produced with TAFE 1375VM are excellent for the replacement of hard chromium plating because TAFE 1375VM can be applied faster and more evenly. TAFE 1375VM is not as hard as a tungsten carbide coating so therefore it can be ground with a silicon carbide grinding wheel instead of a diamond wheel. TAFE 1375VM is also good for some nuclear applications (such as fuel rods) where coatings with tungsten carbide/cobalt cannot be used.

CAUTION: All TAFE 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:

- Petrochemical
 - Compressor rods
 - Sucker rods
 - Ball valves
- Hard Chrome Replacement
 - Marine diesel valve stems
 - Truck diesel valve stems
 - Camshaft lobes and journal areas
 - Landing gear rods
 - Wear and/or corrosion applications
- Fuel rod mandrels
- Paper rolls
- Hot crushing rolls
- Fretting wear applications in environment temperatures up to 1500°F (815° C)

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

Composition:

	<u>Weight %</u>
Chromium Carbide	75
Nickel	20
Chromium	5

Particle Size:

-325/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.

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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