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POWDER CHARACTERISTICS

TAFE® 1270F Nickel-Chromium-Molybdenum-Iron-Tungsten (Alloy C-22)

Summary:

TAFE 1270F powder is made exclusively for thermal spraying. TAFE 1270F has a chemical composition identical to Hastelloy® C-22. Thermal sprayed TAFE 1270F coatings are extremely dense and low in oxide content. Alloy C-22 has a higher chromium content than of either Alloy C or C-276. This higher chromium content results in increased corrosion resistance in both oxidizing and reducing environments. Coatings of TAFE 1270F show outstanding resistance to localized (pitting and crevice) corrosion. Coatings of TAFE 1270F display good metal to metal wear and abrasion resistance and are well suited to applications in the chemical refining and manufacturing industries, such as pump casings and valve parts and general corrosion resistance.

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:

- Digesters
- Boiler tubes
- Pump and Valve parts
- Plate and tubular heat exchangers
- Incineration systems
- Flue gas desulfurization systems
- SO₂ Cooling towers
- Sulfonation systems
- Chlorination systems
- Cellophane manufacturing
- Dye manufacturing
- Geothermal wells
- Nuclear fuel reprocessing
- Pickling system components

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

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Typical Composition:

	<u>% Weight</u>
Chromium	21
Molybdenum	13
Iron	4
Tungsten	3
Nickel	Remainder

Particle Size -270/D

TAFA is committed to a continuing program of product improvement. Product specifications are subject to change without notice. TAFA 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:

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