

POWDER CHARACTERISTICS

TAF A 1274H NICKEL-CHROMIUM SELF-FLUXING ALLOY

Summary:

The TAF A 1274H powder is made exclusively for thermal spraying. Spraying with TAF A 1274H results in smooth coatings which are of medium hardness (R_c40), dense and corrosion resistant. Good finishes can be achieved with little stock removal. TAF A 1274H is a self-fluxing alloy that can be "fused" after spraying to produce an even denser coating that is essentially pore-free. Though in many cases the as sprayed coating produced is good enough to be used as is to replace spray and fused coatings. The coatings are well suited for wear resistance by abrasion and hard surfaces, fretting, particle erosion and cavitation. The coatings can be used in temperatures up to 1500 F (815 C).

CAUTION: All TAF A'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 TAF A's JP5000 HP/HVOF system, doesn't seem to have thickness limitations as with other thermal spray processes. Coating thickness of over 0.325" (8.25 mm) are sprayed on a variety of applications. These applications include:

- Particle erosion wear at temperatures to 1500 F (815 C)
- Pump cavitation wear
- Fretting wear
- Power generation "soot blower" erosion
- Low temperature sliding wear
- Pump sleeves
- Glass mold dies
- Hot forming dies
- Forging tools
- Replacement for hard chrome plating

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

Composition:

	WEIGHT %
Nickel	Remainder
Chromium	10.7
Silicon	4
Boron	2.4
Iron	2.8
Carbon	0.4

Particle Size: -230/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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