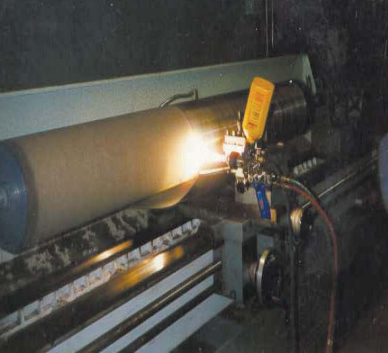


A Self-Bonding Nickel Aluminum Alloy Powder

ThermoTec® 18995



COATING

- Suitable for use with Plasma Non-Transferred Arc and high energy combustion thermal spray systems
- Self bonding to most conventional iron and nickel base alloys
- Meets PWA specification 1380
- Meets GE specification B50TF56 Class B
- Excellent high temperature oxidation resistance



DESCRIPTION:

ThermoTec 18995 is a pre-alloyed nickel aluminum powder suitable for use with conventional plasma non-transferred arc and high energy combustion spray systems. The powder undergoes an exothermic reaction during spraying and, as a result, produces coatings that are self-bonding to conventional iron and nickel base alloys.

ThermoTec 18995 is typically used as a bond coating for metals, ceramics and abradable top coatings. The powder can also be used as a single coating for build-up and general restoration applications.

ThermoTec 18995 is a premium grade, high performance powder suitable for use in aircraft related applications. ThermoTec 18995 meets several aircraft specifications including GE B50TF56 Class B and Pratt & Whitney 1380.

TECHNICAL DATA:

Powder Properties

Chemistry: Nickel-Aluminum alloy
Melting Point: Approx. 2620° F (1438°C)
Apparent Density: 2.8 g/cc
Hall Flow Rate: 29 sec/50 grams

Coating Properties

Macro Hardness: HRB 65
Coating Density: 7.2 g/cc (Combustion)
7.4 g/cc (Plasma)
Bond Strength: 5,000 psi (Combustion)
6,000 psi (Plasma)
Max. Service Temperature: 1200°F (650°C)
Surface Roughness:
As-Sprayed: 200 – 3500 Microinches AA
As-Ground: 10-20 Microinches AA
Finishing: Coatings of 18995 may be finished by machining with carbide tools or grinding.

APPLICATIONS:

- Cylinder Liners
- Expansion Joints
- Compressor Air Seals
- Pump Components
- Flap Tracks

HEALTH & SAFETY:

HAZARDS

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2. 1-73, "Recommended Safe Practices for Thermal Spraying and AWS TSS-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations.

DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic web site for Material Safety Data Sheet (MSDS) information.

DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



Eutectic Corporation
N94 W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA
P 800-558-8524 • F 262-255-5542
www.eutectic.com

Eutectic Canada
428, rue Aime Vincent
Vaudreuil-Dorion, Quebec J7V 5V5
Phone: (800) 361-9439
Fax: (514) 695-8793
www.eutectic-na.com

Eutectic Mexico
KM 36.5 Autopista
Mexico-Quertaro
54730 Cautitlan-Izcalli
Estado de Mexico, Mexico
Phone: 011 (52) 55-5872-1111
e-mail: eutectic@eutectic.com.mx

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