

Atomized Austenitic Stainless Steel Alloy Powder

Eutectic® 19300



COATING

- Two-step “Cold Process” powder
- Excellent resistance to atmospheric corrosion
- Precise particle sizing ensures coating consistency
- Good machinability



DESCRIPTION:

19300 is a water atomized austenitic alloy powder designed for use with the TeroDyn® System 2000. It is a Two-Step "Cold Process" powder which must be used in conjunction with a bond coat powder such as 50000 or 21031. Controlled composition is based on 316 stainless steel. Precise control of particle size and chemistry ensure that coatings will offer excellent resistance to atmospheric corrosion, a low coefficient of friction and good machinability.

TECHNICAL DATA:

Coating Properties:

Typical macro-hardness: Rockwell B Scale, 90
Typical density: 7.0 g/cc
Thickness limit: 0.075 inch
Max. service temperature: 1,000°F (538°C)
Corrosion resistance: For immersion service a coating sealer is recommended; please contact Technical Services to discuss your application: 800-361-9439.

Powder Properties:

Hall flow rate: 30 seconds
Bulk density: 2.7 g/cc
Powder coverage: 0.042 lbs/ft² @ 0.001"

RECOMMENDED COATING & SPRAY PARAMETERS:

TD 2000	
Nozzle	RL 200
Module Adaptor	Yellow/Red
Oxygen	50 psi / 35 flow (FM-1 flowmeter)
Acetylene	12 psi / 75 flow (FM-1 flowmeter)
T-Valve Setting	18 clicks
Coating Rate	15.0 lbs/hr
Spray Distance	5-7 inches

PROCEDURE FOR USE:

Single Point Turning
(Do Not use coolant unless coating is sealed)

Tool: Carbide, ISO K01

Rake Angle: -5°

Turning Speed: 100 SFPM

Cross Feed: 0.002-0.007 inch/rev

In Feed:

roughing: 0.01-0.04 inch

finishing: 0.002-0.005 inch

Grinding

(Do Not use coolant unless coating is sealed)

Wheel Specification: 11 C 80 F 13 V Pmf (for 16" wheel)

Wheel Speed: 5000 - 6000 RPM

Cross Feed

roughing: 75% of the wheel width per revolution
of work piece

finishing: 12.5% of the wheel width per revolution
of workpiece.

In Feed roughing: generally less than 0.005"; operator
experience should guide this operation.

finishing: should never exceed 0.001 to 0.002 inch.

Coolant: Coating should be sealed so that coolant can be
used.

TYPICAL APPLICATIONS:

- Valves
- Shafts
- Armatures
- Packing glands
- Pistons
- Rolls
- Sleeves
- Seal areas
- Chemical process parts
- Journals
- End bells

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