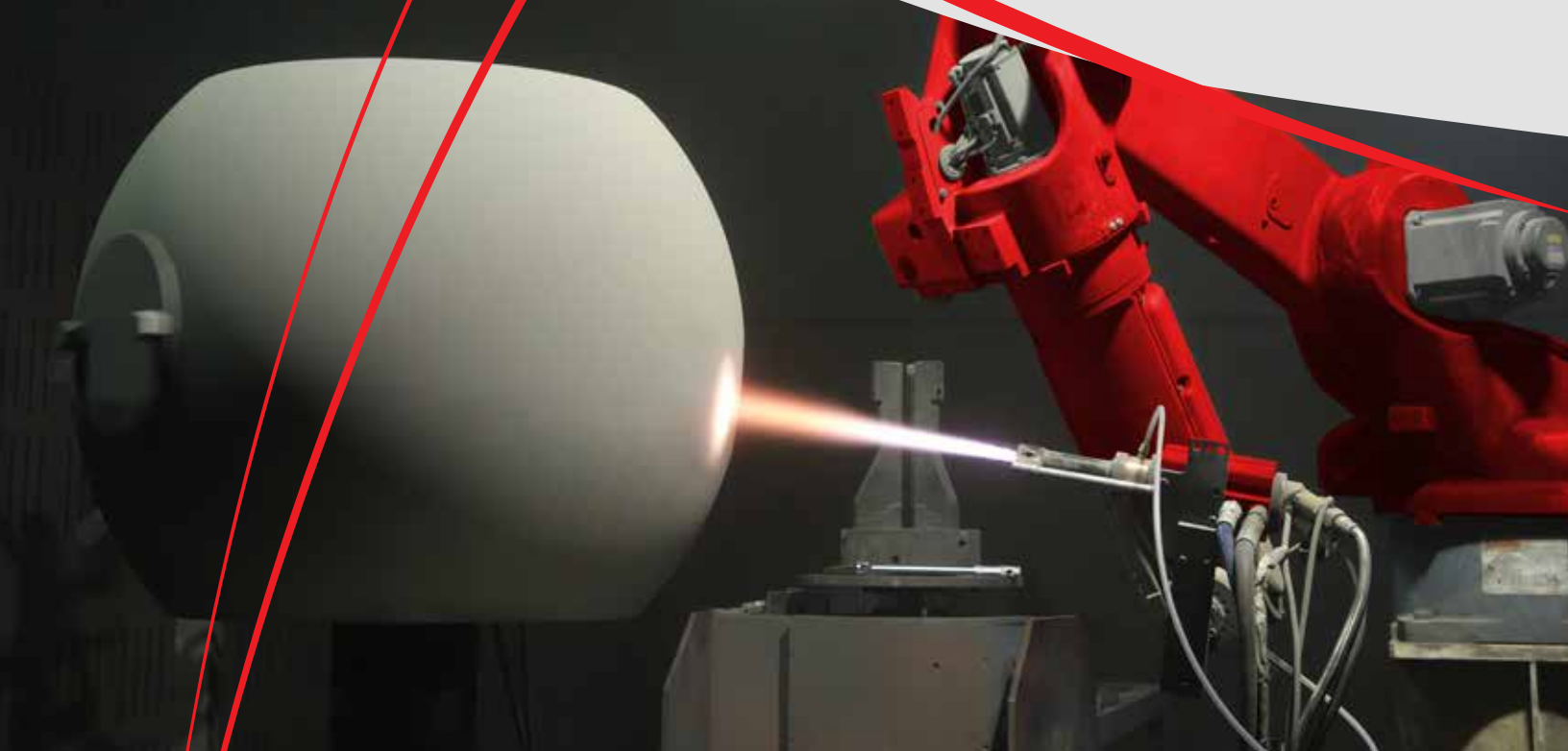




Water Atomized Nickel, Chromium,
Boron and Silicon HVOF
Thermal Spray Powder

TeroJet

55396



- Hard, dense coatings with excellent corrosion resistance
- May be used as sprayed or spray and fused for superior bonding to the base metal
- Very good abrasion resistance
- May be used with some non-HVOF application systems

TeroJet 55396

TeroJet 55396 is a water atomized Nickel Chromium Boron Silicon alloy powder designed specifically for application via thermal spraying. The powder may be applied using HVOF, low velocity combustion or plasma NTA systems.

Coatings of 55396 may be used in the as-sprayed condition or subsequently fused with a heating torch. The fusing operation will densify the coating and will produce metallurgical bonding to the base metal. For applications where it is desirable to use the coating in the as-sprayed condition, then HVOF is the preferred method of application. The coatings produced are hard, dense and will exhibit high bond strengths to a wide variety of base metals. TeroJet 55396 coatings offer excellent resistance to abrasion and hard particle erosion.

TECHNICAL DATA

Typical Values	
Hardness / R15N:	87-88 (HRC 54-56 converted)
Bond Strength:	>5,000 psi (ASTM C633)
Porosity:	< 3 %
Oxide Content:	< 2 %
Coating Density:	7.5 g/cc
Service Temperature:	1200°F / 650°C (Max)
As-Sprayed Roughness:	200 micro-inches AA
As-Ground Roughness:	< 20 micro-inches AA
As-Ground and Lapped:	< 5 micro-inches AA
Melting Point:	1875°F (1023°C)

Powder Properties:

Nickel, Chromium, Silicon, Boron, Carbon, Iron

PROCEDURE FOR USE:

Finishing Procedure

Coatings of TeroJet 55396 may be finished by grinding using silicon carbide wheels with flood coolant. Follow the tool manufacturer's recommendations for speeds and feeds.

TYPICAL APPLICATIONS

- Pump Shafts
- Wear Rings
- Seals
- Compressor Rods
- Chrome Plate Replacement Applications
- Brick Dies

When applying 55396 powder via the HVOF process, respiratory, hearing and eye protection is required. For general guidelines consult AWS Publication C2.1-73 and AWS T5S-85, "Recommended Safe Practices for Thermal Spraying and AWS T5S-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.



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