POWDER

EUTALLOY 10011

A Hot Process, Nickel-Based Alloy With Tungsten Carbide Particles

DESCRIPTION

Eutalloy 10011 is a powder designed for anti-wear applications, particularly for fine particle abrasion. The powder produces a coating consisting of a high volume of tungsten carbide particles (80% by weight) embedded within a hard nickel-chromium matrix. The unique characteristics of this composit coating enable it to substantially extend the service life of components, more than twice as effective as any comparable coating material.

* Product Details

- Tungsten carbide particles in a hard Ni-based matrix ensures high wear resistance for extremely long service life
- Coatings combined with easy to use Eutectic equipment provides versatility in protecting equipment and parts
- Thin, strong and durable deposits lead to maintenance savings.

APPLICATION

Thin Overlay: Recommended (< 2mm}

- Mixer Blades :Cutter Wheels
- Post Hole Augers : Crawler Shoes
- Rock Bits : Muller Blades
- Choppers : Chutes
- Debarker Chains:Liners
- Plowshares : Furrowing Shovels
- Cultivator Blades: Billet Tongs
- Skid Cleats : Grapple Arms
- Catwalks, Stair Treads : Ladder Rungs
- Revolving Platforms : Conveyor Cleats
- Grippers: Guides
- Lift Devices : Feed Devices
- Clamping Devices

PROCEDURE FOR USE

Preparation:
All oxides, dirt, grease, or other contaminants should be removed before application. This can be accomplished by mechanical preparation with a file, cutting tool (without lubrication), clean wire brush, grinding or grit blasting.

Coating Procedure:
Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.

Leave the part to cool slowly and away from air currents.
Where possible, place it in vermiculite or cover with a thermal blanket

Finishing:
Grind with a green or black silicon carbide wheel,
24-36 grit for rough work and 60 or finer grit for finishing.

Technical Data
Typical hardness:
Hardness(Matrix): 60 HRC
Hardness (Tungsten Carbide): 1900 µHV

Service Temperature: 1200°F (649°C)

EUTALLOY 10112

Hot Process, Multi-Component, Nickel-Based Alloy Powder Containing Carbide Particles

DESCRIPTION

Eutalloy 10112 is a multi-component nickel-based alloy powder blend containing carbide particles. It is a hot process powder designed to be applied and fused using the Eutalloy type thermal spray process. Suitable for use on steels, stainless steels, cast irons and nickel-based alloys that are subject to severe abrasive wear. Coatings are hard and smooth as applied. They resist abrasion, friction, erosion, cavitation, and fretting. The coating will not peel or scale when exposed to elevated temperatures. The carbide particles are sized to provide optimal resistance to both fine and coarse abrasive particles. Coatings can be put in service as deposited or finished by grinding and polishing

* Product Details

- Designed for the Spray and Fuse process
- Carbide particles are sized to provide resistance to fine and coarse abrasive particulate
- Excellent for use on steels, stainless steels, cast irons and nickel-based alloys
- Excellent resistance to abrasion, friction, erosion, cavitation and fretting

APPLICATIONS

Thin Overlay: Recommended (< 2mm}

- Auger Points : Coal Pulverizers
- Coveyor Chains : Sand Slinger Cups
- Coal Feed Screws : Post Hole Diggers
- Pug Mill Knives: Debarker Knives
- Mixer Blades: Wear Plates
- Fly Ash Chutes :Drill Bits
- Plow Discs and Harrows

PROCEDURE FOR USE

Preparation:
All oxides, dirt, grease, or other contaminants should be removed before application. This can be accomplished by mechanical preparation with a file, cutting tool (without lubrication), clean wire brush, grinding or grit blasting.

Coating Procedure:
Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.

Leave the part to cool slowly and away from air currents.

Where possible, place it in vermiculite or cover with a thermal blanket

Finishing:
Grinding Wheel Type: Aluminum Oxide
Grit Size: 120 or finer Concentration

Notes:
1. Before grinding, all edges and ends of coating must be chamfer ground.
2. Frequently dress the grinding wheel face to reduce friction an and heat .

Technical Data
Typical hardness
Hardness(Matrix): 60 HRC
Hardness (Tungsten Carbide): 1900 µH

Service Temperature: 1000°F (538°C)

EUTALLOY 10146

Copper Alloy Designed For The Eutalloy Process

DESCRIPTION : Eutalloy 10146 is a copper-tin Eutalloy alloy designed for build-up and joining of copper-base alloys. It provides an excellent combination of machinability and corrosion resistance.

Product Details:

Excellent machinability
- Very good corrosion resistance
- Low coeffi cient of friction

APPLICATIONS:

Deposit Thcikness: Unlimited

- Shafts
- Gears
- Gauges
- Slideways
- Beds
- Molds
- Keyways
-
-

PROCEDURE FOR USE:

Preparation:

All oxides, dirt, grease, or other contaminants should be removed before application. This can be accomplished by mechanical preparation with a file, cutting tool (without lubrication), clean wire brush, grinding or grit blasting.

Coating Instructions:

Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.
Note:
Spray a thin coat of Eutalloy 10224 to prevent oxidation of the base material.
Leave the part to cool slowly and away from air currents.
Where possible, place it in vermiculite or cover with a thermal blanket.

Finishing:
Grinding or maching

TECHNICAL DATA:

Typical hardness: 28 HRB
Maximum Service Temperature: 700°F (371°C)

EUTALLOY 10185

Nickel-Based Alloy Designed For The Eutalloy Process

DESCRIPTION

Eutectic 10185 is a nickel-based Eutalloy alloy designed to provide a combination of machinability and resistance to wear and corrosion. Excellent weldability and machinability permits easy contour forming on steels, stainless steel, nickel alloys and cast irons. The Eutalloy process permits precise deposition of 10185 so that thin, tough overlays can be applied and dimensional tolerances maintained.

Product Details:

- Excellent resistance to wear and corrosion
- Excellent weldability and machinability on a wide range of steels and stainless steels
- Thin, tough overlays maintain tight dimensional tolerances

APPLICATIONS

Deposit Thcikness: upto 10 mm

- Bearing Surfaces: Molds
- Crankshaft Journals: Pump Parts
- Dies :Shafts
- Diesel Valves : Tile Dies
- Feed Rolls : Valve Plugs
- Material Pins : Valve Seats
- Glass Mold Plungers

PROCEDURE FOR USE:

Preparation:

All oxides, dirt, grease, or other contaminants should be removed before application. This can be accomplished by mechanical preparation with a file, cutting tool (without lubrication), clean wire brush, grinding or grit blasting.

Coating Procedure:

Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.

Leave the part to cool slowly and away from air currents.

Where possible, place it in vermiculite or cover with a thermal blanket.

Finishing:

Grinding Wheel Type: Green Silicon Carbide
Grit Size: 75

TECHNICAL DATA:

Typical hardness: 39 HRC
Maximum Service Temperature: 1400°F (760°C)

EUTALLOY 10224

Nickel-Based Alloy Recommended For Cast Iron Protection And Repair

DESCRIPTION

Eutalloy 10224 (NiTec) is a nickel-based alloy with properties which make it ideal for protective coating, joining and cladding applications on a variety of base metals including steels, cast irons and nickel alloys. The deposit is easy to machine, with standard cutting tools, and has a low coefficient of friction and wear resistance properties which make it ideal for protection against metal-to-metal friction. It is also exceptionally heat resistant. Eutalloy 10224 is manufactured by a process of atomization, designed to ensure both optimum spheroidization and controlled granulometry. This in turn ensures troublefree fusion of the alloy using our SuperJet Eutalloy torch. Eutalloy 10224, applied with a Eutalloy system, produces smooth and uniform quality coatings. This maintenance-engineered coating technology increases the value and reliability of parts treated, with results far superior to conventional repair processes, and savings in costs including those of machining.
Eutalloy 10224 is recommended for rectifying both machining and casting defects, as well as for protective coatings against oxidation, with a considerable gain in service life for a number of parts.

Product Details:

- Ideal for protective coating, joining and cladding applications
- The deposit is easy to machine with standard cutting tools
- Exceptionally heat resistant
- Ideal for protection against metal-to-metal friction

Metal-to-metal friction property: Excellent
Corrosion resistance: Very good
Machinability: Excellent, with normal cutting tools

APPLICATIONS:

Deposit Thcikness: Unlimited

Recommended for corrosion/wear-resistant coatings on journals and gearwheels, exhaust manifolds, etc., for repair of casting and machining defects and for repair of worn areas of deep-drawing dies.

PROCEDURE FOR USE:

Preparation:

All surfaces to be coated should be thoroughly cleaned,removing all contaminants, oxides and grease. Thin surfaces and edges require no preheating. However, large, heavy and cast iron parts of all thickness should be heated to about °575F (approx. °302C) (blue hot).

Coating instructions:

Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.
Leave the part to cool slowly and away from air currents.
Where possible, place it in vermiculite or cover with a thermal blanket.

TECHNICAL DATA:

Typical hardness:: 90 HRB
Maximum Service Temperature: 1112° (600°C)

EUTALLOY 10680

Nickel-Based Alloy Recommended For Cast Iron Protection And Repair

DESCRIPTION

Eutalloy 10680 is a premium nickel base alloy powder designed to provide easy build-up on cast iron parts and excellent machinability. Machined deposits are bright and porosity free. The hardness of this alloy promotes good edge integrity while not detracting from its machinability. The high compressive strength of this alloy resists deformation at elevated temperatures. Deposits will not scale even at elevated temperatures. The Eutalloy process permits precise deposition with a minimal amount of overspray. Thin, tough overlays can be applied and dimensional tolerances maintained.

Product Details:

Deposists are easily machinable and porous-free
- Compressive strength resists deformation at high temperatures
- No deposition scaling with increased temperatures
- Precise deposition with minimal overspray

APPLICATIONS:

Deposit Thcikness: Unlimited

General-purpose build-up and dimensional restoration for cast iron and steel parts such as:

- Gears Shafts
- Patterns
- Clutches

EQUIPMENT:

Eutalloy 10680 may be applied by either the Eutalloy B torch or the UltraJet Eutalloy torch using acetylene as the fuel gas.

PROCEDURE FOR USE:

Preparation:

All surfaces to be coated should be thoroughly cleaned, removing all contaminants, oxides and grease. Thin surfaces and edges require no preheating. However, large, heavy and cast iron parts of all thickness should be heated to about °575F (approx. °302C) (blue hot).

Coating instructions:

Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.

Leave the part to cool slowly and away from air currents.

Where possible, place it in vermiculite or cover with a thermal blanket.

TECHNICAL DATA:

Typical hardness: 95 HRB
Tensile Shear Strength: 517N/mm2 (75,000psi)
Maximum Service Temperature: 1200°F (649° C)

Proxon 21021

Pre-Alloyed, Self-Bonded Powder Whichproduces Homogenous Coatings With Conventional Combustion Or Plasma Thermal Spray Equipment

DESCRIPTION

ProXon 21021 is a pre-alloyed, self-bonding powder which produces homogenous coatings with conventional combustion or plasma thermal spray equipment. The unique exothermic nature of the powder minimizes dependence on operator technique to obtain excellent quality coatings. A separate bond coat material is not required.

21021 powder is specially designed to produce coatings for many applications involving wear due to abrasion, particle erosion, fretting and bearing-fit surfaces. Coatings exhibit excellent inter-particle and tensile bond strengths. This results in an extremely "tough" coating that will display excellent impact resistance for a thermal spray coating.

Coating can be deposited more economically than other conventional self-bonding materials, with all spray systems, due to higher spray rates, higher deposit efficiencies and greater coverage per pound. Additionally, because of the unique Manufacturing process used to produce Proxon 21021 nozzel build-up and loading , frequently a problem with composite selfbonding powders, is eliminated.

Product Details

- Minimal operator technique needed for excellent coatings
- Seperate bond coating material is not required
- Excellent impact resistance for a thermal spray coating
- May be finished by machining

APPLICATIONS

Thickness Limit: >0.125 inch

Transportation:
Crankshafts, Timing Gear Fits, Pully Fits, Thrust Faces
Pulp and Paper:
Pump Shaft, Bearing Fits
General:
Dimensional Restoration, Hydraulic Cylinder Cases

PROCEDURE FOR USE:

Preparation:

Clean and preheat the spray areas to 50 – 150°C. Remove damaged material and round off edges.

Spraying:

Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.

Apply the powder in the preheated state to achieve the desired coating thickness. Maintain the spray layer temperature between 50°C and 200°C. Do not exceed a coating thickness of 2 mm.

Cooling: Allow the coating to cool in still air.

Good machined finishes can be obtained using carbide tools with low turning speeds in the range of 50 to 80 surface feet per minute.

Finishing can be done at less than 0.004 inch per revolution crossfeed with infeed of less than 0.005 inch (turningspeed can be increased somewhat for finishing). Coolants and applications involving corrosion should be avoided.

Note: please refer the parameters given in operation manual .

TECHNICAL DATA

Values	Combustion	Plasma
Macrohardness:	78 HRB	84HRB
Microhardness:	175 DPH	215 DPH
Bond Strength:	>5000 psi	>6000psi

Max. Service Temperature: 1200°F (649°C)
Melting Point: 2500°F (1371°C)

ProXon 21023

An Easy-To-Machine, One-Step, Iron-Nickel- Aluminum-Molybdenum Powder

ProXon 21023 is an iron - nickel - aluminum - molybdenum composite powder designed for use with both Plasma spray and Combustion spray processes.
Coatings of 21023 exhibit excellent self-bonding properties and are suitable for use as a one-step product. Each lot of powder is subjected to extensive quality checks to insure a consistent particle size distribution and chemical composition. Coatings of 21023 are recommended to satisfy a number of broad requirements:
Machinabil i t y - Exhibits better machinability and less tool wear than similar coatings.
Oxidation Resistance - Coatings are resistant to oxidizing a tmos p h e r e s u p t o a maximum temperature of 1500°F.
Bond Coating - May be used as a bond coat for nickel - chromes, carbides or stainless steels.

Product Details

- Outstanding machinability
- Excellent oxidization resistance
- High quality coatings with minimum operator technique dependence
- May be used for bond coat for nickel-chromes, carbides or stainless steels

APPLICATIONS

Thickness Limit: >0.125 inch

- Salvage and build-up of carbon steel and stainless steel parts
- Exhaust mufflers and heat treating fixtures
- Press fits and bearing seats to resist fretting wear

PROCEDURE FOR USE:

Preparation:
Clean and preheat the spray areas to 50 – 150°C. Remove damaged material and round off edges.
Spraying:
Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.
Apply the powder in the preheated state to achieve the desired coating thickness. Maintain the spray layer temperature between 50°C and 200°C. Do not exceed a coating thickness of 2 mm.
Cooling: Allow the coating to cool in still air.
Good machined finishes can be obtained using carbide tools with low turning speeds in the range of 50 to 80 surface feet per minute.
Finishing can be done at less than 0.004 inch per revolution crossfeed with infeed of less than 0.005 inch (turningspeed can be increased somewhat for finishing). Coolants and applications involving corrosion should be avoided.

Note: please refer the parameters given in operation manual .

TECHNICAL DATA

Typical hardness: 87 HRB
Bond Strength : 6000 psi
Max. Service Temperature: 1500°F (816°C)

Proxon 21031

Pre-Alloyed, Self-Bonding “Stainless Type“ Nickel-Chromium Powder

Description

Proxon 21031 is a pre-alloyed, self-bonding «stainless type» nickel-chromium powder designed for producing homogenous coatings using conventional combustion or plasma thermal spray equipment. It is particularly well-suited for applications involving corrosion at high temperatures.

Product Details

Coating of parts in the pulp & paper industry
Protection of fan blades, shaft sleeves, and roller bearing seats
Coating of compressor pistons

APPLICATIONS:

Thickness Limit: >0.125 inch

Proxon 21031 is a self-bonding NiCrAl alloy with good resistance to corrosion from wastewater. Coatings from Proxon 21031 have a very low coefficient of friction and provide thick deposit capability (<3mm).
Utilities: Pump shaft bearing fit, pump pistons, impeller shafts
General: Electric motor shafts, end bells, grinder spindle bearings, drill press quills

PROCEDURE FOR USE

Preparation:
Clean and preheat the spray areas to 50 – 150°C. Remove damaged material and round off edges.
Spraying:
Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.
Apply the powder in the preheated state to achieve the desired coating thickness. Maintain the spray layer temperature between 50°C and 200°C. Do not exceed a coating thickness of 2 mm.
Cooling: Allow the coating to cool in still air.
Good machined finishes can be obtained using carbide tools with low turning speeds in the range of 50 to 80 surface feet per minute.
Finishing can be done at less than 0.004 inch per revolution crossfeed with infeed of less than 0.005 inch (turningspeed can be increased somewhat for finishing). Coolants and applications involving corrosion should be avoided.

Note: please refer the parameters given in operation manual

TECHNICAL DATA

Values	Combustion	Plasma
Macrohardness:	HRB 85	HRB 90
Microhardness:	DPH 225	DPH 260
Bond Strength:	>4000 psi	>5000 psi
Max Service Temp.:	1600°F	1800°F

Melting Point: °2550F (°1379C)

Proxon 21071

Gas Atomized Aluminum - Bronze Alloy Powder Used In Both Plasma Spray And Combustion Spray Processes

Description

Proxon 21071 is a high-quality, gas-atomized aluminum-bronze alloy powder designed for use in both plasma spray and combustion spray processes. It is particularly well-suited for applications requiring machinable coatings with excellent corrosion resistance.

Product Details

High-Quality Machinable Coatings: Ideal for soft bearing applications.
Repeatable, High-Integrity Coatings: Requires minimal operator technique.
Versatility: Can be used on steel and copper alloy parts to restore dimensions, provide self-lubricating surfaces, and offer excellent corrosion resistance in caustic solutions.

APPLICATIONS

Thickness Limit: 0.08 inch

Repair of Ship Screws
Coating of Metal Parts from Chemical Engineering
Protection of Shafts, Pistons, and Bearing Seats
Rebuilding of Worn Parts
Coating of Valve Seats
Reclaiming Copper-Base Parts
Diesel Engine Cooler Element Parts
Transmission Gear Shafts and Piston Guides
Shifter Forks
Worn Bearing Fits

PROCEDURE FOR USE

Preparation:
Clean and preheat the spray areas to 50 – 150°C.
Remove damaged material and round off edges.
Spraying:
Roughing can be done at 0.004 inch per revolution crossfeed with infeed of 0.010 to 0.030 inch.
Apply the powder in the preheated state to achieve the desired coating thickness. Maintain the spray layer temperature between 50°C and 200°C. Do not exceed a coating thickness of 2 mm.
Cooling: Allow the coating to cool in still air.
Good machined finishes can be obtained using carbide tools with low turning speeds in the range of 50 to 80 surface feet per minute.
Finishing can be done at less than 0.004 inch per revolution crossfeed with infeed of less than 0.005 inch (turningspeed can be increased somewhat for finishing). Coolants and applications involving corrosion should be avoided.
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Note: please refer the parameters given in operation manual .

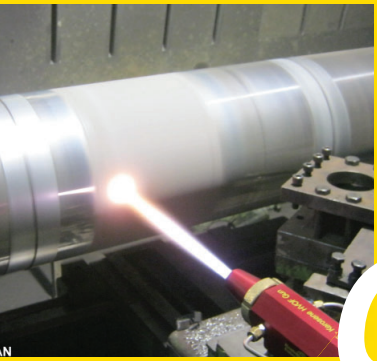
TECHNICAL DATA

Typical hardness: 60 HRB
Bond Strength : 3000 psi
Max. Service Temperature: 700°F (371°C)

Chromium Carbide, Nickel Chromium Powder Made for the Thermal Spray Process

TeroJet® 55 575

HVOF Powder




COATING

- Excellent for hard chrome plating replacement
- Very good abrasion resistance
- May be used with some non-hvof application systems
- Hard, dense coatings with excellent corrosion resistance

Castolin Eutectic®
Eutectic Castolin

DESCRIPTION:

TeroJet 55 575 is an agglomerated and sintered Chromium Carbide-Nickel Chromium Alloy powder designed specifically for application via thermal spraying. Optimum coating results will be achieved using HVOF. However, 55 575 powder may also be applied using plasma NTA systems.

Each lot of powder is subjected to extensive quality checks to insure a consistent particle size distribution and chemical composition. The powder is essentially spherical in shape. The HVOF coatings produced are hard, dense and will exhibit high bond strengths to a wide variety of base metals. Exceptional resistances to fretting, abrasion, oxidation and high temperature corrosion can also be expected.

TECHNICAL DATA:

COATING PROPERTIES:

Micro Hardness: 900-1000 DPH 100g
Hardness / R15N: 87-89 (HRC 53-57 converted)
Bond Strength: > 10,000 psi (ASTM C633)
Porosity: < 3 %
Coating Density: 6.4 g/cc
Service Temperature: 1500° F / 815° C (Max)
As-Sprayed Roughness: 175 -200 micro-inches AA
As-Ground Roughness: < 10 micro-inches AA
As-Ground and Lapped: < 5 micro-inches AA
Wear Resistance: 25-28 x 10^{-3} mm^3 volume Loss
(ASTM G65, Sch. A)

POWDER PROPERTIES:

Nominal Composition: Chromium Carbide
Nickel Chromium
Bulk Density: 2.9-3.4 g/cc^3

PROCEDURES FOR USE:

FINISHING PROCEDURE:

Coatings of 55 575 may be finished by grinding using silicon carbide wheels with flood coolant. Diamond wheels or belts may be used as an alternative. Follow the tool manufacturer's recommendations for speeds and feeds.

TYPICAL APPLICATIONS:

- Marine and Truck Diesel Valve Stems
- Chrome Plating Replacement Applications
- Compressor Rods
- Hydraulic Cylinders
- Ball Valves
- Sucker Rods

Castolin Eutectic® Eutectic Castolin

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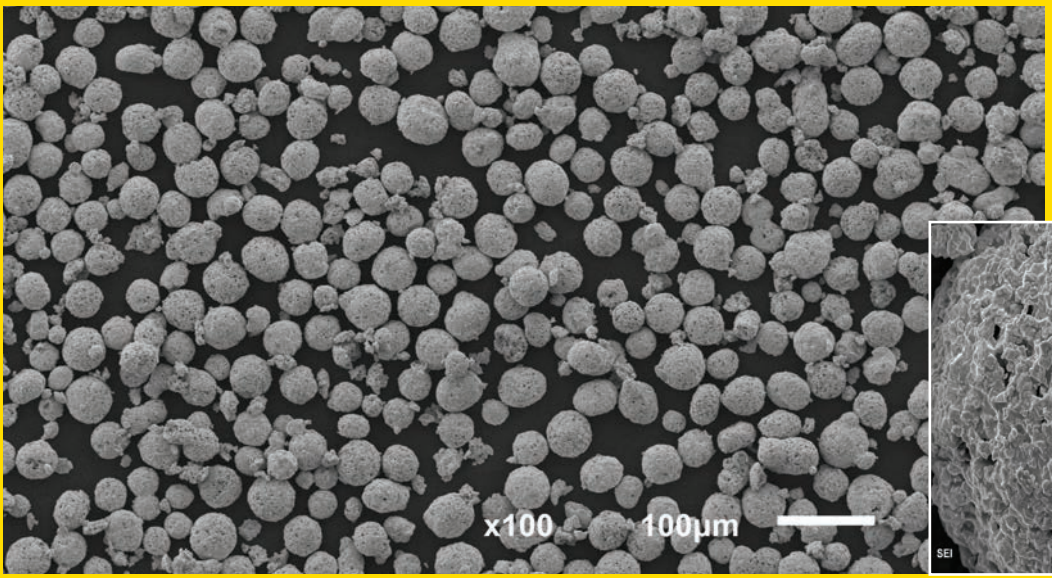
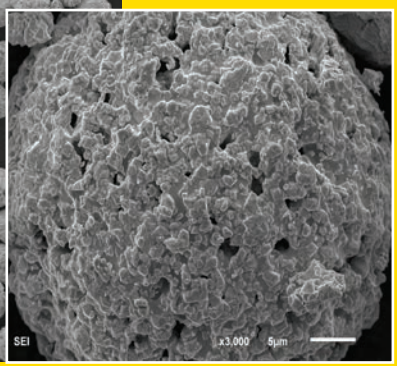
CastoJet® HVOF Powder

55586C

Tungsten carbide - 10% cobalt 4% chromium





COATING

- Enhanced properties where both wear and corrosion resistance are required
- Developed for use with the CastoJet CJK5 HVOF system
- Compatible with other HVOF systems
- Excellent bond strength on most metals
- Withstands service temperature up to 500°C

Castolin Eutectic®
Eutectic Castolin

Description

55586C is a spherical powder manufactured by agglomerating and sintering a formulation of 86% tungsten carbide with 10% cobalt and 4% chromium by weight. The addition of chromium to the matrix improves the resistance to corrosion and increases thermal stability versus WC-12Co or WC-17Co coatings. It has been developed for spraying with the CastoJet CJK5 system which is a High Pressure HVOF using kerosene as liquid fuel. 55586C powder is also suitable for other HVOF systems or plasma spraying.
55586C sprayed coatings are hard and dense with high bond strengths on a wide variety of metallic substrates. They resist exceptionally well where both wear and corrosion are required for service temperatures up to 500°C.

Technical Data

Typical Coating Properties

Micro hardness: ~ 1230 HV0.3
Service temperature: max 500°C (930°F)
Bond strength (EN 582:1994): >70 MPa (>10,000 psi)
Deposition efficiency (EN ISO 17836:2004): ~ 48%
Porosity (image analysis): ~ 0.5%

The above values depend on the spraying system and parameters used. Therefore measured coating properties may vary from above values.

Powder Properties

Nominal composition (weight %):
86% tungsten carbide, 10% cobalt, 4% chromium
Nominal size distribution: -45 +15 microns
Apparent density: ~ 5 g/cm3

Typical Applications

- Compressor shaft
- Oil and gas extraction parts
- Ball and gate valves
- Landing gears
- Impellers
- Paper rolls
- Hard chrome plating replacement

Procedures for use

Preparation

The substrate surface must be perfectly clean and free from all traces of residues or contaminants before being grit blasted.

Spray parameters

Typical spray parameters for the CastoJet® CJK5 that can be further optimised depending on the specific application:

- Gun barrel length:	150 mm
- Kerosene flow rate:	380 ml/min
- Oxygen flow rate:	845 Nl/min
- Powder carrier gas flow rate:	9.9 Nl/min of nitrogen
- Powder feed rate:	72.6 g/min (11.9 rpm)
- Chamber pressure:	7 bar
- Spray distance:	350 mm

For other HVOF and plasma systems, the spray parameters must be adapted according to the system used. Contact your Castolin Eutectic specialist.

Finishing Procedure

Due to high hardness characteristics, 55586C coatings are usually used as-sprayed without post machining. However grinding the coating to required surface finish specifications is possible using diamond wheels or belts with flood coolant. Follow the tool manufacturer's recommendations for speeds and feeds.

Packaging and Storage

55586C powder is packed in sealed 5 kg wide neck MegaPak containers for optimum storage protection (part n°/ESC code 757474).
MegaPak should be stored in a dry location and thoroughly shaken before use to homogenise the powder contents from possible sedimentary effects.

Health & Safety

Use the powder in accordance with its Material Safety Data Sheet (MSDS) instructions. MSDS for 55586C is available from the Castolin web site at www.castolin.com.