Modular Spray-Fuse System for Wear Protective Coatings

• Safe streamline flows of gas and powder feeding through the system circuits
• Increase powder deposition rates on massive parts or thick sections
• Precise deposit control on critical corners or thin edges
• Minimize over-spray and costly post machining operations
• Prolong service life of parts and increase productivity
**The EuTalloy Process - Advanced Surface Engineering Technology**

The EuTalloy process is designed to apply wear protective coatings typically from 0.1-3mm thickness, in a single pass, on a variety of metallic parts to prolong their service life. Special powder alloys are sprayed and fused to create strong diffusion bonds without melting the substrate.

Independent approvals and extensive field tests assure high quality standards for performance, power and precision in the fields of preventive maintenance and repair applications.

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**Superior Performance, Power and Precision**

**Multi-Purpose Modular System**

SuperJet -S- Eutalloy is a multi-purpose powder delivery system which can easily be adapted for surface engineering coatings to protect or repair either flat metallic surfaces, fine precision edges or rotating cylinder parts.

Unique benefits of the modular SuperJet -S- delivery system include:

- Fast manual assembly of the torch with easily rotated tip assembly for positional spray work.
- Complete range of integrated tip assemblies, each with its own injector and mixing chamber to ensure optimum powder alloy feeding at different flame settings.
- Internal powder channel and nozzle designed for maximum wear resistance, service life and reliability.
- All torch components readily accessible for dismantling, cleaning and service maintenance.
- Quick action, gas shut-off trigger for instant re-ignition of original flame settings without gas valve readjustments.
- Ergonomic torch design for handling ease, lightness, balance and adjustable heat shield.

**Exclusive Design Quality: Body-Handle Assembly**

- Precision CNC machining provides perfect alignment and trajectory of gas channels within the forged monoblock body. This assures streamlined powder flow.
- Powder control lever is surfaced hardened to increase its service life in contact with transported powder particle flows.
- Both oxygen and acetylene valve seats are surface treated and mated for uncompromising safety, gas tight sealing and long service life.
- Adjustable heat shield designed for optimum protection in different working positions.

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**Integrated Tip Assemblies**

Wide variety of tip assemblies available to handle all applications.

- Optimized flame power focus characteristics of the nozzle restrict powder over-spray losses to a minimum.
- Stainless steel swan neck better withstands reflected flame heat and enhances service life.

**Optional Tips**

These tips are optimized for heavy-duty applications. Reinforced with a tungsten carbide insert, and thicker tubing for improved heat resistance, they dramatically increase powder flow and fusing capacity.

**CSS HF High flow model tip**

- Part No. 42758487 - 13.38” (340 mm)
- Part No. 42758488 - 15.35” (390 mm)
- Part No. 42758489 - 17.32” (440 mm)

These tips provide finer control of linear coating deposit profiles during the spray-fuse procedure without general overheating or deformation of the substrate.

**A0 S Spot precision model tip**

Part No. 4271619030

**A1 S and A2 S Linear precision tips**

- A1 S Part No. 4271619031
- A2 S Part No. 4271619032

**B3 S and B4 S standard intermediate models**

- B3 S Part No. 4271619033
- B4 S Part No. 4271619034

**C5 S power model - For coating large areas**

Part No. 4271619035
Eutectic offers a complete range of EUTALLOY self-fluxing powders and other atomized powder formulations. Combined with an appropriate delivery system, industrial tools and machine parts can be given an effective protective coating.

### SuperJet -S- Basic Kit
**Part No. 4291867**

The Superjet -S- Eutalloy basic kit is supplied in a convenient carrying/storage case containing the necessary accessories for rapid and easy assembly but without supplementary tip assemblies or Eutalloy powders.

This picture shows the Superjet -S- Basic Kit with three (3) tip assemblies, A1 S, B3 S and C5 S, accessories and a powder hopper.

### SuperJet -S- Kit with Powders
**Part No. 4291871**

The Superjet -S- Eutalloy kit with powders is supplied in a convenient carrying/storage case containing the necessary accessories for rapid and easy assembly and includes three powders. Contact Eutectic for more information.

This picture shows the Superjet -S- Kit with three (3) tip assemblies, A1 S, B3 S and C5 S, 3 Eutalloy powder modules, a powder hopper and accessories.

### Additional Accessories
**Kooltip C6S Kit (Part No.4271619056)**

The KoolTip kit is recommended whenever the SuperJet -S- torch is subjected to high duty cycle usage or prolonged exposure to heat. The water cooled tip facilitates and speeds up coating operations on large parts or internal inside diameters.

Complete KoolTip kit includes connecting water hoses, heat shield, spark lighter, goggles, nozzle cleaner, injector cleaner and Teflon® washers.

C6S nozzle only (Part No. 4291738A)
C6S lance only (Part No. 4291732)

**Hopper Assembly (Part No. 4291796)**

An optional, aluminum, refill container may be mounted onto the torch when powder alloys need to be transferred from bulk packages. Refilling is easily executed via the lid without removing the container.
SuperJet Assembly

A) Torch nozzle
B) Rotatable, interchangeable tip assembly
C) Powder Injector
D) Powder feed valve
E) Eutalloy powder module
F) Powder feed control lever
G) Gas Mixer
H) Protective heat shield
I) Quick shut-off trigger
J) Acetylene valve
K) Oxygen valve

Safety First
The SuperJet -S- Eutalloy torch is easy to use by semi-skilled operators and meets even the most stringent safety requirements:
- The use of pure oxygen as the carrier gas minimizes flashback risks.
- Each tip assembly incorporates safety devices to proven flashback.
- Quick action shut-off trigger cuts gas flows without affecting original flame settings.
- Adjustable heat shield and longer tip assemblies protect against thermal reverberation.
- The partial vacuum created by the oxygen gas flow through the injector draws the Eutalloy powder into the system. Only after this step, is the acetylene gas allowed into the mixer zone.

Additional Coating Equipment from Eutectic...

CastoDyn® DS 8000/TD 2000/TD 3000
The CastoDyn DS 8000 is designed to be a versatile, multi-purpose powder delivery system for applying the following types of wear resistant, protective coatings.

“Cold” spray RotoTec two-step alloys, RotoTec LT low fusion temperature alloys, ProXon one-step, self bonding alloys and CastoPlast thermoplastic polymers.

“Cold” spray MetaCeram series of heat resisting alloys and ceramic powders.

Spray and fuse Eutalloy RW self-fluxing powder alloys.

CastoDyn SF Lance
The CastoDyn SF Lance is an attachment for the CastoDyn DS 8000 to provide simultaneous spraying and fusion capability with high deposition rates and excellent powder yield factors. This extension lance is designed and optimized for the exclusive use with Eutalloy SF self-fluxing powder alloys.

Eutronic® GAP
The EuTronic GAP process uses high-energy, Plasma Transferred Arc with shielding and powder transport gases to enable high speed deposition of surface engineered coatings. The EuTroLoy series of powder alloys are formulated for repetitive, highest quality, wear resistant deposits with extremely low dilution and distortion risks.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS