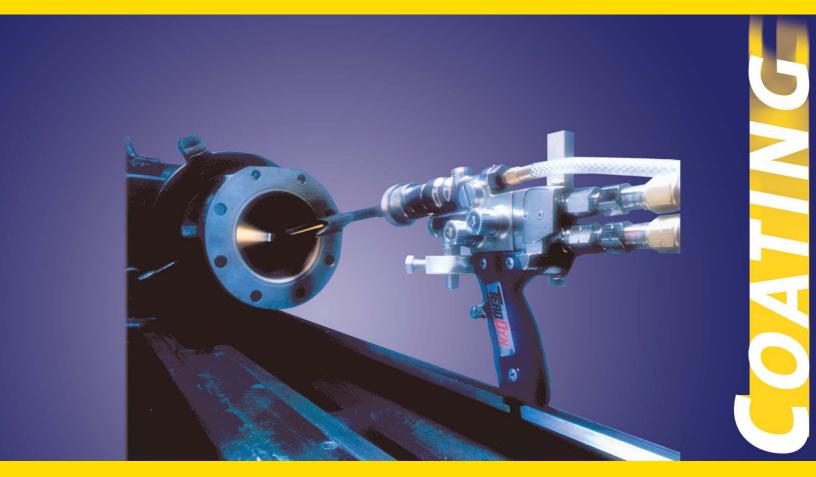
# High Energy Combustion Powder Delivery System with Remote Fluidized Bed feeder

# TeroDyn® System 3000



- Multi-Fuel capability: Acetylene, Propylene, MAPP etc.
- Applies metal, polymer and ceramic powders
- Ideal for extended use and production applications
- Fluidized bed, pressurized powder feeder
- Positive repeatable spray rates



# TERODYN System 3000

#### **High Deposition Rates**

TD System 3000 produces a very stable and thermally efficient flame that delivers up to 140,000 Btu/hr. (when used with propylene fuel). This high energy level makes it possible to produce premium quality coatings while spraying at very high deposition rates.... up to 45lbs./hr.

## **Maximum Efficiency**

Unique high performance nozzles produce hot concentrated spray patterns for exceptionally high deposit and target efficiencies..minimizing waste from over-spray.

## **Greater Flexibility**

Precision air jet accessories allow for accurate control of powder melting and base metal temperature. They may be used to envelope the flame and shape its spraying pattern, or to cool the flame temperature for low temperature applications.

# **Out-of-Position Spraying**

Spray at any angle with consistent coating quality.

# **Premium Quality Coatings**

- Bond Strength up to 6,000 psi (ASTM C-633)
- Hardness to Rc 60
- Low Porosity and oxide content

# **Broad Range of Applications**

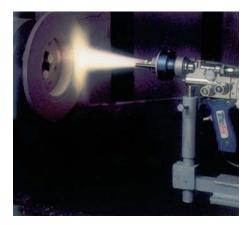
- Abrasive Wear Protection
- Corrosive Protection
- Erosion Protection
- Thermal Barrier Coatings
- Dimensional Restoration
- Friction Reduction





# A Truly Universal Thermal Spray System





## Versatility

TD System 3000 is lightweight and balanced for comfortable manual operation....and it adapts easily to standard tool holders for semi-automatic operation.

Gas valves are on the torch, so coating parameters can be easily manipulated for optimum coating quality.

Meets Military Specifications for corrosion control and machine element repair (MIL STD 2138 and 1687 A, thermal spray systems).

# Positive, Steady, Repeatable Powder Delivery Rates

TecFlo fluidized powder feeders operate without troublesome mechanically moving parts in the powder feed circuit. This more reliable technology reduces downtime, lowers maintenance costs and improves coating quality. TecFlo Feeders are also easily interfaced with plasma systems. Choose the feeder that best fits your needs.......

#### 1. TecFlo 5102 Dual

This unit can supply two torches simultaneously, improving productivity while minimizing your capital investment.

# **Complete Powder Line**

You can choose from seven Eutectic Powder groups:

- 1) ProXon® One-Step, Self Bonding Alloys
- 2) Fusing Alloys 3) MetaCeram® Two-Step, Cold

Process Alloys 4) ThermoTec® Two-Step Specialty Alloys\* 5) Low Temperature Alloys

6) Polymers 7) Selected Ceramics

### **Choice of Fuels**

Acetylene, propylene, MAPP, propane or hydrogen can be used with the TD System 3000, depending upon the alloy being deposited. Liquid fuels are especially advantageous, since they are safer and often more economical than acetylene. Propylene fuel allows for higher coating rates with consistent coating quality.

<sup>\*</sup>May also be used in plasma spray systems

# The Basic TeroDyn System 3000 Kit

(Part No. 4484758)

#### **Powder Delivery Unit**

The basic powder delivery unit is supplied in a carrying case which includes the torch, heat shield, nozzles, maintenance tools, tool post holder, spare O-rings and a detailed operation and maintenance manual.

The TecFlo® 5102 is equipped with two delivery tubes in the powder hopper, allowing the operation of two torches at the same time. Single torch operation is accomplished by simply blanking off one pick up tube. Also supplied with the feeder are 12' powder hoses to connect the feeder to the torch, inert gas hoses and a spare parts kit.

# **Optional Accessories**

#### Extender Kit (Part No. 4469000)

The TD System 3000 is capable of coating internal diameters as small as 5" using the extender kit which includes the extender with cooling air jets, air filter/regulator, air hose and spare parts.

#### Low Temperature Kit (Part No. 4484748)

Contains air shroud, nozzle and all hardware necessary to apply low temperature alloys and polymers.

#### Propylene Fuel Kit (Part No. 4458000)

Contains alternative fuel regulator plus three nozzles to enable the system to use propylene, propane or MAPP.



#### **Torch Nozzles**

#### Model RL 210W (Part No. 448421)

The hottest flame, with tailored powder ignition, for high melting point materials.

#### Model RL 200 (Part No. 4486021)

A hot flame with straight-through powder feed, for intermediate melting point materials.

# TeroDyn System 3000 Gas Supply Package

(Part No. 4484620)

#### Contains:

•Tri-Safe® oxygen and acetylene dual-stage regulators for precise control and monitoring of supply gasses. •Easy to read Flowmeter. •Air filter/regulator. •Two twin oxygen/acetylene hoses. •One 12' air hose. •All RotoJet® air attachments recommended for use with the TD System 3000. •All parts to manifold two acetylene and two oxygen tanks.

# TechFlo 5120 Dual Powder Feeder

(Part No. 4484752)

The TechFlo 5120 is a remote powder feeder for the TeroDyn 3000 torch. It uses either argon or nitrogen as the carrier gas. Feed rates can be controlled to within 3% or less and are repeatable with high reliability. the feeder functions entirely by means of gas fluidization and pressurization of the powder hopper. It has no moving mechanical parts in the powder feed circuit. Powder feed can be controlled either from the torch or from a remote location.



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