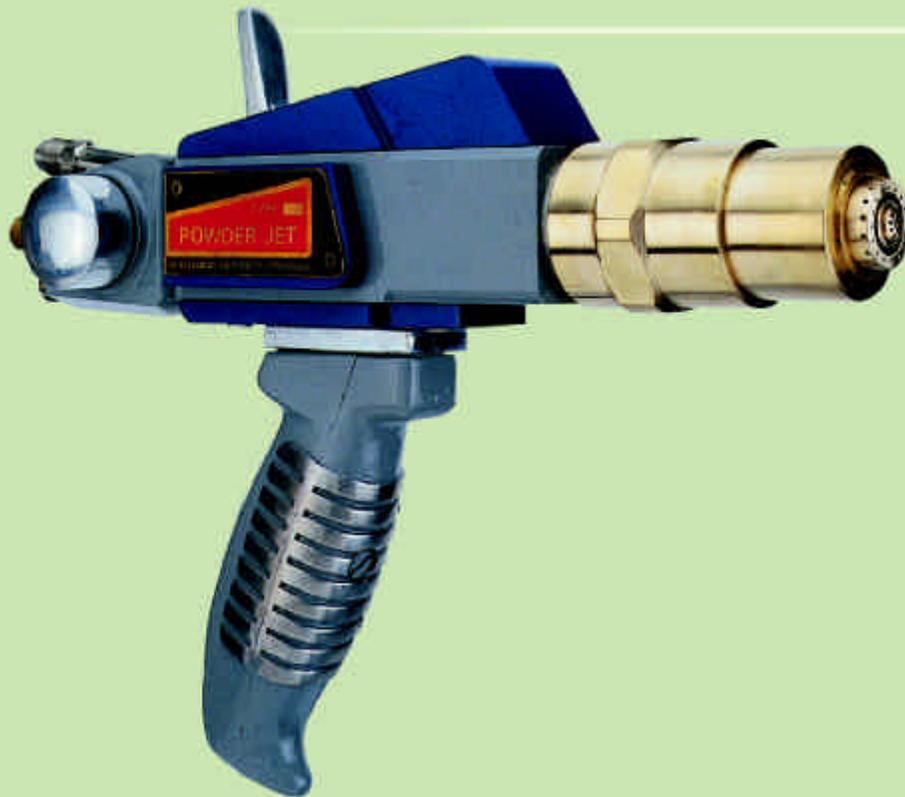


# HEAVY DUTY THERMAL POWDER SPRAY SYSTEM

## POWDERJET-86-II



**Powder Jet 86 II in action**

Quality is our tradition



For coating of hardfacing alloys, ceramics, metals and carbides.

## MEC POWDERJET-86-II A UNIVERSAL GUN



**POWDERJET-86-II GUN  
(Fitted with Cooling Wand)**

The **Powderjet-86-II Gun** is extremely versatile and offers premium coating for wear resistance, corrosion protection, thermal and electrical insulation etc., which have long been the attendant goal of all the coating processes. The system can be made fully automatic or programmable.

The heavy duty thermal spraying gun, **86-II** is successfully used with varying spray rates, as high as 25 Kg/hr, which shortens the spray time on large parts.

The specially designed high performance nozzle, accelerates spray powders efficiently by feeding the powders directly into the flame centre of gun & gives the consistent deposition efficiency for varied spraying.

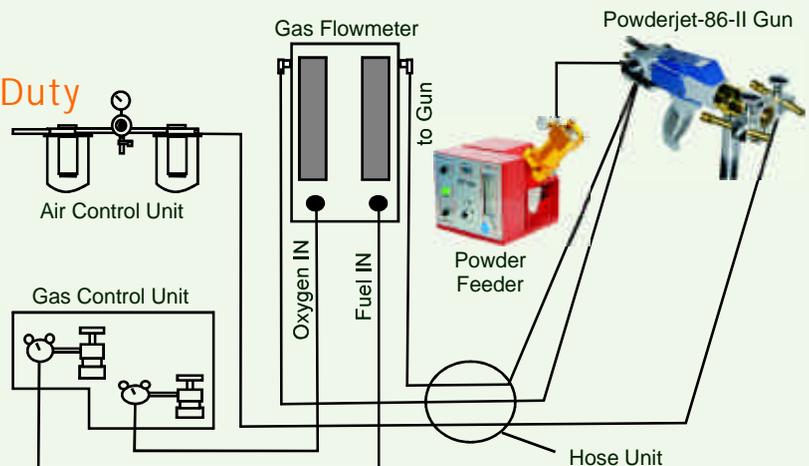
Standard unit is with Oxy-Acety gases but is also usable with Oxy-LPG/CNG gases for economy and cleaner environment.

Optionally Oxy-LPG/CNG gases can be used for low melting powders like plastic powders to save fuel cost.

The system is equipped with **Reverse Flow Check Valve** to ensure safety of operator.

### MEC POWDERJET-86-II Heavy Duty Flame Spray System consists of :

- \* Powderjet 86-II Spray Gun
- \* Powder Feeder, PF-700
- \* Gas Flowmeter
- \* Gas Control Unit
- \* Air Control Unit
- \* Cooling Wand (Airjet Assy)
- \* Interconnecting Hose Unit (5 mtr)



### REFERENCE PARAMETERS

Gas	Operating Pressure	Consumption
Oxygen	2.2 Bar	2.7 M <sup>3</sup> /hr
DA	1.0 Bar	1.7 M <sup>3</sup> /hr
Powders	Spray Rates	Deposit Efficiency*
Ceramics	0.9 Kg/hr	25-75%
Metallic	2.7 Kg/hr	80-90%
Self fluxing	9.1 Kg/hr	85-95%

\* Depends upon powder composition & particle size.  
**Above parameters are only for guidance.**

### COOLING WAND



Powderjet-86-II Gun can be fitted with cooling wand to accelerate velocity of powder particles and cool the substrate. This avoids overheating of coating and the job.

## POWDER FEEDER; PF-700



Powder Feeder, works on pressurization & constant volumetric feed principal. It has a variable AC Drive fitted with digital RPM display. During operation, the powder is gravity fed into the slots of the rotating disk through which controlled quantity of the powder is pushed into the powder feed hose by the carrier gas. The power feed rate is directly proportional to the powder disc RPM which can be controlled by a pot on the front panel. A safety valve is provided to release high canister pressure.

### FEATURES :

- Feed Rate from 1 RPM to 28 RPM.
- Disc RPM Display.
- Remote or Local Powder Feed Control selectable.
- High Pressure Safety Valve.
- Sensor less vector control technology for accurate RPM Control
- **Canister Capacity : 700 Cm<sup>3</sup>**

**Optional Model : PF-3350 (capacity : 3350 Cm<sup>3</sup>)**

## AUTOMATIC CONTROL PANEL; AP-2200 (OPTIONAL)

Automatic Control Panel; AP-2200 to give a new speed to your production. The user can remotely Start / Stop the gun as well as control the powder feed rate. The PLC controls the Start & Stop sequences as well as monitors the flame and the pressures of various gases. The panel is compact and robust for rough and tough operation. The PLC displays the status and any fault in the system.

Complete with S.S. Tube fittings & tubings and can be hanged on wall as well as mounted on a stand. Manually each parameter can be set for initial setting using different gases.

Power Supply : 230 V AC / 1 P / 3Amps  
Dimensions (mm) : 600 (L) x 350 (W) x 750 (H) (Excluding Stand)  
Weight (Kg) : 55 Kg. (nett) (Excluding Stand)



## THERMAL SPRAY POWDERS

### NICKEL ALUMINIUM POWDERS

#### A) MEC-1037 (Ni-Al 95/5)

Nickel aluminium composite that reacts exothermically during spraying. General purpose bond coat, produces dense & self bonding coating. Good resistance to thermal shock & oxidation. Hardness : 75 R<sub>c</sub>

#### B) MEC-1087 (Ni-Al-MO 90/5/5)

Nickel-aluminium-molybdenum composite, for general purpose, medium hard coating for hard bearing and wear resistant application. Coating is tough & can withstand impact. Hardness : 75 R<sub>c</sub>

### NICKEL BASE SELF FLUXING ALLOY

#### A) MEC-1260 (Ni-Cr-Fe-B)

Nickel based self fluxing alloy, produces hard, dense and porefree coating that is fusible, good resistance to corrosion & wear by abrasive grains, hard surface, particle erosion, fretting & cavitation, easy to fuse and will not crack even in thick build up. Hardness : 60 R<sub>c</sub>

### CERAMIC POWDERS

#### A) MEC-1011 (Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> 97/3)

Alumina-Titania (97/3) powder for good wear resistance to abrasion & erosion. It can be used in many environments including most acids & alkalis. Hardness : 50 R<sub>c</sub>

#### B) MEC-1070 (Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> 60/40)

Contains 60% aluminium oxide & balance titanium oxide for highly abrasion resistant coating with good corrosion resistance. It can be used for thread guide to resist abrasive fibers. Hardness : 60 R<sub>c</sub>

#### C) MEC-1025 (Cr<sub>2</sub>O<sub>3</sub>)

Pure chromium oxide powder, suitable for wear due to abrasion, corrosion, oxidation, fretting or erosion resistance coating. Coating will be dense and can be used on pump seal areas, ground rolls & wear rings. Hardness : 60 R<sub>c</sub>

## WIDE RANGE OF APPLICATIONS



Engine Valves, Stems, Glass Moulds, Pulverizing Equipment Parts, Wire Drawing Capstans, Pump Plunger, Gas Turbine Parts, Metal Pouring Troughs Spout, Crusher Rolls, Heat Treating Rolls, Oil Well Pump, Flame Brooms, Nozzles, Lapping Plates, Textile Cones, Thread Guide, Wear Rings, Casting Inserts, Exhaust Fan, Impellers, Bearing Shafts, Pump Sleeves, Conveyor Screws, Plug Gauges, Textile Spindles, Extrusion Rams, Seal Rings, Cutting Lances, Galvanizing Kettles & many more.



**Hijet-9600 HVOF  
WIRE SPRAY GUN**



**HIPOJET-2100 HVOF  
POWDER SPRAY GUN**



**SPRAYJET-5MC HEAVY DUTY FLAME  
WIRE SPRAY GUN (ELECTRIC)**



**SPRAYJET-88 FLAME  
WIRE SPRAY GUN**



**TWIN WIRE ARC  
SPRAY GUN-95**



**RODOJET-9800 CERAMIC  
ROD SPRAY GUN**

## Our Other Manufacturing Equipments

Acoustic Chamber, Spraybooth, Tilting Turntable, X-Y Manipulator, Dust Collector & Automatic Systems for HVOF, Flame Spray, Arc Spray & Rod Spray Guns.

## METALLIZING EQUIPMENT CO. PVT. LTD.



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