

4M-CDS

Features

- **■** Closed-loop pressure control
- **■** Built-in mass flow metering
- **■** 6-axis robot + coordinated 7th axis motion control
- **Dual Powder Fluidizing Units**
 - Continuous operation
- **Dual-layer/composition coatings**
- \blacksquare Multiple gas compatible (He, N_2 , & mixtures)

Thermal Conditioning Unit

Friction Compensated

Patented Sonic Design

Long-Life Cemented Carbide Material

Max. Gas Temp: 1400°F (760°C)



Thermal Conditioning Unit

Nozzle Integrated, 3.8kW

Stainless Steel Powder Injection Tube

Powder/PreHeater Mixing Chamber

Light-Weight, Low Thermal Inertia

Dual Powder Fluidizing Units

Patented Brush-Sieve Design

Light-weight pressure vessel

Proven Consistent Feed Rate

Powder Size: 500nm - 50µm

Feed Rate: 1-100g/min

Powder Mass Flow = Gas Mass Flow



Pressure/Mass Flow Control

Low Pressure Operation: 395 - 895kPa

Low Gas Flow Rate: He: 620slpm max

N₂: 225slpm max

He/N2 blend: 275slpm/55slpm max

Low Inlet Pressure: 1MPa

Dual Mass Flow Controllers

KM System Control

UL Listed, NFPA 70, ANSI/RIA R15.066

Fully Integrated Control Software

Optional Integrated Robot Control

Optional Dust Collector Interface

Real-time Human-Machine Interface

Full Parameter Data Logging 1/sec

Quality Technical Support



KM Process Display

Localized User Display

Supervisor Mode:

- Real Time Process Parameter Change
- Recipe Creation

Operator Mode:

Recipe Load and Run

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