

Metallisation HVOF Met-Jet 4L

Thermal spray equipment and consumables



The Metallisation MET-JET 4L is the latest development to our kerosene fuelled HVOF system. All of the great features of the MET-JET III have been retained: the system is still mass flow controlled for repeatable coating quality and the start-up remains clean and smooth as it is hydrogen fuelled. The system produces the densest metallic and carbide coatings of all. The coatings can be compressively stressed, allowing thick layers to be applied without fear of spalling. The latest developments are to the pistol, powder feeder and operator interface. The pistol combustion chamber has been modified to achieve cleaner burning and the nozzle arrangement simplified. The powder feeder has mass flow controlled carrier gas and closed loop motor control for reliability and repeatability of powder feed rates. The operator interface is still simple to follow but is now via touch screen rather than pushbuttons. The result is a high quality, compact and easy to use HVOF system.

- Mass flow control = repeatability
- Easy to use operator interface
- Liquid fuel = thick, low stressed coatings
- Hydrogen start-up = clean operation
- High hardness, low oxide level coatings
- PC control with touch screen
- Optional keyboard control
- Unlimited recipes and parameter recording
- Low running costs compared to hydrogen fuel
- High bond strength and low porosity coatings

Typical Applications:

- Hard-chrome plating alternative
- CGL mill rolls
- Oil/Gas valves
- Paper rolls
- Hydraulic rams
- Suspension components
- Landing gear
- Hydroelectric turbines
- Automotive valves
- Wire drawing blocks

| Typical Material | Powder Reference | Throughput Grams/min | Deposit Efficiency % |
|--------------------|------------------|----------------------|----------------------|
| WC Co Cr (86/10/4) | 99745 | 70 | 49 |
| WC Co (83/17) | 99735 | 70 | 45 |
| WC Co (88/12) | 99725 | 70 | 45 |
| Ni Cr B Si | 99325 | 70 | 48 |
| Inconel 625 | 99405 | 70 | 47 |
| Copper | 99407 | 70 | 63 |
| Chrome Carbide | 99785 | 70 | 50 |
| Stellite™ 6 | | 70 | 44 |

All figures are approximate.

