

Liquid Fuelled HVOF Technology

CastoJet® CJK5



COATING

- Easy to use and intuitive to operate
- Kerosene fuelled high pressure HVOF for high quality coatings
- Unlimited recipes and parameter recording for repeatable coatings
- Safe and rapid start up which saves fuel and time
- Simplified maintenance
- Thick, low stressed coatings that are in compression



Intuitive to operate



The CastoJet® Kerosene 5 - CJK5 - is the latest Castolin Eutectic development of kerosene fuelled high pressure HVOF (High-Velocity Oxy-Fuel) systems. Using mass flow control for repeatable coating quality. 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 gun, powder feeder and operator interface. The operator interface is simple to follow using a touch screen interface. The powder feeder has mass flow controlled carrier gas and closed loop motor control for reliability and repeatability of powder feed rates.



The value is in the technology to make it intuitive to operate, to reduce operator errors, to simplify the maintenance and to obtain repeatable high quality coatings.

Advantages

- High-pressure of the combustion chamber is typically at least double that of gas fuelled HVOF, what improves the gas speed of 20% over gas fuelled HVOF.
- Mass flow control of oxygen and carrier gas = repeatability.
- PC control with touch screen operator interface.
- Optional keyboard control or operator interface unit.
- Unlimited recipes and parameter recording.
- Low running costs compared with hydrogen fuel HVOF systems.
- High Bond strength and low porosity coatings.
- Manual or fully sequenced start-up, operation and shut-down.
- Hydrogen, Propylene, Propane or Kerosene start-up.
- Liquid fuel = thick, low stressed coatings.
- High hardness, low oxide level coatings

Technical data:

Typical Material	GPM (grams)	Deposit Efficiency (%)
Stellite 6	70	44
Cr3C2 /25 NiCr	70	50
Wc/10Co/4Cr	70	49
Wc/Co17%	70	45
Wc/Co12%	70	45
625	70	47
Copper	70	63
NiCrBSi	70	48

All figures are approximate

Typical applications:

- Hard chrome plating alternative
- CGL mill rolls
- Gas ball and gate valves
- Down hole tools used in the oil and gas industry
- Paper rolls
- Hydraulic rams
- Aircraft Landing gear
- Suspension components
- Hydro-electric turbines
- Automotive valves
- Wire drawing blocks

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