

## Spray HVOF at 60% of the Usual Cost, Deposit Better Coatings 5 Times Faster!

**Fuel:** Propane, Propylene, Propane-Butane (LPG), Natural gas. Pressure: 7-11.5 bar (100-165 PSIG)

**Oxidant:** Compressed Air, Oxygen. Pressure range 8-11.5 bar (115-165 PSIG)

**Coolant:** Compressed Air



**Kermetico C7** – our most powerful convertible HVOF/HVAF gun for large parts (diameter >200 mm (8")):

- ✓ Works in HVOF or HVAF mode, compliant with all HVOF specifications
- ✓ Independent control of combustion air and cooling air
- ✓ Perfect combustion with an optimized nozzle design
- ✓ The best protection against feedstock oxidation is in HVAF mode
- ✓ Flexible setup (variable combustion and powder path combinations to fit your application)
- ✓ 5-20 to 20-53  $\mu\text{m}$  powder sizes, suspension spray
- ✓ Spray rate of 550+ g/minute (73+ lbs./hour) with 60% DE will let you spray a 1 m<sup>2</sup> (11ft<sup>2</sup>) with an 1 mm (0,04") thick WC-10Co-4Cr coating in less than 40 minutes
- It is too powerful for small parts

**Kermetico C6** – a universal gun to deposit metals, alloys, and carbides onto a variety of parts:

- ✓ With 2/3 of C7 powder, maximum spray rate – 28 kg/hour (62 lbs./hour)
- ✓ Works in HVOF or HVAF mode, compliant with all HVOF specifications
- ✓ Independent control of combustion and cooling air
- ✓ Works great on medium to small parts (diameter less than 250 mm (10")), well on larger parts
- ✓ Flexible setup (variable combustion and powder path combinations to fit your application)
- ✓ 5-20 to 20-53  $\mu\text{m}$  powder sizes, suspension spray

Each gun may be set up for **Ultra** (highest coating quality), **Economy** (highest DE) or **Balanced HVAF Mode**.

Consider adding Kermetico HVAF guns to the system: compact [AK5](#), hand-held [AK-HH](#), internal diameter, 90° spray angle [AK-ID](#) (ID 80 mm and larger) or rotating [AK-IDR](#) (ID 100 mm and larger).

Having a lower particle temperature than conventional HVOF and 200-500 m/s higher particle speed, Kermetico Convertible systems do not overheat the sprayed materials. Adding a large nozzle diameter, axial powder injection, and narrow powder jet, we deposit uniform quality tungsten carbide, chromium carbide, metal, and alloy coatings with a 6% hardness deviation.

## The Kermetico C HVOF + HVOF System



The Kermetico AK HVOF system deposits coatings with a **5-6 times higher spray rate**, 20-30% higher same spec. deposition efficiency, which leads to ½ of the HVOF cost and can provide a coating of higher quality when needed. Choosing Kermetico AK, an HVOF job shop gains a 50% cost advantage to competitors and additional coating quality superiority as a bonus.

The Thermal Spray Industry uses the HVOF process infrequently because it is not consistent with some HVOF standards. HVOF systems work best on fine powders, while some standards require 15-45 or 20-53 µm powder cuts.

The Kermetico C (C for Convertible) equipment family operates in either mode. **Kermetico C uses Oxygen and Air to spray HVOF cut powders consistent with HVOF standards, AND it works in the pure HVOF mode** to deposit ductile, high-hardness (1400-1600+ HV<sub>300</sub>, 6% deviation), non-permeable, smooth as-sprayed tungsten carbide coatings.

The HVOF mode Kermetico Convertible system is compliant with HVOF specifications and still lets you cut operating costs. The HVOF mode offers you greater savings or allows you to create coatings with properties superior to any HVOF spec – the choice is yours!

## Kermetico Control Console and Powder Feeder

C-01: Controller & Wide-Screen Industrial Operator Tablet



Option:  
Stationary Operator Interface  
(Touch-Screen, 22" + size)



Powder Feeder

(max. capacity option)



### Some Features of the [Kermetico Systems](#):

- ✓ Industrial IP67-rated Tablet
- ✓ Unlimited number of stored programs
- ✓ One system fits all Kermetico guns
- ✓ Variety of powder feeders and gas vaporizers
- ✓ Custom-made systems and guns by request
- ✓ And more

We have been developing our process and equipment since 2006. Years of research let us create equipment which produces the best quality coatings and the highest technological efficiency possible. More than 60 Kermetico HVOF and HVOF systems are at work worldwide. All of our equipment is designed and made in California, USA.

Visit our [website](#) or our job shop to learn more about our coating quality and equipment.