Convertible HVAF + HVOF Equipment: 2 in 1

Spray HVOF at ½ of the Usual Cost, Deposit Better Coatings 5 Times Faster!

Our Convertible systems feature:

- Flexible setup (variable combustion and powder path combinations to fit your application)
- HVOF and 3 HVAF modes (Economy, Balanced and Ultra Quality)
- Precise particle temperature management
 - +5 -20 to +20 -53 µm powder sizes, suspension spray

Kermetico C7

- Compliant with all HVOF specifications known to us
- ✓ The best protection against feedstock oxidation is in HVAF mode
- ✓ Spray rate of 550+
 g/minute (73+ lbs./hour)
 with 60% DE will let you
 spray 1 m² (11 ft²) with
 1 mm (0.040″) thick
 WC-10Co-4Cr coating in
 less than 40 minutes

Kermetico C6

- ✓ With 2/3 of the C7's power, maximum spray rate – 28 kg/hour (62 lbs./ hour)
- ✓ Works great on medium to small parts (diameter less than 250 mm (10")), well on larger parts



Convertible ID(R)

Convertible ID – internal diameter gun, 90° spray angle, ID 80 mm (3.15")

Convertible IDR – rotating gun for internal diameters starting from 100 mm (4")

Add Kermetico AK or Specialized HVAF guns to the system: compact AK5, hand-held AK-HH, low-melting point metals SL or titanium STi.

Having a lower particle temperature than conventional HVOF and 200-500 m/s higher particle velocity, Kermetico Convertible systems do not overheat the sprayed materials deposit uniform quality tungsten carbide, chromium carbide, metal, and alloy coatings with a 6% hardness deviation.

Easy to Upgrade and Outperform the Competition

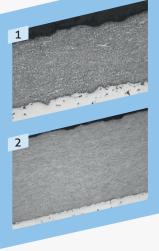
The Kermetico AK HVAF system deposits coatings with **5-6 times higher spray rates**, 20-30% higher same spec. deposition efficiency, which leads to ½ of the traditional HVOF cost and can provide a coating of higher quality when needed. Choosing Kermetico AK, an HVOF job shop gains a 50% cost advantage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

operates in either mode. It uses Oxygen and Air to spray HVOF cut powders consistent with HVOF standards, AND it works in the pure HVAF mode to deposit ductile, hard (1400-1600+ HV300, 6% deviation), non-permeable at 50µm, smooth as-sprayed tungsten carbide coatings, un-oxidized chromium carbide and stainless coatings.

The Kermetico Convertible equipment family

Some Features of the Kermetico Systems

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



- AMS 7882-specified WC-10Co-4Cr in HVOF mode, hardness 1,180 HV $_{0.3}$, DE 50%, porosity less than 0.5%
- H.C. Starck Amperit WC-10Co-4Cr in HVAF Ultra-mode, hardness 1,450 HV_{0.3}, DE 45%, gas impermeable, porosity less than 0.5%

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

You will need to add just a 40 HP designated air compressor to your existing HVOF infrastructure.

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

We have been developing our process and equipment in California, USA since 2006. More than 60 Kermetico HVAF and HVOF systems are at work worldwide.

