



Coatings beyond state-of-the-art HVOF limitations.

### Kermetico Systems' Features

- ✓ Gas fuel, low temperature & high pressure combustion
- ✓ Axial powder injection and gentle particle heating
- ✓ Blast & spray with the same gun

The results of these features are:

- ✓ No overheating, oxidation or decomposition of feedstocks
- ✓ Spray finer powders to achieve higher particle velocities

And you benefit with:

- ✓ High coating quality: low oxidation, high hardness, high ductility, low porosity, less deviation of coating properties
- ✓ 5x higher spray rate, higher deposit efficiency

**Better, less expensive coatings**

### Convertible HVOF/HVAF systems, the Best of Both Worlds



For job shops spraying coatings according to strict HVOF specifications, limiting the process and the powder sizes

Switchable between HVOF and HVAF Economy, Balanced or Ultra mode

One system can run C, AK or S-line guns

Oxygen-enriched air-gas fuel process

HVOF-size powders

½ of traditional HVOF cost

[C7](#) – sprays 33+ kg (73+ lbs.)/hour, for rolls 200 mm (8") φ or larger

[C6](#) - for the majority of jobs

**Use the power of HVAF working according to HVOF standards!**

### AK Systems — the Swiss Army Knife of the Thermal Spray Industry



For Universities and job shops spraying coatings without strict specifications that limit the process or the powder cut.

One system can run our AK or Specialized guns.

Higher hardness ductile non-permeable wear, corrosion and cavitation-resistant coatings beyond HVOF specifications.

Use your existing HVOF booth, spray at less than ½ of traditional HVOF cost

Less QC incidents and health hazard related risks

[AK7](#) - for rolls 200 mm (8") φ or larger

[AK6](#) - to spray tungsten carbide for the majority of geometries

[AK5](#) – a compact gun for thin walls and complex geometries

[AK-HH](#) - for manual spraying

[AK-ID](#) - for internal diameters 80 mm (3.15") and larger

**Spray known materials faster, better and more affordably!**

### S family — Highly Specialized Systems for Excellent Functional Coatings



Custom systems to deposit functional alloys with the best quality/cost ratio possible for an application:

[SL](#) – a system to spray low melting point materials: Al, Cu, Sn, Zn

SP – a system to deposit precious metals like silver or gold

STi – a system to thermal spray titanium and Ti Alloys

**We help to develop new coating applications and markets.**

## Kermetico Consoles & Wide-Screen Industrial Operator Tablet



- ✓ Industrial IP67 rated Tablet + PLC Controller
- ✓ Unlimited number of stored programs
- ✓ Combustion chamber pressure monitoring
- ✓ Adjustable settings for gun ignition
- ✓ Adjustable settings for warning alarms and safety shut-off alarms
- ✓ Complete remote control of the powder feeder with adjustable settings for powder startup
- ✓ Communication ports for external devices (E-stop, robot, master computer, etc.)
- ✓ Custom-made systems by request

## Variety of Powder Feeders



- ✓ 0-32 RPM, 150 PSI, 110 or 220 VAC
- ✓ Setup for automatic pressure release from the powder feeder canister after the gun is shutdown
- ✓ Powder feeder electronic scale option

Available models:

Canister volume, l	3.37	5.1	6.7	10.45
WCCoCr load, kg	20.9	31.7	41.7	64.9
Ni-base load, kg	14.2	21.6	28.2	44.2

## HVAF Blasting Grit Feeder



Our HVAF gun accelerates grit particles to an extremely high velocity, and they are simultaneously heated to over 1200°C (2200°F), improving the cleaning and profiling efficiency of the process. A quality blast in a single pass! (For most substrates.)

Surface preparation by HVAF grit blasting increases production rate 5+ fold with a reduction of grit consumption over 100-fold compared to conventional grit blasting.

Grit used: Aluminum Oxide, Silicone Carbide or Tungsten Carbide  
 Grit particle size: From #220 to #24 mesh  
 Grit consumption: 1-8 kg/hour  
 Blasting rate: 5-20 m<sup>2</sup>/hour

We have been developing our 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 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 Kermetico's coating quality and equipment.

\* Images are not in the same scale.