



THERMAL PLASMA SPRAY

The Apticote 800 Thermal Spraying range is a family of high performance ceramic, cermet and metallic coatings that can be applied to a wide variety of steel, titanium, aluminium and copper alloys, as well as to some non-metallic substrates.

Poeton offer modern thermal spraying equipment, encompassing wire, plasma spraying, electric arc, and high-energy processes, supported by sophisticated computer-controlled five-axis robotic manipulation.

Poeton boast an experienced and highly skilled thermal spraying team, backed by an ability to handle the most intricate and precise masking and tooling.

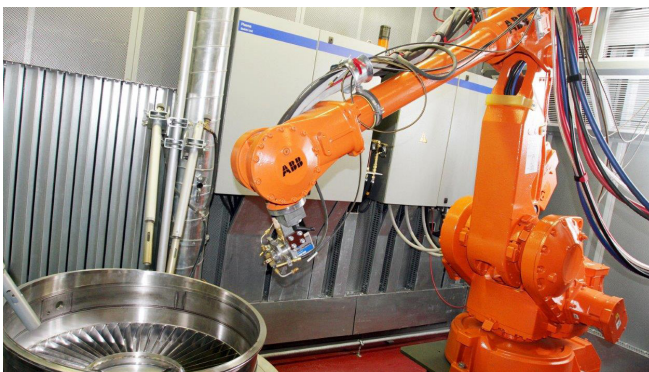
INSPECTION CRITERIA

A fully equipped laboratory, with high quality metallography, image analysis and optical microscopy, provides the expert support that underpins our formal Approvals, including NADCAP, BSI and Industry approvals.

MULTICOAT® ROBOTIC PLASMA SPRAYING SYSTEM

Poeton Industries have installed a TriplexPro™- 210 Robot Plasma Spraying System, offering the ultimate in spraying performance. Its cutting-edge design is unavailable on any other thermal spraying gun and sets new standards of effectiveness, efficiency, economics and environmentally-friendly design.

MultiCoat® can simultaneously control up to four thermal spray processes from a single console. With advanced processing, trending and reporting features, MultiCoat® offers superb performance and value for all types of spray operations, from R&D to high volume production.



MultiCoat® Thermal Spray system

CERAMICS	
Alumina, Chromium Oxide, Titania and blends	For wear and abrasion resistance on crankshafts, pumps, piston rods, textile parts, seals and valve seats
Zirconia (Y-Stabilised)	For thermal barriers and insulation on piston caps, grill plates, exhausts, etc.
ABRADABLES	
Aluminium/Graphite Aluminium/Polyester Ni/Cr/Boron Nitride	For controlled bedding-in on components like turbine blades and stators
CERMETS	
Tungsten Carbide/Co	For extreme toughness and wear resistance on compressor blades, flap tracks, lathe centres, capstans and seals
Chrome Carbide/Ni/Cr	For unsurpassed corrosion resistance on rams, lock gates, cranes, ship loading doors, etc.
METALS & ALLOYS	
Molybdenum blend	For low friction and wear resistance on valve bodies, shifter forks, gear cones, piston rods and thrust washers
Copper and Nickel Aluminium Bronze, Mo/ Ni/Al, Nickel Aluminium	For reclamation and repair on shafts or worn components, as well as for corrosion resistant surfaces

APPLICATIONS

- Propeller hubs
- Seal rings
- Seal retainers
- Piston rings
- Rotatables
- Compressor casings
- Support rings
- Pump plates
- Heat shields
- Propellant grids
- Exhaust tubes

TYPES OF THERMAL SPRAY

- Plasma spray (single and triple cathode guns)
- HVOF spray (gas and liquid fuel)
- Combustion powder spray
- Combustion wire spray

Disclaimer

The information contained in this leaflet is intended for guidance. Whilst every effort is made to understand the environment in which the coating is designed to work, success can only be determined by trials and in-service testing.