



Shot peening process

C.A.S.E™ (isotropic finishing)

Improved performance and lubrication, reducing critical factors such as wear, micro and macro pitting, noise and operating temperatures. C.A.S.E.™

super finishing of components is critical in applications of metal to metal contact such as gears and bearings. This technique has been developed for surfaces that require both excellent bending and contact fatigue strength with enhanced surface properties to resist high loading. The process is generally applied after controlled shot peening to remove surface asperities.

Laser peening

Next generation peening process.

Introduces residual compressive stresses in all metallic materials up to 10 times deeper than other cold working techniques with virtually no surface disruption. This process has the ability to surgically place beneficial residual compressive stress into key areas of components to retard crack initiation and growth, enabling increased fatigue strength.

Thermal spray

Protecting components from high temperatures, oxidation and corrosion and as a replacement for hard chrome plating.

Our range of thermal spray processes includes HVOF (High Velocity Oxy Fuel), Plasma, Arc Wire and Flame Spray. These processes can be used to apply thermal barrier, abrasible, environmental and hard faced coatings either for new manufacture or component repair. Components such as turbine blades can be brought back to OEM specification.

Engineered coatings

Improving part life and reducing maintenance costs. We have been providing the aerospace and defence industry with a comprehensive range of coatings to enhance performance and extend the life of components. Many of our coatings are qualified to aerospace and defence specifications.

Our range of coatings, including Everlube® Dry Film Lubricants and Parylene provide:

- | Resistance to corrosion, chemical and environmental attack, erosion and galling
- | High lubricity/low friction/high release/anti-stick/low noise/anti squeak
- | Shielding to EM/RF radiation
- | Aerospace aluminized coatings
- | Pre-treatments including Ti anodising, phosphate conversion coating and chilled iron blasting, aluminium oxide blasting and vapour degreasing
- | Ultra thin bio compatible conformal protection
- | REACH compliant, chrome free aerospace coating

In addition to our range of standard coatings, we have the in-house ability to design and develop our own coatings tailored to individual requirements.

Material testing services

IMR Test Labs, a Business Unit of Curtiss-Wright, offer the latest in independent mechanical and metallurgical testing services including fatigue testing, thermal spray coating analysis, metallurgical and failure analysis using the latest technology and methodology to produce detailed and user friendly reports.

Confidence and quality

Our customers operate in a wide range of markets including aerospace, automotive, oil & gas, energy, power generation, medical and other general industries. We would be happy to discuss your requirements with you without obligation.