

# **Surface Technologies**

www.cwst.com | www.cwst.co.uk

#### **COMPANY PROFILE**

Curtiss-Wright Surface Technologies (CWST) offers a single source solution and point of contact for all your surface treatments. We can reduce your turnaround times and costs through our network of over 65 worldwide facilities.

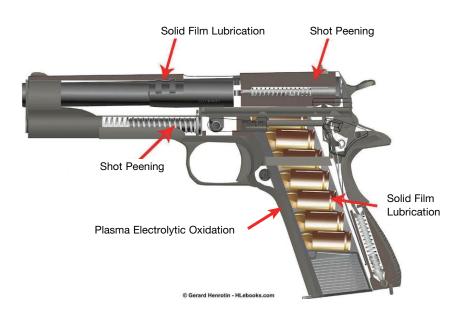
Our proven surface treatments meet industry demands for lighter materials, improved performance and life extension in key markets such as Aerospace, Automotive, Energy and Medical. We can prevent premature failures due to fatigue, corrosion, wear, galling and fretting.



Surface Technologies is a Division of Curtiss-Wright (NYSE:CW) a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships.



# Firearm Materials Improvement and Testing



## **Shot Peening • Engineered Coatings • Analytical Services**

Surface engineering techniques are proven to extend the life of components, and ensure optimum operating performance. These 3 methods should be considered, especially where components are exposed to harsh environments and challenging operating conditions. See details on page 2.





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## **Shot Peening**

### Provides Fatigue Strength Enhancement in Small Radii

- Fatigue enhancement of cyclically-loaded parts
- Ejector pins
- Springs
- Firing pins
- Notch-sensitive geometry
- Texturing to specified finish
- Media types
  - Steel
  - Stainless steel
  - Glass bead

## **Engineered Coatings**

#### **Bullets**

Coating: Microseal

Friction Reduction

Coating: 10014 case coat + 6108 top coat

Corrosion, Lubricity, Color

#### AR15/M4 Platforms

Coating: Anodizing, Mil-DTL-16232, EM6226

 Color Matching, Cleaning, Assembly, Reliability,

### Steel Components

Coating: Mil-Std-171 and Everlube 6226, EM8256, Powder Coatings, Cerakote

 Break In, Wear, Lubrication, Stiction, Corrosion Resistance

### Magazines

Coating: Mil-DTL 16232 and overcoat of SFL EM6256

 Lubrication, Stiction, Corrosion Resistance

#### Military weapons

Coating: Mil-Std-171 and Everlube 6226, EM6256, Powder Coatings, Cerakote

 Break In, Wear, Lubrication, Stiction, Corrosion Resistance

#### Handrails / Guards

Coating: PEO

- Enhanced Corrosion, Wear Protection, Lightweighting (magnesium)
- Cleaner Process Less FOD and Particulate



## **Analytical Services**

- Chemical analysis for alloy identification
- Chemical and thermal analysis for polymer identification
- Hardness
- Microstructure examination of metals
- Coating identification
- Mechanical strength (tensile)
- Fatigue testing of springs
- Residual stress measurements of bullet casings
- Failure analysis
- Lubricant identification
- Salt spray and other corrosion testing