# CURTISS -WRIGHT

# INDUSTRIES SERVED AIRCRAFT WING FORMING





### **NON-DESTRUCTIVE TESTING**

## **Company Overview**

Curtiss-Wright operates the world's largest network of shot peening facilities to meet today's challenging requirements. Located in Wellington, Kansas and previously known as Metal Improvement Company, we are a full-service shot peening facility with most OEM and industry approvals.

### **Design Challenges and Problems Solved**

High-Cycle Metal Fatigue (bending, torsion, vibration)

Fretting Fatigue

Stress Corrosion Cracking

Gear Tooth Flank Fatigue (micro-pitting, rolling-sliding contact fatigue) Forming / Contour Correction of titanium and aluminum aircraft structures Thermal Fatigue

### **Markets and Industries Served**

Aerospace Mining

Automotive Power Generation
Chemical & Food Processing Off-Highway Vehicles

Construction Oil & Gas Industrial Railroad

Military Recreational Vehicles

### **Facility Capabilities and Services**

Shot Peening Shot Peen Forming
Glass Bead Peening Corrective Peening

On-Site Shot Peening Roto-Peening (Flapper Peening)

Precision Texturing Non-Destructive Testing

### **Customer Approvals/Specifications (Partial Listing)**

The Wellington facility is approved to meet numerous OEM, industrial and military requirements including:

Boeing Bombardier Lockheed-Martin Goodrich

Gulfstream Textron (Cessna / Beechcraft / Hawker)

IAI Honda

Embraer Safran Landing Systems (Messier-Dowty)

L3 John Deere

Nadcap

### **Contact Information**

**Curtiss-Wright: Metal Improvement Company** 

440 North West Road Wellington, Kansas 67152

Ph: (620)326-5509 Web: www.cwst.com rob.maruca@cwst.com



# **Shot Peening Applications**



LANDING GEAR











**SPRINGS** 

**Aircraft and Rotorcraft Components** 

Wing Panels Spars

Wing Ribs Landing Gear Bulkheads Slat Tracks

Landing Gear Transmission Gears: All designs

### **Automotive Power Train Components**

Flex Plates Gears: All designs

Parking Pawls Shafts

### **Automotive Engine Components**

Connecting Rods Crankshafts
Rocker Arms Valve Springs

### **Military, Off-Highway Vehicle Components**

Suspension Lugs Torsion Bars
Wheel Bearing Flanges Steering Flanges

### Oil & Gas

Drill Collars, Bits and Rods Hydraulic Fracking Fluid Blocks

Shovel Buckets and Screens Trunk Crankshafts

### **Other Components / Applications**

Gears: Large Industrial and Mining Threaded Connections Precision Texturing (Architectural) Tools, Dies, Molds

Springs: All Designs Powdered Metal (Fatigue & Porosity Sealing)

Welded Fabrications

### **On-Site Shot Peening**

Field crews can shot peen any size part to Mil spec at your facility or site:

Aircraft Fuselage / Wings Gas or Steam Turbines

Hydro Water Wheels Mining Ball Mills and Drag Line Gears
Oil Refinery Coker Structure Weldments – Pipelines, Railcars, Ships

Curtiss-Wright operates a network of over 70 business units in 10 countries performing the following surface treatment technologies:

- · Controlled Shot Peening
- Peening Forming
- · CASE Super Finishing
- · Laser Peening
- · Application of Coatings for Corrosion Prevention and Solid Film Lubrication
- · Material Testing/Analytical Services
- Thermal Spray (Including HVOF)
- · Sale of Coating Products under the Everlube® Brand

Please visit our website at www.cwst.com and select "Find a Location" to see which business units are nearby.