

# CURTISS - WRIGHT

## INDUSTRIES SERVED



AIRCRAFT WING FORMING



AEROSPACE



MINING



COMMERCIAL & MILITARY  
HELICOPTER

## Company Overview

Curtiss-Wright operates the world's largest network of shot peening facilities to meet today's challenging requirements. Located in Grand Prairie, Texas 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

Robotic Shot Peening	Shot Peen Forming
Glass Bead Peening	Corrective Peening
On-Site Shot Peening	Roto-Peening (Flapper Peening)
Precision Texturing	

### Customer Approvals/Specifications (Partial Listing)

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

Boeing	Bombardier
Lockheed-Martin	Sikorsky
Gulfstream	Goodrich
Bell Helicopter	Textron (Cessna / Beechcraft / Hawker)
Northrup Grumman	Pratt & Whitney
Rolls Royce	L3

### Contact Information

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# Shot Peening Applications



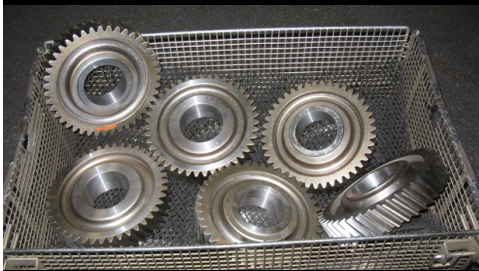
LANDING GEAR



HELICOPTER ROTOR



FIREARMS



GEARS



SPRINGS

## Aircraft and Rotorcraft Components

Wing Panels  
Wing Ribs  
Bulkheads  
Landing Gear  
Spars  
Landing Gear  
Slat Tracks  
Transmission Gears: All designs

## Automotive Power Train Components

Flex Plates  
Parking Pawls  
Gears: All designs  
Shafts

## Automotive Engine Components

Connecting Rods  
Rocker Arms  
Crankshafts  
Valve Springs

## Military, Off-Highway Vehicle Components

Suspension Lugs  
Wheel Bearing Flanges  
Torsion Bars  
Steering Flanges

## Oil & Gas

Drill Collars, Bits and Rods  
Shovel Buckets and Screens  
Hydraulic Fracking Fluid Blocks  
Trunk Crankshafts

## Other Components / Applications

Gears: Large Industrial and Mining  
Precision Texturing (Architectural)  
Springs: All Designs  
Welded Fabrications  
Threaded Connections  
Tools, Dies, Molds  
Powdered Metal (Fatigue & Porosity Sealing)

## On-Site Shot Peening

Field crews can shotpeen 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](http://www.cwst.com) and select "Find a Location" to see which business units are nearby.