LAMBDA Technologies Group

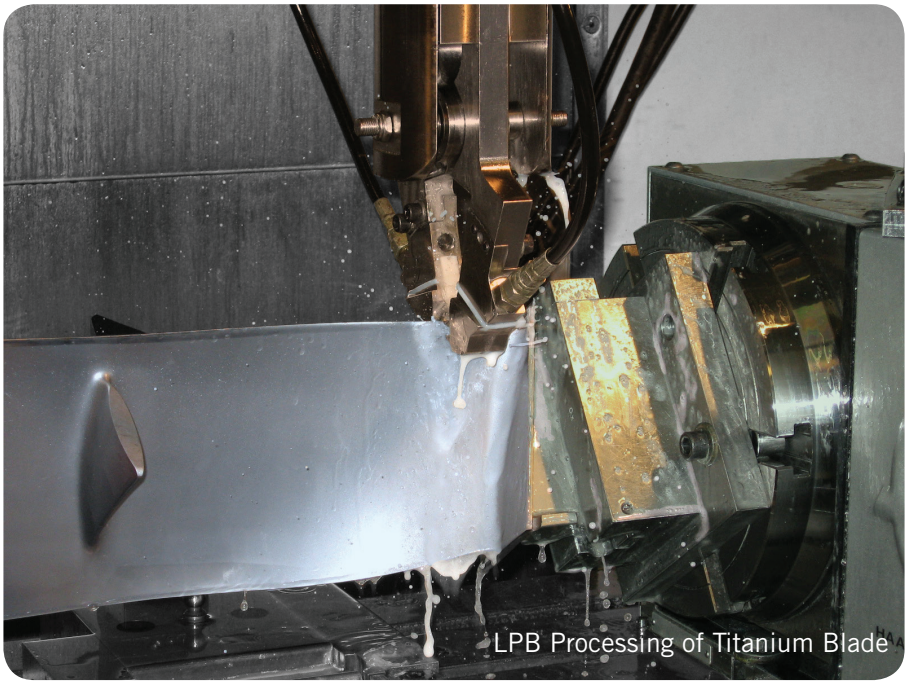
Fact Sheet

Low Plasticity Burnishing (LPB®)

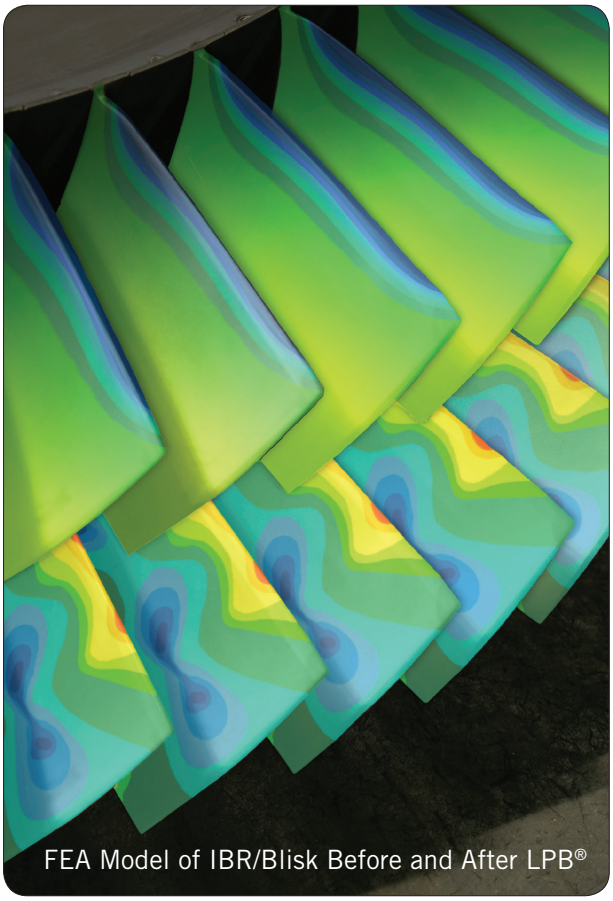
Improving Component Life and Performance

How LPB® Works

Low Plasticity Burnishing (LPB®) is a patented process and proven surface treatment. LPB® uses residual compression by design to improve performance, increase damage tolerance, and reduce maintenance costs without changing the material or component design.



LPB Processing of Titanium Blade



FEA Model of IBR/Blisk Before and After LPB®

Compression by Design

- Custom Engineered for Each Part
- Residual Stress Stability
- Cancels Applied Tension
- Compression Can Exceed 12mm
- Through-Thickness Compression Achieved on Thin Sections

Ease of Processing

- CNC Repeatability
- Single Cycle Processing
- Rapid Production
- Works with Difficult Geometries
- Push-Button Simplicity

Turn-Key Production

- Processing by OEMs, Depots, Third Party
- No Exotic Equipment or Training
- Worldwide Delivery and Support

Quality Control

- 100% Continuous Closed Loop Monitoring
- QC Exceeding Six Sigma
- Automatic Immediate Acceptance Testing
- Component Tracking by Serial Number or Barcode
- Statistical Process Control

To maximize the life of your component, visit us online at **www.lambdatechs.com**.

Lambda Technologies 3929 Virginia Avenue, Cincinnati, OH 45227 • Tel (513) 561-0883 • Toll Free/U.S. (800) 883-0851 • Fax (513) 322-7186

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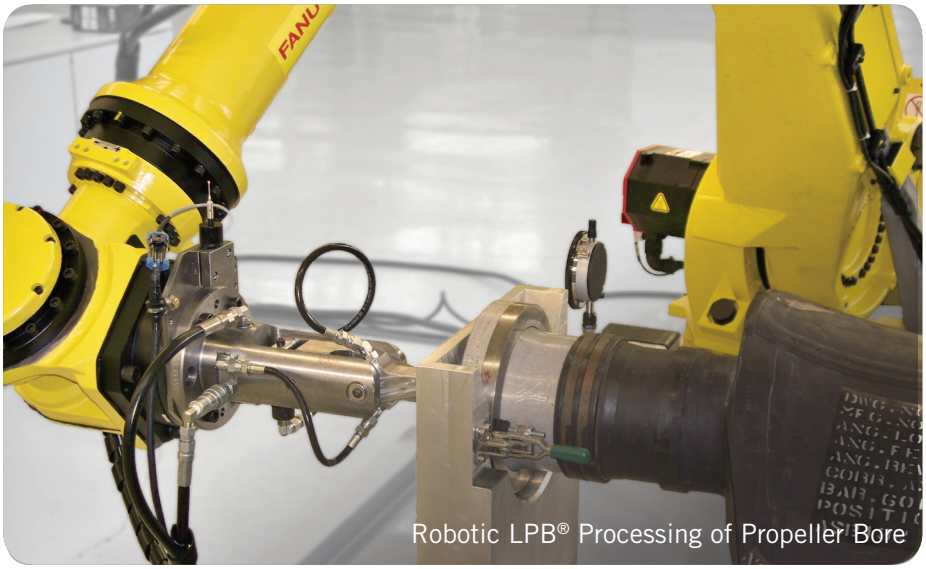

Robotic LPB® Processing of Propeller Bore

LPB® Solutions

Lambda has developed applications used in major industries around the world. We work with industries including aerospace, power, oil & gas, nuclear, chemical, weaponry, medical, locomotive, and automotive. This technology is also approved by FDA for use on medical implants and accepted by the FAA for the repair and alteration of commercial aircraft components.

Extend Fatigue Life

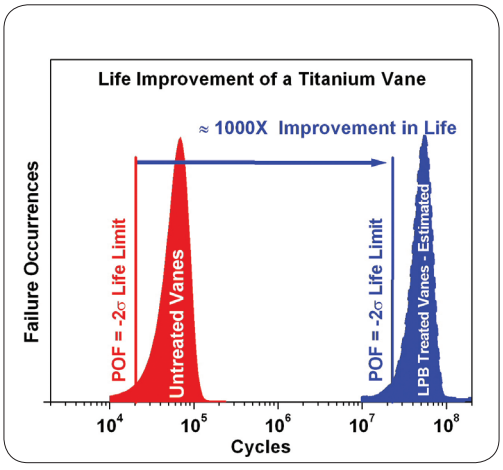
- Reduces Replacement Costs
- Increases Safety
- Prevents Forced Shut Downs and Outages

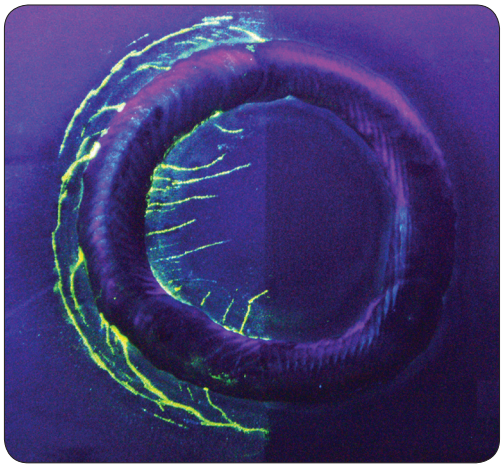
Eliminate Stress Corrosion Cracking (SCC)

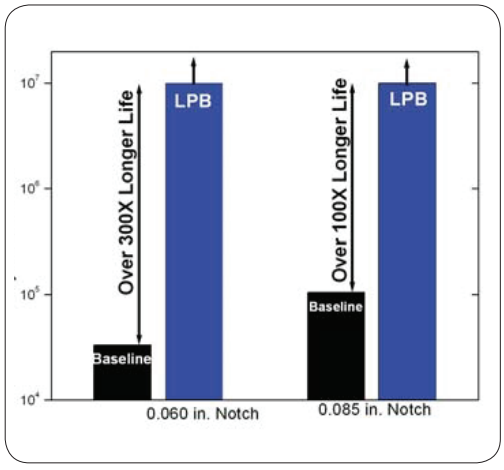
- Shortens Inspection Times
- Reduces Maintenance Costs
- Allows Use of Less Expensive Alloys

Increase Damage Tolerance

- Reduces Scrap Rate
- Increases Time in Service
- Superior Finish Facilitates Inspection







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