



Contact: Justin Combs
Lambda Technologies Corporate Headquarters
3929 Virginia Avenue
Cincinnati, Ohio 45227-3411
Tel: 513.561.0883
Toll Free: 800.883.0851
Fax: 513.322.7186
E-mail: @lambdatechs.com

For Immediate Release

Low Plasticity Burnishing Honored as NASA Spinoff

Low Plasticity Burnishing (LPB[®]) was selected as a NASA Spinoff technology for 2010. Each year, NASA publishes a yearbook of significant breakthroughs that “fuel economic and technological development nationally and globally,” and LPB is the first technology featured in the 2010 edition. The Health and Medicine section showcases LPB’s ability to dramatically improve the fatigue life of titanium hip implants by mitigating fretting damage. Replacement hips that have been improved with LPB last longer and eliminate the need for painful and costly follow-up hip repair surgery.

LPB uses residual compression by design to increase damage tolerance in metallic components, greatly extending their service life. Processing is performed using basic CNC machines, allowing for quick and easy integration into manufacturing processes. Computer control also guarantees repeatability and process regulation. The closed-loop pressure system for LPB adjusts in real time and exceeds six-sigma quality requirements. Each part is tracked by serial number and SPC information is immediately available to quality control teams.

NASA was particularly interested in LPB because of the benefits it offers over traditional surface treatments. Techniques, such as shot peening or deep rolling, cause high amounts of cold work in the part surface. LPB creates minimal cold work. This makes its protective layer less chemically active, stable at higher temperatures, and able to stand up to mechanical overloading. The mirror-like surface finish provided by LPB facilitates non-destructive testing and eliminates the need for extra machining steps in components with very precise tolerance. LPB has applications in aerospace, medical, power, and other major industries.

You can read the 2010 Spinoff or order a copy of your own at the [NASA Spinoff website](#). For more information on LBP or Lambda’s other services, contact Justin Combs at 513-561-0883 or visit www.LambdaTechs.com.

###