



Robots Break into MRO

PPI and Lambda begin robotic LPB production

10/15/10, Kent, Washington - Pacific Propeller International has begun robotically processing aircraft components for the US Navy, using Lambda Technologies' patented low plasticity burnishing (LPB). LPB mitigates failure mechanisms in military propellers. The program is a large step forward in bringing robotic technology to basic MRO.

"We are very excited to be working with Lambda, and look forward to the future," said Mike Johnson, General Manager of PPI. "Innovative solutions offered by Lambda will help us provide new levels of service to our customers."

The PPI system is one of three that are in facilities across the country. The other two are installed in naval facilities in Cherry Point and Warner Robbins Airforce Base. LPB replaced traditional shot peening for the surface treatment of the P-3 propeller bore, providing a much deeper layer of protection, eliminating machining procedures and extending the life of the propeller.

The flexibility of robots makes it much easier to perform complicated maintenance procedures. Using these machines allows PPI to quickly process what were once considered difficult pieces, dramatically increasing the time in service for these aircraft.

"The main benefits of robotic processing are control and repeatability. This system is completely closed-loop controlled. That allows us to verify absolutely that we've achieved what we set out to do, and using CNC robots allows us to do it exactly the same way every time," said Paul Prev y, CEO of Lambda.

LPB is a proven surface treatment that provides a deep layer of compressive residual stress to mitigate fretting, corrosion cracking, or foreign object damage in the fatigue prone areas of expensive and critical metallic components. LPB delivers significant fatigue life extension with minimal initial capital investment and low production costs.

PPI provides global repair and overhaul services to several regional airline aircraft, as well as many of the world's military operators of large propeller aircraft. Propeller driven transport aircraft throughout the globe are also served by PPI's respected engineers and technicians.

Lambda Technologies is an innovative company incorporating a premier materials research laboratory with a world-class engineering and production enterprise dedicated to the development and optimization of surface treatments to improve component performance. For additional information on Lambda Technologies or the LPB process, contact Justin Combs at (513) 561-0883 or visit lambdatechs.com.