

Hydro Honing

Hydro Honing Buys T&S Finishing in Georgia, New Names for Both Companies Announced

East Hartford, Connecticut. Hydro Honing Laboratories, Inc., has announced the purchase of T&S Metal Finishing in Austell, Georgia. The company is now a subsidiary of Hydro Honing Laboratories, Inc. and is doing business as Peening Technologies of Georgia.

Hydro Honing Laboratories has also changed the name of its Connecticut plant to Peening Technologies. Both plants will function as part of the Hydro Honing family of companies.

Peening Technologies is located in East Hartford, Connecticut, and has provided shot peening services to aerospace and commercial customers for nearly 40 years. Aerospace clients include General Electric, Boeing, Sikorsky, Pratt & Whitney and NASA. Peening Technologies has earned Nadcap approval and bears the distinction of being the very first shot peening facility to earn this certification.

Peening Technologies of Georgia is located in Austell, Georgia, and holds approvals from Boeing, General Electric, Honeywell, Lockheed-Martin, Gulfstream and Pratt & Whitney.

Together, Peening Technologies and Peening Technologies of Georgia provide a full range of shot peening services for a variety of industries including military, aerospace, power generation, and oil and natural gas businesses.

More information can be found at the company website www.hydro-honing.com or www.peeningtechnologies.com.

Lambda Research

Joint Industry-Government Collaboration Garners Best Paper Honors

Cincinnati, Ohio: The International Gas Turbine Institute (IGTI) and the American Society of Mechanical Engineers (ASME) – Manufacturing Materials and Metallurgy Committee selected the paper entitled “Case Studies of Fatigue Life Improvement Using Low Plasticity Burnishing in Gas Turbine Engine Applications”, presented June 18, 2003, during the annual Turbo Expo in Atlanta, Georgia, as Best Paper. The four co-authors represent both industry and a wide cross-section of government agencies. They are:

- Paul Prevéy, Lambda Research, Cincinnati, Ohio
- Ravi Ravindranath, Naval Air Systems Command (NAVAIR), Patuxent Naval Air Station, Maryland
- Mike Shepard, Air Force Research Laboratory (AFRL), Wright-Patterson Air Force Base, Ohio
- Dr. Timothy Gabb, National Aeronautics and Space Administration (NASA) Glenn Research Center (GRC), Cleveland, Ohio

The paper was presented in conjunction with the Turbo Expo Technical Congress, in which the world's authorities on gas turbine design and development gather to review new technologies. The subject focused on the application of Low Plasticity Burnishing (LPB) as a cost-effective means to extend turbine engine life by greatly reducing the risk of engine failure caused by metal fatigue. LPB produces compressive residual stress in metal components to mitigate High Cycle Fatigue (HCF), failures from corrosion, or Foreign Object Damage (FOD). Simply stated, compressive residual stress is a state of the internal structure of a material in which the

material is pushed and held together in compression from all directions. In compressive residual stress, higher tensile stresses are required to initiate material failure: i.e., the higher the degree of compressive residual stress, the more resistant the material becomes to tensile stresses. The paper compared the overall effectiveness of the LPB process in treating an array of advance metal alloys used in the manufacture of turbine engines with other available metal surface treatment technologies - conventional shot peening and Laser Shock Peening (LSP). In the cases discussed, LPB produced improvements in the alloy's performance to include increased damage tolerance, elimination of fretting wear, and enhanced corrosion resistance. The LPB process is applicable to both new and legacy engines and holds considerable promise to achieve excellent technical performance in a production environment at an affordable cost. The honorees will receive a plaque at Turbo Expo 2004 to be held June 14-17, 2004, Vienna, Austria.

Empire Abrasive Equipment

Empire Acquires Hoffman Blast Room

Langhorne, PA – Empire Abrasive Equipment Company, a leading producer of air blast equipment, has announced the acquisition of certain assets of Hoffman Blast Room Equipment, Inc., which declared bankruptcy in March of 2003. Since its founding in 1984, Hoffman had established itself as the leading supplier of blast rooms while producing over 1,000 units, some exceeding 120 feet in length. Larger blast rooms are typically employed in the building and maintenance of railroad cars, truck trailers, ship parts, construction equipment, bridge components and heavy machinery.

The acquisition of Hoffman's intellectual properties gives Empire exclusive rights to market the Hoffman products thereby prohibiting any and all parties from using the Hoffman name in conjunction with the promotion and/or sale of Hoffman style rooms without the written permission of Empire. Empire Abrasive Equipment Company, which manufactures blast cabinets, automated blast systems and portable blasters, as well as its own line of blast rooms, has acquired rights to all Hoffman designs, in addition to the Hoffman name and the exclusive rights to market Hoffman products.

According to Empire's chief operating officer, Robert Morey, the Hoffman acquisition should establish Empire as the leader in blast-room technology, installation and service. “We've added important new products and turnkey capabilities,” said Morey.

For more information, contact Robert Morey, Chief Operating Officer at rmorey@empire-airblast.com.

Correction

In the fall issue of *The Shot Peener*, we printed a press release from Surface Finishing Equipment Co. We have since been contacted by Officine Meccaniche San Giorgio SPA (OMSG) who provided documentation that the machine was erroneously claimed by Surface Finishing Equipment Co. and was actually built by OMSG. We apologize for any confusion that this may have caused and we remind you that *The Shot Peener* does not endorse or concur with any articles submitted by our readers. For more information on OMSG, see the article on page 27.