

Shot Peening Program at Purdue University

1999103

Electronics Inc. sponsored a banquet at Purdue University to launch the Purdue Shot Peening Program with Dean of School of Technology, Don Gentry; Assistant Dean of School of Engineering, Warren Stevenson; and 25 others.

Several industrial partners were honored for donating equipment to Purdue School of Mechanical Engineering Technology:

- Progressive Technologies - shot peening machine
- Premier Shot Company - Cut wire shot

- Ervin Industries - Cast steel shot
- W. S. Tyler - Media analysis equipment
- Electronics Inc. - Almen gages and MagnaValves
- Zero Products/Clemco - Air blast nozzles
- Lambda Research - X-ray stress analysis

The contact people at Purdue for additional information: Prof. Mike Magill, head of School of Mechanical Engineering Technology (mamagill@tech.purdue.edu) and Christine Corum (clcorum@tech.purdue.edu).

ICBM Conference Proceedings

The 1st International Conference on Barkhausen Noise and Micro-Magnetic Testing was held in Hannover, Germany in 1998, giving scientists, researchers and engineers an opportunity to share their experience with their colleagues. Interest and involvement of the researchers and the commitment of those that were willing to pursue the industrial applications of the Barkhausen Noise method have been both equally important in elevating the BNA method to its esteem today.

The presentations in the conference covered the theory of the physical phenomenon of the magnetic Barkhausen effect and the practical applications of micromagnetic testing. Proceedings are now available as a CD or a book for the price of \$40 from American Stress Technologies. You can either mail or fax your purchase order to:

American Stress Technologies
267 Kappa Drive
Pittsburgh, PA 15238-2817
Tel: (412)963-0676 Fax: (412)963-7552

Table of Contents for the 1st international Conference on Barkhausen Noise and Micromagnetic Testing, Hannover, German, September 1-2, 1998:

I. PAPERS

Residual Stress Evaluation in ABB Power Plant Turbine Blades
Technical University of Gdansk. Poland ABB-Zamech Ltd. Elblag, Poland

Inspection of Aircraft Landing Gear Components Using the Barkhausen Noise Technique

Dr. J.H. Burgoyne and Patmers, Consulting Scientists and Engineers, London, UK. Hawker Pacific Aerospace, Ltd., Heathrough Airport, Hounslow, UK

Contact Fatigue Damage Measurement of Ball Axial Bearings by Means of Barkhausen Noise

Univerrita di Brescia. Dipartimento di Ingegneria Meccanica, Brescia, Italy

Applications of Barkhausen Noise Analysis (BNA), A Review of Three Cases Having Industrial Significance

American Stress Technologies, Inc. Pittsburgh, PA USA

Process Improvement for Crankshafts Grinding Using BNA
Caterpillar Belgium. Charleroi (Gosselies)

Combined NDT Testing of Camshafts
Daimler-Benz AG. Stuttgart, Germany

Introduction to Micromagnetic Techniques
Institute for Production Engineering and Machine Tools, University of Hannover

Characterization of Fatigue of Cyclically Loaded Welded Joints by Micromagnetic Testing and X-ray Diffraction
Institute of Welding Technology. Technical University of Braunschweig

Micromagnetic In-Process Surface Integrity Analysis of Ground Workpieces
Institute for Production Engineering and Machine Tools, University of Hannover

Investigations on Ground Parts Using Barkhausen Noise, XRD and Metallographic Methods
SKF Schweinfurt

Residual Stress Determination of Ferro-Magnetic Sheets
Institute for Production Engineering and Machine Tools, University of Hannover

Application of Barkhausen Noise Measurements in Failure Analysis and Failure Prevention
WTWEB-120, Erding, Germany

Modeling of Angular Dependence of Barkhausen Effect for the Biaxial Load State
Southwest Research Institute, San Antonio, Texas USA, Technical University of Gdansk, Poland

Detection of Grinding Damage in Hardened Gear Steels Using Barkhausen Noise Analysis
Department of Mechanical, Materials and Manufacturing Engineering, University of Newcastle, Newcastle upon Tyne, UK

Physical Basis of Micromagnetic Methods and Sensor Systems and Their Application Areas
Fraunhofer Institute fur ZfP, Universitat Saarbrucken, Germany

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