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Electromagnetic Evaluation of Metallic Fillers - Plastic Composites
Quantitative Estimation of Strain Induced alfa'- Martensite in Cold Worked AISI Type 304 Stainless Steel Using GMR Sensor; Characterization of Pulsed Eddy Current NDE in Metallic Materials Through in-situ Monitoring of Tensile Testing; Magnetic NDE Techniques; Evaluation of Sigma Phase Embrittlement in Fe-Cr Alloys by Magnetic Hysteresis Loop Technique; Behavior of Magneto acoustic Emission on Cold-Rolled Fe-Cu Alloy with Thermal Aging; Early Detection of Damage in Thermo-Cyclically Loaded Austenitic Materials
Understanding Sigma Phase Influence on the Magnetic Behavior of Duplex Stainless Steel Inversion and Imaging Techniques; Improvement of Restoration Accuracy of Semi-Elliptical Surface Crack Considering the Resolution of Flux Gate Sensor; Statistical Analysis of Array Probe Eddy Current Data from Steam Generator Tubes; Dipole Identification and Localization Using Pseudo-Inverse Techniques for Magnetic Flux Leakage Experiments; 3-D finite Element Modeling of Leakage Magnetic Fields from Inclined Cracks in Carbon Steel Plates
Competitive Learning on Cosine Similarity Method for Classification of Defects in Two-Layered Metallic Structures 3D Image Reconstruction Using Noisy EMAT Signal; Eddy Current Imaging Enhancement Using Electromagnetic Evanescent Waves; Sensors and Transducers for Electromagnetic NDE; Damage Evaluation of Copper Alloy by Eddy Current Testing with AMR Sensor; Eddy Current Transducers Dedicated for Titanium Billets Evaluation; Comparison of Detection Abilities Between Inductance Sensor and Fluxgate Magnetometer in ECT
Pipe Wall Thickness Measurements on Flow Accelerated Corrosion by Electro-Magnetic Acoustic Transducer

Sommario/riassunto

Nondestructive evaluation is a vitally important tool in many fields of engineering, medicine and art. Because it does not permanently alter the article being inspected, it is a highly-valuable technique that can save both money and time in product evaluation, troubleshooting and research. Electromagnetic Nondestructive Evaluation (ENDE) is the process of inducing electric currents, magnetic fields or both inside a test object and observing the electromagnetic response. This book is a collection of 41 papers presented at the 16th International Workshop on Electromagnetic Nondestructive Evaluation