

1. Record Nr.	UNINA9910464764803321
Titolo	Experimental stress analysis 51 : selected, peer reviewed papers from the 51st Annual of the International Scientific Conference on Experimental Stress Analysis (EAN 2013), June 11-13, 2013, Litomerice, Czech Republic // edited by Alena Petrenko
Pubbl/distr/stampa	Durnten-Zurich, Switzerland : , : Trans Tech Publications, , 2014 ©2014
ISBN	3-03826-358-3
Descrizione fisica	1 online resource (428 p.)
Collana	Applied Mechanics and Materials, , 1662-7482 ; ; Volume 486
Altri autori (Persone)	PetrenkoAlena
Disciplina	620.112
Soggetti	Strength of materials Materials - Testing Strains and stresses Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Experimental Stress Analysis 51; Preface, Committees and Sponsors; Table of Contents; Chapter 1: Stress Analysis in Metal and Composites; Study of Residual Stress Surface Distribution on Laser Welded Steel Sheets; Non-Destructive Inspection of Surface Integrity in Milled Turbine Blades of Inconel 738LC; Mathematical Model of the Experimental Drilled Hole Imperfections Influence on the Stress State Identification for the ""Hole Drilling Strain-Gauge Method"" Application; Distribution of Stress around the Graphitic Particles in Cast Iron Microstructure Implementation of Correction Coefficients Relevant for Photoelastic Coatings into the PhotoStress Software Method of Investigation of the Stress-Strain State of Surface Layer of Machine Elements from a Sintered Nonuniform Material; The Use of Modan 3D in Experimental Modal Analysis; Investigation of Long-Term Mechanical Response of Rubber; Memorization and other Transient Effects of ST52 Steel and its FE Description; An Effect of Surface Laser Hardening on Deformations and Fatigue Properties of 42CrMo4 Steel Specimens

Monitoring of Internal Damage of Glass Fibre Reinforced Composite Components Using Strain Measurements with Strain Gauges and Fibre Optic Sensors
Adaptive Control of the Belt Conveyor Preloading;
Deformation Properties of Laminated Glass Subjected to Increased Temperature; Wear Behavior of Hard Dental Tissues and Restorative Materials; Experimental Tests of the UHPC in Triaxial Compression; Mechanical Resistance of Triple Glass Facade Panels; Determination of the Necessary Geometric Parameters of the Specimen in Ring-Core Method

Temperature and Stress Field Measurement at Friction-Stir Welding of an Aluminum Alloy Probe
The Use of Fiber Bragg Grating Sensors during the Static Load Test of a Composite Wing Structure; Understanding of the Dynamical Properties of Machines Based on the Interpretation of Spectral Measurements and FRF; Verification of Deformation and Loading of a Mould during Manipulation; The Numerical Analysis of Influence of the Shape of the Anchor Head on the Headed Stud's Tensile Capacity; Strain Gage Measurements for Accurate Yield Point Determination

Possibility of Application of the Simulation Based Reliability Assessment Method in Modeling of Structures
QUALISYS System Applied to Industrial Testing; The Knowledge Acquired by Using of Optical Methods by Strain Fields Investigation; Residual Stress Investigations of Electron Beam Welds on Samples Prepared by Reconstitution Method; Determine Parameters for Double-K Model at Three-Point Bending by Application of Acoustic Emission Method; Numerical and Experimental Research of Design Optimization of Baths for the Production of Nanofibers by the Electrospinning

Analysis of a Dynamic Response of a Car Door Impact into the Lock

Sommario/riassunto

Collection of selected, peer reviewed papers from the 51st Annual of the International Scientific Conference Experimental Stress Analysis (EAN 2013), June 11-13, 2013, Litomerice, Czech Republic. The 69 papers are grouped as follows: Chapter 1: Stress Analysis in Metal and Composites; Chapter 2: Experimental Methods and Stress Analysis in Building Materials
Scientists and engineers from across Eastern Europe explore the experimental analysis of stress in metals and composite and in building materials. The 69 papers include discussions of investigating the stress-strain state of the surface lay
