

COMAT 2014 - Recent Trends in Structural Materials

Collection of selected, peer reviewed papers from the 3rd International Conference COMAT on Recent Trends in Structural Materials, November 19-21, 2014, Pilsen, Czech Republic. The book contains 21 papers and covers a wide range of topics: Mechanical Prope

Bearbeitet von
Jan Džugan

1. Auflage 2015. Buch. ca. 164 S. Hardcover
ISBN 978 3 03835 623 3

[Weitere Fachgebiete > Technik > Werkstoffkunde, Mechanische Technologie](#)

schnell und portofrei erhältlich bei



Die Online-Fachbuchhandlung beck-shop.de ist spezialisiert auf Fachbücher, insbesondere Recht, Steuern und Wirtschaft. Im Sortiment finden Sie alle Medien (Bücher, Zeitschriften, CDs, eBooks, etc.) aller Verlage. Ergänzt wird das Programm durch Services wie Neuerscheinungsdienst oder Zusammenstellungen von Büchern zu Sonderpreisen. Der Shop führt mehr als 8 Millionen Produkte.

Table of Contents

Preface, Committees and Sponsors

Small Size Specimens Methods for Evaluation of Mechanical Properties M. Rund, J. Volák and M. Šindelářová	1
Combination of International High Pressure Forming and Q-P Process for Production of Hollow Products from Ahs Steel B. Mašek, I. Vorel, H. Jirková and P. Kurka	9
Effect of Accelerated Spheroidisation and Long Annealing of 100CrMnSi6-4 Steel on Structure and Properties after Hardening D. Hauserova, J. Dlouhy and Z. Novy	17
Possibilities of Use of the Thermographic Measurement as a Tool for Detecting Defects and Improving the Production Process E. Rykalová, Z. Peřina, R. Fabian and P. Jonšta	23
A New Approach to Determining the Bending Moment in Tube Forming E. Peterková and R. Samek	31
Forming and Microstructure Development of AHS Steels by Temperatures under A_{C3} H. Jirková, K. Opatová, Š. Jeníček and B. Mašek	39
Forming a Structured Surface of a New Type of Solar Absorber with Hydroforming L. Mrňa and J. Řiháček	49
Mathematical Models of Ultra-Fine Grained Materials Based on Dissipation Normal Form J. Lahoda and M. Zemko	55
Investigation of Steel 09G2S Processed by Equal Channel Angular Pressing M. Borisova, S. Yakovleva and S. Makharova	61
In Situ Testing and Heterogeneity of UFG Cu at Elevated Temperatures M. Petrenec, P. Král, J. Dvořák, M. Svoboda and V. Sklenička	67
Aluminium Alloys Measurement in Quenching Dilatometer and Application of the Data M. Kövér and P. Sláma	73
Effect of Precipitation Aging Conditions on Microstructural Refurbishment in Cast Nickel Base Superalloy GTD-111 P. Wangyao, L. Phansri, P. Hirisatja, K. Saelor, J. Zrník and Z. Novy	79
Optimization of Microstructure of the Low Alloy Structural Steel Using Rare Earth Metal (REM) Addition P. Jonšta, P. Machovčák, M. Sušovský, A. Trefil, S. Brožová, T.H. Vu, J. Drápala and E. Rykalová	85
New Type of Device for Achievement of Grain Refinement in Metal Strip S. Rusz, L. Čízek, V. Michenka, J. Dutkiewicz, M. Salajka, O. Hilser, S. Tylšar, J. Kedroň and M. Klos	91
Capabilities of Thixoforming of Steels Z. Novy and K. Opatová	99
Mechanical Properties and Wear Resistance of PM Composite Materials Reinforced with the Halloysite Particles L.A. Dobrzański, B. Tomiczek, W. Pakiela and A.E. Tomiczek	107
Influence of Thermo-Mechanical Treatments on Structure and Mechanical Properties of High-Mn Steel L.A. Dobrzański, W. Borek and J. Mazurkiewicz	113
Application with Simultaneous Electrocontact Heating Stretching to Reduce Residual Stresses in the Heat Exchange Tube G. Shimov, A. Serebryakov and A. Serebryakov	121
Finite-Element Simulation of the Process of Lengthwise Pipe Rolling on a Stub Mandrel A.A. Bogatov, D.A. Pavlov and E.A. Dresvyankina	127
The Influence of ECAP Geometry on the Effective Strain Distribution R. Kočiško, T. Kvačkaj, A. Kováčová and M. Zemko	135
Background of Branched Crack Formation in Surface Zone of Continuously-Cast Ti-Nb Microalloyed Steel Slab P. Bekeč, M. Longauerová, M. Vojtko, O. Milkovič, J. Kadlec, G. Tréfa and G. Grimplini	143