



UDC: 621

ISSN 1451-2092

University of Belgrade
Faculty of Mechanical Engineering

FME TRANSACTIONS

New Series, Volume 36, Number 3, 2008

Editor:

Rašuo Boško
University of Belgrade

Associate Editor:

Stevanović Vladimir
University of Belgrade

Editorial Board:

Ašković Radomir
Université de Valenciennes, France

Avellan François
Laboratory for Hydraulic Machines
Swiss Federal Institute of Technology, Zurich, Switzerland

Bojić Milorad
University of Kragujevac

Dulikravich S. George
Department of Mechanical and Materials Eng.
Florida International University, Miami, USA

Đorđević Vladan
University of Belgrade

Ehmann F. Kornel
Department of Mechanical Engineering
Northwestern University, Evanston IL, USA

Felix Hong
Wayne State University, Detroit, USA

Gajić Zoran
Rutgers University, USA

Jovanović Jasmina
University of Belgrade

Klimenko A. Sergei
National Academy of Sciences, Kiev, Ukraine

Komatina Mirko
University of Belgrade

Meerkamm Harald
Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Nedić Novak
University of Kragujevac

Petrović Milan
University of Belgrade

Plančak Miroslav
University of Novi Sad

Radovanović Miroslav
University of Nis

Sedmak Aleksandar
University of Belgrade

Stamenović Dimitrije
Boston University, Boston, USA

Technical Editor:

Venci Aleksandar
University of Belgrade

Published by:

University of Belgrade
Faculty of Mechanical Engineering

Volume 36, No 3, 2008, pp. 99-144**CONTENTS****PAGE**

Rusov Srđan, Mitrović Zoran, Mladenović Nikola 99

Control Function on Active Tilting Train Based on an Appropriate Multibody Mechanical System

Vasić S. Vasilije, Lazarević P. Mihailo 103

Standard Industrial Guideline for Mechatronic Product Design

Obradović Aleksandar, Mladenović Nikola, Marković Saša 109

Brachistochronic Rigid Body General Motion

Rakić Slavko, Cvetić Miloš 113

Calculation of Flow Parameters Inside the High Pressure Line of Fuel Injection System in Diesel Engines

Simonović M. Aleksandar, Stupar N. Slobodan, Peković M. Ognjen 119

Stress Distribution as a Cause of Industrial Steel Chimney Root Section Failure

Kreculj D. Dragan 127

Stress Analysis in an Unidirectional Carbon/Epoxy Composite Material

Roegiers Michel, Zhang Hongli, Zhmud Boris 133

Elektrionized™ Vegetable Oils as Lubricity Components in Metalworking Lubricants

Marušić Vlatko, Džepina Ilija, Konjatić Pejo 139

Influence of Content and Arrangement of Reinforcements on Properties of Polyester Laminates

The publication of the Vol. 36 No 3 of this Journal was fully financially supported by the Ministry of Science of the Republic of Serbia. This support is gratefully acknowledged.

On line service:<http://www.mas.bg.ac.yu/transactions>**Printed by:**

"PLANETA print", Ruzveltova 10, 11 000 Belgrade