



University of Belgrade Faculty of Mechanical Engineering

TRANSACTIONS

FME TRANSACTIONS

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:

Vencl Aleksandar

University of Belgrade

Published by:

University of Belgrade Faculty of Mechanical Engineering ISSN 1451-2092

Volume 38, No 4, 2010, pp. 157-208

CONTENTS

PAGE

157

UDC: 621

Mirosavljević Petar, Gvozdenović Slobodan, Čokorilo Olja

The Transport Aircraft Pollution Cost Reduction Strategy

Damljanović Dijana, Rašuo Boško

167

Testing of Calibration Models in Order to Certify the Overall Reliability of the Trisonic Blowdown Wind Tunnel of VTI

Varghese Vinod, Khalsa Lalsingh

173

181

189

197

Two-Dimensional Transient Problem for a Thick Disc with Internal Heat Source

Škatarić Dobrila, Ratković Kovačević Nada

The System Order Reduction via Balancing in

View of the Method of Singular Perturbation

Madić J. Miloš, Marinković J. Velibor

Assessing the Sensitivity of the Artificial Neural

Network to Experimental Noise: A Case Study

Younise Bashir, Rakin Marko, Medjo Bojan, Sedmak Aleksandar

Numerical Simulation for Studying Constraint Effect on Ductile Fracture Initiation Using Complete Gurson Model

Čikara Dejan, Todić Aleksandar, Čikara-Anić 203 Deana

Possibilities of Production of Wear Resistant Construction Elements by Processing of Serbian Basalt

The publication of the Vol. 38, No 4 of this Journal was fully financially supported by the Ministry of Science and Technological Development of the Republic of Serbia. This support is gratefully acknowledged.

On line service:

http:/www.mas.bg.ac.rs/transactions

Printed by:

"PLANETA print", Ruzveltova 10, 11000 Belgrade