



UDC: 621

ISSN 1451-2092

University of Belgrade
Faculty of Mechanical Engineering

FME TRANSACTIONS

New Series, Volume 37, Number 2, 2009

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

Dorđević 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 37, No 2, 2009, pp. 53-106

CONTENTS

	PAGE
Venci Aleksandar	53
<i>Guest Editorial</i>	
Bryant D. Michael	55
<i>Entropy and Dissipative Processes of Friction and Wear</i>	
Franek Friedrich, Badisch Ewald, Kirchgaßner Martin	61
<i>Advanced Methods for Characterisation of Abrasion/Erosion Resistance of Wear Protection Materials</i>	
Bouzakis K.-D., Skordaris G., Gerardis S., Katirtzoglou G., Makrimalakis S., Klocke F., Bouzakis E.	71
<i>The Effect of Micro-Blasting Procedures on the Cutting Performance of Coated Tools</i>	
Kakaš Damir, Škorić Branko, Babić Miroslav, Mitrović Slobodan, Miletić Aleksandar, Vilotić Marko, Terek Pal	83
<i>Surface Roughness and Friction Coefficient in IBAD Deposited Tin Hard Coating</i>	
Di Benedetto Giuseppe, Organisciak Michel, Popovici George, Stijepić Aleksandar	87
<i>Film Thickness Prediction of Radial Lip Seal</i>	
Yüksek Levent, Kaleli Hakan, Özener Orkun, Özoguz Berk	91
<i>The Effect and Comparison of Biodiesel-Diesel Fuel on Crankcase Oil, Diesel Engine Performance and Emissions</i>	
Zidaru Ion, Ripeanu George Razvan, Tudor Ioan, Drumeanu Catalin Adrian	99
<i>Research Regarding the Improvements of Tribological Behavior in Three Cone Bits Bearings</i>	
Vereš Miroslav, Nemčeková Miroslava, Marinković Aleksandar	103
<i>Tooth Flanks Scoring Resistance of Noninvolute Teeth Profiles In Plane Toothed Cylindrical Gears</i>	

The publication of the Vol. 37 No 2 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