



**FACULTY OF MECHANICAL ENGINEERING KRALJEVO  
UNIVERSITY OF KRAGUJEVAC  
KRALJEVO – SERBIA**

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**THE SIXTH INTERNATIONAL TRIENNIAL CONFERENCE**

# **HEAVY MACHINERY HM 2008**

**PROCEEDINGS**

**KRALJEVO, 24. – 29. JUNE 2008.**



**FACULTY OF MECHANICAL ENGINEERING KRALJEVO**  
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ORGANIZATION SUPPORTED BY:

Ministry of Science, Republic of Serbia

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**PUBLISHER:**

Faculty of Mechanical Engineering, Kraljevo

**EDITORS:**

Prof. dr Novak Nedić, mech. eng.

**PRINTOUT:**

Riža d.o.o., Kraljevo

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No. of copies: 200

**REVIEWS:**

All papers have been reviewed by members of scientific committee



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## **PREFACE**

The Faculty of Mechanical Engineering Kraljevo has been traditionally organizing the international scientific conference devoted to heavy machinery every three years. The VI International Scientific Conference HM 2008 is considering modern methods and new technologies in the fields of design in machinery, production technologies, urban engineering and QMS through thematic sessions for the purpose of sustainable competitiveness of economic systems. Modern technologies are exposed to fast changes at the global world level so that their timely application both in large industrial systems and in medium and small enterprises is of considerable importance for the entire development and technological progress of economy as a whole.

The VI International Scientific Conference Heavy Machinery HM 2008 is a place for exchange of experiences and results accomplished in domestic and foreign science and practice, with the goal to indicate directions of further development of our industry on its way toward integration in European economic trends. Exchange of experiences between our and foreign scientific workers should contribute to extension of international scientific-technical collaboration, initiation of new international scientific-research projects and broader international collaboration among universities.

The papers which will be presented at this Conference have been classified into three thematic fields. In the first thematic field: Machine Building Design, the scientific-research issues refer to:

- A. Automatic Control and Fluid Technique
- B. Earth-Moving and Transportation Mechanisation
- C. Railway Engineering
- D. Termotechnology, Environment Protection and Urban Engineering
- E. Mechanical Design and Mechanics
- F. Production Technologies, Material Application and Entrepreneurial Engineering and Management
- G. Computer-Integrated Processes and Designing of Machining Processes

Within this Conference, a round table with the topic “Energy Efficiency in Heavy Machinery” will be held. The aim is to open a scientific discussion on this actual problem in industry.

The sponsorship by the Ministry of Science of the Republic of Serbia is the proper way to promote science and technology in the area of mechanical engineering in Serbia.

On behalf of the organizer, I would like to express our thanks to all organizations and institutions that have supported this Conference. I would also like to extend our thanks to all authors and participants from abroad and from our country for their contribution to the Conference. And last but not the least, dear guests and participants in the Conference, I wish you a good time in Kraljevo – Mataruška Banja and see you again at the Seventh Conference, in three years.

Kraljevo, 19 June 2008

Conference Chairman,

Prof. Dr Novak Nedić, mech eng.



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CIP – Каталогизacija y yбликацији  
Народна библиотека Србије, Београд

621 (082)  
621.86/.87(082)  
629.3/.4(082)  
622.6(082)

**INTERNATIONAL Triennial Conference Heavy Machinery (6; 2008; Kraljevo)**  
Proceedings / The Sixth International Triennial Conference Heavy Machinery – HM  
2008, Kraljevo, 24. - 29. June 2008.;  
[organized by] University of Kragujevac, Faculty of Mechanical Engineering,  
Kraljevo; [editor Novak Nedić]. – Kraljevo: Faculty of Mechanical Engineering, 2008  
(Kraljevo: Riža). – 1 knj. (razl. Pag.): ilstr. ; 29 cm

Radovi na engl. i na rus. jeziku.- Tekst štampano dvostubačno. -Tiraž 200.-Napomene  
i bibliografske reference uz radove.-Bibliografija uz svaki rad.

ISBN 978-86-82631-45-3

1. Faculty of Mechanical Engineering (Kraljevo)

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COBISS.SR-ID 149485324