

The journal is dedicated to the following problems:

Dynamics and strength of machines
Material science
Mathematical simulation and calculation methods
Mechanics of deformable-rigid body
Corrosion protection of materials
Design, calculations, testing and reliability of machines
Drive systems
Friction and wear in machines
Manufacturing engineering
The journal intended for scientists and specialists in mechanical engineering.

EDITORIAL BOARD

O. Andrejkiv
M. Bobyr
Ja. Burak
S. Gutryra
I. Dmytrakh
M. Dmytrychenko
O. Hachkevych
V. Kiryan
B. Kindratsky
I. Kuzio
R. Kushnir
V. Malashchenko
V. Marcinkovsky
V. Osadchuk
O. Ostash
V. Pavlyshche
V. Palash
V. Panasyuk
V. Pokchmurskyi
Z. Stocko
V. Strutynsky
G. Sulym
G. Trishch
E. Kharchenko
M. Shulzhenko

Editorial office address:

Po.Box 6758, Lviv-58, Ukraine.
Telefax: 380 (32) 231-92-99
E-mail: me@in.lviv.ua

© Mechanical Engineering, 2010.

CONTENTS

3. *Orynyak I., Ageev S.* Calculation s_{ref} for transversal defects of complex shape in the pipes
12. *Yakym R., Petryna Y.* The increase of durability of three-cone rock bits arms pins
18. *Kuznetsov Yu., Huminov V.* Modeling of work of the support for cutting process of the crystals of natural diamonds
21. *Marchuk M., Shevchuk G.* Determination of pressure under the reinforcement shell element of the foundation
25. *Sydorenko I.* Characteristics of its own equivalent stiffness of the elastic coupling with mechanical feedback
28. *Yasniy P., Hlado S., Hutsaylyuk V.* Micromechanism fatigue crack growth in aluminium alloy 2024-T3
34. *Virchenko G.* Use of computer structural-parametric geometric models for the rational design of technological processes in mechanical engineering
38. *Shopa T.* To the construction of the solution of the problem on the vibration of the orthotropic cylindrical non-shallow panel with inclusion of the arbitrary configuration
43. *Kaplun V., Mashovets N., Yakovlev V.* Increase of tribology properties of titan and his alloys low temperature nitriding in glow discharge
48. *Information for Authors*