

Authors	Title	volume, issue, pages, year DOI	Key words	Citation style
Yingchen Dai, Zouhao Song, Yinkai Niu, Xinyuan Yang, Heyun Bao, Fengxia Lu	Dynamic Modeling and Simulation Analysis of Wet Friction Clutch Considering Warping Friction Pair	72 (3-4), 118-127 (2026)	wet friction clutch; warpage of steel plate; engagement characteristics; dynamic modeling; simulation analysis;	Dai, Y., Song, Z., Niu, Y., Yang, X., Bao, H., Lu, F. Dynamic Modeling and Simulation Analysis of Wet Friction Clutch Considering Warping Friction Pair. <i>Stroj Vestn-J Mech E</i> 72 118-127 (2026) DOI:10.5545/sv-jme.2025.1523.
Ligang Bai, Xipeng Wang, Hui Zhuang, Yuanpeng Zhang, Peng Chen, Jianguo Ding	An Improved Model of Convolute Air Springs and Simulation of an Air Spring Vibration Isolation System under the Ambient Vibration	72 (3-4), 106-117 (2026)	convolute air springs; static characteristics; dynamic characteristics; hybrid analysis method;	Bai, L., Wang, X., Zhuang, H., Zhang, Y., Chen, P., Ding, J. An Improved Model of Convolute Air Springs and Simulation of an Air Spring Vibration Isolation System under the Ambient Vibration. <i>Stroj Vestn-J Mech E</i> 72 106-117 (2026) DOI:10.5545/sv-jme.2025.1505.
Chao Li, Linzhi Su, Tielin Li, Fei Chen, Xiaohong Zhang, Peng Peng, Jiantao He, Sishuo Zhao	Polishing of Alumina Ceramic Gears by Picosecond Pulsed Laser	72 (3-4), 94-105 (2026)	Alumina ceramics; Ceramic gears; Picosecond pulsed laser; Surface partitioning; Laser polishing;	Li, C., Su, L., Li, T., Chen, F., Zhang, X., Peng, P., He, J., Zhao, S. Polishing of Alumina Ceramic Gears by Picosecond Pulsed Laser. <i>Stroj Vestn-J Mech E</i> 72 94-105 (2026) DOI:10.5545/sv-jme.2025.1449.
Xiaomei You, Xiaotian Shi, Zilong Zhang, Guoying Chai	Structural Optimization of an Engine Crankshaft-Bearing System based on Deformation Coordination Analysis	72 (3-4), 84-93 (2026)	crankshaft-bearing system; deformation coordination; stiffness matching; structure optimization; hydrodynamic lubrication; clearance optimization;	You, X., Shi, X., Zhang, Z., Chai, G. Structural Optimization of an Engine Crankshaft-Bearing System based on Deformation Coordination Analysis. <i>Stroj Vestn-J Mech E</i> 72 84-93 (2026) DOI:10.5545/sv-jme.2025.1509.
Yongping Liu, Jianli Wang, Changbin Dong	Optimal Design of an Onion Planting Mechanism Based on a Denatured Pascal Limacon Gear	72 (3-4), 72-83 (2026)	Denatured Pascal Limacon gear; Onion transplanting; Non-circular gear; Asymmetric transmission; Optimization algorithm;	Liu, Y., Wang, J., Dong, C. Optimal Design of an Onion Planting Mechanism Based on a Denatured Pascal Limacon Gear. <i>Stroj Vestn-J Mech E</i> 72 72-83 (2026) DOI:10.5545/sv-jme.2025.1517.
Risheng Long, Jiaxin Chen, Fangfeng Gao, Ruidan Huang, Shuzhi Gao, Lin Zong	Leaf Geometric Characteristics of <i>Monstera deliciosa</i> : Effects on Tribological and Friction-induced Vibration Behaviors of Rolling Bearings under Starved Lubrication	72 (3-4), 55-71 (2026)	Rolling bearings; biomimetic surface texture; tribological and friction-induced vibration; starved lubrication;	Long, R., Chen, J., Gao, F., Huang, R., Gao, S., Zong, L. Leaf Geometric Characteristics of <i>Monstera deliciosa</i> : Effects on Tribological and Friction-induced Vibration Behaviors of Rolling Bearings under Starved Lubrication. <i>Stroj Vestn-J Mech E</i> 72 55-71 (2026) DOI:10.5545/sv-jme.2025.1574.
Jun Wan, Zihao Zhou, Nuo Yun, Xiao Yong Zhang, Jinlong Tang, Kehong Wang	Friction Compensation and External Force Estimation for Robotic Systems Using a Fuzzy Neural Network Approach	72 (1-2), 40-51 (2026)	Stribeck model; fuzzy neural network; friction compensation; external force estimation;	Wan, J., Zhou, Z., Yun, N., Zhang, X., Tang, J., Wang, K. Friction Compensation and External Force Estimation for Robotic Systems Using a Fuzzy Neural Network Approach. <i>Stroj Vestn-J Mech E</i> 72 40-51 (2026) DOI:10.5545/sv-jme.2025.1489.
Xiaohui Liu, Siyu Dong, Kaidong Xue, Penghui Wang, Yongyi Ren	Optimization of Simulation Parameters for Wet Concrete Particles Based on Response Surface Methodology and PSO-BP-GA Method	72 (1-2), 29-39 (2026)	wet concrete particles; particle simulation parameter optimization; response surface analysis; PSO-BP-GA;	Liu, X., Dong, S., Xue, K., Wang, P., Ren, Y. Optimization of Simulation Parameters for Wet Concrete Particles Based on Response Surface Methodology and PSO-BP-GA Method. <i>Stroj Vestn-J Mech E</i> 72 29-39 (2026) DOI:10.5545/sv-jme.2025.1440.

Urban Kotnik, Alen Oseli, Jože Kutin, Miroslav Halilović, Lidija Slemenik Perše	Evaluation of Measurement Uncertainty in Creep-Based Determination of Viscoelastic Material Functions of Polypropylene	72 (1-2), 21-28 (2026)	viscoelasticity; creep test; polypropylene; measurement uncertainty;	Kotnik, U., Oseli, A., Kutin, J., Halilović, M., Slemenik Perše, L. Evaluation of Measurement Uncertainty in Creep-Based Determination of Viscoelastic Material Functions of Polypropylene. <i>Stroj Vestn-J Mech E</i> 72 21-28 (2026) DOI:10.5545/sv-jme.2025.1548.
Tao Liu, Yikun Zhang, Fei Zhong, Jiahao Liu	Depth-of-cut Errors in Research on Elastic Deformation of Process System in Camshaft High Speed Grinding	72 (1-2), 13-20 (2026)	elastic deformation; dynamic stiffness; high-speed grinding; camshaft; grinding force;	Liu, T., Zhang, Y., Zhong, F., Liu, J. Depth-of-cut Errors in Research on Elastic Deformation of Process System in Camshaft High Speed Grinding. <i>Stroj Vestn-J Mech E</i> 72 13-20 (2026) DOI:10.5545/sv-jme.2025.1350.
Bo Sun, Xin Li, Feng Guo, Gang Cheng	End-Trajectory Sliding Mode Control Algorithm Design of Hybrid Polishing Robot Based on Nonlinear Disturbance Observer	72 (1-2), 3-12 (2026)	hybrid polishing robot; dynamical model; sliding mode control; disturbance observer; trajectory tracking control;	Sun, B., Li, X., Guo, F., Cheng, G. End-Trajectory Sliding Mode Control Algorithm Design of Hybrid Polishing Robot Based on Nonlinear Disturbance Observer. <i>Stroj Vestn-J Mech E</i> 72 3-12 (2026) DOI:10.5545/sv-jme.2025.1393.

2025

Authors	Title	volume, issue, pages, year DOI	Key words	Citation style
Yuru Li, Gangjian Zhou, Xiangwei Li, Tao Zhu, Shangchao Zhao, Chunlei Zhao, Junke Xie, Shoune Xiao	Dynamic Performance of C80 Railway Wagon Under the Influence of Wheel Polygons and Typical Mode Shapes of the Car Body	71 (11-12), 371-380 (2025) https://doi.org/10.5545/sv-jme.2025.1462	full flexibility; C80 railway wagon; dynamic models; wheel polygons; suspension parameters;	Li, Y., Zhou, G., Li, X., Zhu, T., Zhao, S., Zhao, C., Xie, J., Xiao, S. Dynamic Performance of C80 Railway Wagon Under the Influence of Wheel Polygons and Typical Mode Shapes of the Car Body. <i>Stroj Vestn-J Mech E</i> 71 371-380 (2025) DOI:10.5545/sv-jme.2025.1462.
Delei Du, Yana Li, Jian Song, Zhengping He, Jianxin Xu	Two-Stage Optimal Design of Metro Underframe Structures: Based on Topology-Size-Shape Co-Optimization Methodology	71 (11-12), 381-388 (2025) https://doi.org/10.5545/sv-jme.2025.1308	Underframe; Structural optimization; Collaborative Optimization; Lightweighting;	Du, D., Li, Y., Song, J., He, Z., Xu, J. Two-Stage Optimal Design of Metro Underframe Structures: Based on Topology-Size-Shape Co-Optimization Methodology. <i>Stroj Vestn-J Mech E</i> 71 (2025) 381-388 DOI:10.5545/sv-jme.2025.1308.
Li Zhou, Yan Liu	Kinematics-based Tracking Control Method for Operational Robotic Arm Under Multi-Environmental Constraints	71 (11-12), 389-401 (2025) https://doi.org/10.5545/sv-jme.2025.1301	coal mining operations; robotic arm; dynamics; multi-environmental constraints; tracking control;	Zhou, L., Liu, Y. Kinematics-based Tracking Control Method for Operational Robotic Arm Under Multi-Environmental Constraints. <i>Stroj Vestn-J Mech E</i> 71 (2025) 389-401 DOI:10.5545/sv-jme.2025.1301.
Yongsheng Zhao, Jiaqing Luo, Ying Li, Tao Zhang, Honglie Ma	An Optimal Design Method of Hydrostatic Turntable Based on FPSO Algorithm	71 (11-12), 402-409 (2025) https://doi.org/10.5545/sv-jme.2025.1366	hydrostatic turntable; finite difference method; Reynolds equation; fuzzy particle swarm optimization algorithm; performance optimization;	Zhao, Y., Luo, J., Li, Y., Zhang, T., Ma, H. An Optimal Design Method of Hydrostatic Turntable Based on FPSO Algorithm. <i>Stroj Vestn-J Mech E</i> 71 (2025) 402-409 DOI:10.5545/sv-jme.2025.1366
Yizun Chen, Yu Sun	Theoretical and Experimental Investigation on Microcosmic Surface Generation in Precision Grinding with Discrete Method	71 (11-12), 410-422 (2025) https://doi.org/10.5545/sv-jme.2025.1386	precision grinding; microcosmic surface topography; depth of cut; discrete method (DM); surface roughness;	Chen, Y., Sun, Y. Theoretical and Experimental Investigation on Microcosmic Surface Generation in Precision Grinding with Discrete Method. <i>Stroj Vestn-J Mech E</i> 71 (2025) 410-422 DOI:10.5545/sv-jme.2025.1386.

PeixunTang, Zhengminqing Li, Xiaojing Ma, Yiyen Chen, Xi Liu	Dynamics of Aero-Engine Dual-Rotor Systems under Multi-Flight Attitudes and Simultaneous Rub-Impact Faults	71 (11-12), 423-432 (2025) https://doi.org/10.5545/sv-jme.2025.1428	rotor dynamics; maneuvering flight; bearing nonlinear force; rub-impact; nonlinear characteristic;	Tang, P., Li, Z., Ma, X., Chen, Y., Liu, X. Dynamics of Aero-Engine Dual-Rotor Systems under Multi-Flight Attitudes and Simultaneous Rub-Impact Faults. <i>Stroj Vestn-J Mech E</i> 71 (2025) 423-432 DOI: 10.5545/sv-jme.2025.1428 .
Žiga Žnidarič, Branko Nečemer, Nejc Novak, Matej Vesenjaj, Srečko Glodež	Fatigue of Triply Periodic Minimal Surface (TPMS) Metamaterials – a Review	71 (9-10), 357-368 (2025) https://doi.org/10.5545/sv-jme.2025.1369	cellular structures; TPMS metamaterials; production technologies; mechanical characterization; fatigue behavior;	Žnidarič, Ž., Nečemer, B., Novak, N., Vesenjaj, M., Glodež, S. Fatigue of triply periodic minimal surface (TPMS) metamaterials – A review. <i>Stroj Vestn-J Mech E</i> 71 357-368 (2025) DOI:10.5545/sv-jme.2025.1369.
Matiija Založnik, Matej Zadavec	Analysis of Gas Flow Distribution in a Fluidized Bed Using Two-Fluid Model with Kinetic Theory of Granular Flow and Coupled CFD-DEM: A Numerical Study	71 (9-10), 349-356 (2025) https://doi.org/10.5545/sv-jme.2025.1365	fluidized bed; distribution plate; two-fluid model with kinetic theory of granular flow; coupled CFD-DEM; flow distribution;	Založnik, M., Zadavec, M. Analysis of gas flow distribution in a fluidized bed using two-fluid model with kinetic theory of granular flow and coupled CFD-DEM: A numerical study. <i>Stroj Vestn-J Mech E</i> 71 349-356 (2025) DOI:10.5545/sv-jme.2025.1365.
Nejc Vovk, Jure Ravnik	Comparison of 1D Euler Equation Based and 3D Navier-Stokes Simulation Methods for Water Hammer Phenomena	71 (9-10), 337-348 (2025) https://doi.org/10.5545/sv-jme.2025.1340	water hammer; cavitation; water column separation; CFD; Euler equation; Navier-Stokes equations; OpenFOAM; method of characteristics;	Vovk, N., Ravnik, J. Comparison of 1D Euler equation based and 3D Navier-Stokes simulation methods for water hammer phenomena. <i>Stroj Vestn-J Mech E</i> 71 337-348 (2025) DOI:10.5545/sv-jme.2025.1340.
Marko Simonič, Iztok Palčič, Simon Klančnik	Advancing Intelligent Toolpath Generation: A Systematic Review of CAD-CAM Integration in Industry 4.0 and 5.0	71 (9-10), 328-336 (2025) https://doi.org/10.5545/sv-jme.2025.1370	CAD-CAM integration; Industry 4.0; Industry 5.0; toolpath optimization; AI; theory-context-characteristics-methodology (TCCM);	Simonič, M., Palčič, I., Klančnik, S. Advancing intelligent toolpath generation: A systematic review of CAD-CAM integration in industry 4.0 and 5.0. <i>Stroj Vestn-J Mech E</i> 71 328-336 (2025) DOI:10.5545/sv-jme.2025.1370.
Snehashis Pal, Matjaž Finšgar, Jernej Vajda, Uroš Maver, Tomaž Brajljih, Nenad Gubeljaj, Hanuma Reddy Tiyyagura, Igor Drstvenšek	Fusion Behavior of Pure Magnesium During Selective Laser Melting	71 (9-10), 318-327 (2025) https://doi.org/10.5545/sv-jme.2025.1381	magnesium; melt pool; laser power; scanning speed; layer thickness; support structure; laser powder bed fusion ;	Pal, S., Finšgar, M., Vajda, J., Maver, U., Brajljih, T., Gubeljaj, N., Tiyyagura, H.R., Drstvenšek, I. Fusion behavior of pure magnesium during selective laser melting. <i>Stroj Vestn-J Mech E</i> 71 318-327 (2025) DOI:10.5545/sv-jme.2025.1381.
Nejc Novak, Zoran Ren, Matej Vesenjaj	Integrated Design, Simulation, and Experimental Validation of Advanced Cellular Metamaterials	71 (9-10), 309-317 (2025) https://doi.org/10.5545/sv-jme.2025.1363	cellular structures; metamaterials; experimental testing; computational simulations; mechanical properties;	Novak, N., Ren, Z., Vesenjaj, M. Integrated design, simulation, and experimental validation of advanced cellular metamaterials. <i>Stroj Vestn-J Mech E</i> 71 309-317 (2025) DOI:10.5545/sv-jme.2025.1363.
Vinko Močilnik, Nenad Gubeljaj, Jožef Predan	Vinko Močilnik, Nenad Gubeljaj, Jožef Predan	71 (9-10), 301-308 (2025) https://doi.org/10.5545/sv-jme.2025.1407	creep; torsion bar; FEM analysis; presetting; deep rolling; torque; twist angle;	Močilnik, V., Gubeljaj, N., Predan, J. Effect of presetting and deep rolling on creep of torsion spring bars. <i>Stroj Vestn-J Mech E</i> 71 301-308 (2025) DOI:10.5545/sv-jme.2025.1407.
Uroš Kovačec, Franc Zupanič	Removal of Inclusions and Trace Elements from Al-Mg-Si Alloys Using Refining Fluxes	71 (9-10), 294-300 (2025) https://doi.org/10.5545/sv-jme.2025.1371	aluminium; refinement; flux; cleanliness; non-metallic inclusion; rotary injection; alkali element;	Kovačec, U., Zupanič, F. Removal of inclusions and trace elements from Al-Mg-Si alloys using refining fluxes. <i>Stroj Vestn-J Mech E</i> 71 294-300 (2025) DOI:10.5545/sv-jme.2025.1371.
Luka Kevorkijan, Matjaž Hriberšek, Luka Lešnik, Aljaž Škerlavaj, Ignacij Biluš	Numerical Investigation of Erosion Due to Particles in a Cavitating Flow in Pelton Turbine	71 (9-10), 284-293 (2025) https://doi.org/10.5545/sv-jme.2025.1351	Pelton turbine; solid particle erosion; cavitation; CFD simulation;	Kevorkijan, L., Hriberšek, M., Lešnik, L., Škerlavaj, A., Biluš, I. Numerical investigation of erosion due to particles in a cavitating flow in Pelton turbine. <i>Stroj Vestn-J Mech E</i> 71 284-293 (2025) DOI:10.5545/sv-jme.2025.1351.
Ivan Dominik Horvat, Jurij Iljaž	Numerical Solving of Dynamic Thermography Inverse Problem for Skin Cancer Diagnosis Based on non-Fourier Bioheat Model	71 (9-10), 271-283 (2025) https://doi.org/10.5545/sv-jme.2025.1368	numerical modeling; dynamic thermography; inverse problem; non-Fourier bioheat transfer; dual-phase-lag model; boundary element method; Levenberg-Marquardt optimization;	Horvat, I. D., Iljaž, J. Numerical solving of dynamic thermography inverse problem for skin cancer diagnosis based on non-Fourier bioheat model. <i>Stroj Vestn-J Mech E</i> 71 271-283 (2025) DOI:10.5545/sv-jme.2025.1368.

Matej Vesenjaj, Luka Lešnik, Matej Borovinšek, Simon Klančnik	Editorial: Special Issue of the Faculty of Mechanical Engineering, University of Maribor — 30 Years of Excellence in Engineering Research	71 (9-10), 268-270 (2025) https://doi.org/10.5545/sv-jme.2025.09-10.ed	applied fluid mechanics; computational fluid dynamics (CFD); hydropower systems; advanced materials; metamaterials; triply periodic minimal surfaces (TPMS); biomedical modelling; inverse bioheat problem; intelligent toolpath generation; artificial intelligence in manufacturing	Vesenjak, M., Lešnik, L., Borovinšek, M., Klančnik, S. Editorial: Special Issue of the Faculty of Mechanical Engineering, University of Maribor — 30 Years of Excellence in Engineering Research. <i>Stroj Vestn-J Mech E</i> 71 268-270 (2025) DOI:10.5545/sv-jme.2025.09-10.ed.
Daniel Pieniak, Mateusz Otrocki, Leszek Gil, Agata Walczak, Krzysztof Przystupa, Artūras Kilikevičius	Evaluation of Surface Functional Properties of Polymeric Sliding Materials for Lubricated Metal-Polymer Pairs Applications	71 (7-8), 258-266 (2025) https://doi.org/10.5545/sv-jme.2024.1188	tribological wear resistance, polymeric sliding materials, frictional contact, coefficient of friction	Pieniak, D., Otrocki, M., Gil, L., Walczak, A., Przystupa, K., Kilikevičius, A. Evaluation of Surface Functional Properties of Polymeric Sliding Materials for Lubricated Metal-Polymer Pairs Applications. <i>Stroj Vestn-J Mech E</i> 71 258-266 (2025) DOI:10.5545/sv-jme.2024.1188.
Yu Zhang, Chenyu Duan, Xiao Li, Zhiyong Wang, Yanli Ma, Guoqi He	Differential Tooth Surface Modification Method for Reducing Vibration in Spiral Bevel and Hypoid Gears	71 (7-8), 249-257 (2025) https://doi.org/10.5545/sv-jme.2024.1249	spiral bevel and hypoid gears, differential tooth surface modification, dynamic simulation, angular acceleration, meshing force	Zhang, Y., Duan, C., Li, X., Wang, Z., Ma, Y., He, G. Differential Tooth Surface Modification Method for Reducing Vibration in Spiral Bevel and Hypoid Gears. <i>Stroj Vestn-J Mech E</i> 71 249-257 (2025) DOI:10.5545/sv-jme.2024.1249.
Nedžad Rudonja, Ivan Zlatanović, Miloš Banjac, Milan Gojak, Ružica Todorović	Thermodynamic Evaluation and Working Fluid Selection for a Heat Pump Integrated into a Hydropower Plant HVAC System: A Case Study from Serbia	71 (7-8), 242-248 (2025) https://doi.org/10.5545/sv-jme.2025.1344	hydropower plant, heat pump, energy efficiency, COP, SCOP	Rudonja, N., Zlatanović, I., Banjac, M., Gojak, M., Todorović, R. Thermodynamic Evaluation and Working Fluid Selection for a Heat Pump Integrated into a Hydropower Plant HVAC System: A Case Study from Serbia. <i>Stroj Vestn-J Mech E</i> 71 242-248 (2025) DOI:10.5545/sv-jme.2025.1344.
Yao Li, Longsheng Li, Gaoxiang Ni, Xinlong Li, Jianjun Tan, Kongde He	Comprehensive Performance Evaluation of Sliding-bearing Wind Turbine Gearboxes	71 (7-8), 231-241 (2025) https://doi.org/10.5545/sv-jme.2024.1239	sliding-bearing wind turbine gearbox, comprehensive performance evaluation, multidimensional evaluation indicators, analytic network process, fuzzy comprehensive evaluation	Li, Y., Li, L., Ni, G., Li, X., Tan, J., He, K. Comprehensive Performance Evaluation of Sliding-bearing Wind Turbine Gearboxes. <i>Stroj Vestn-J Mech E</i> 71 231-241 (2025) DOI:10.5545/sv-jme.2024.1239.
Bowen Zhang, Shaopeng Kang, Runze Zhou, Hongbin Qiang, Jing Yang, Kailei Liu, Yunkai Zhou	Cam Ring Curve Optimization for Radial Hydraulic Motor Based on Seagull Algorithm	71 (7-8), 219-230 (2025) https://doi.org/10.5545/sv-jme.2025.1394	radial piston hydraulic motor, cam ring optimization, seagull optimization algorithm, contact stress, speed pulsation	Zhang, B., Kang, S., Zhou, R., Qiang, H., Yang, J., Liu, K., Zhou, Y. Cam Ring Curve Optimization for Radial Hydraulic Motor Based on Seagull Algorithm. <i>Stroj Vestn-J Mech E</i> 71 219-230 (2025) DOI:10.5545/sv-jme.2025.1394.
Wusheng Tang, Yufei Nie, Zhuo Zhang, Wei Lin, YanKai Rong, Yaochen Shi, Ning Ding	Simulation Analysis and Experimental Study on Vibration Reduction Performance of Groove-Textured Friction Pair Surfaces	71 (5-6), 207-215 (2025) https://doi.org/10.5545/sv-jme.2024.1209	groove textured, friction characteristics, numerical analysis, velocity	Tang, W., Nie, Y., Zhang, Z., Lin, W., Rong, Y., Shi, Y., Ding, N. Simulation Analysis and Experimental Study on Vibration Reduction Performance of Groove-Textured Friction Pair Surfaces. <i>Stroj Vestn-J Mech E</i> 71 207-215 (2025) DOI:10.5545/sv-jme.2024.1209.
Chao He, Yangzhi Chen, Xiaoxiao Ping, Zhen Chen, Maoxi Zheng, Qinsong Zhang	Geometric Design Method of Lightweight Line Gear Mechanism	71 (5-6), 199-206 (2025) https://doi.org/10.5545/sv-jme.2024.1184	lightweight design, space curve meshing, gear design, kinematics experiments, high transmission ratio	He, C., Chen, Y., Ping, X., Chen, Z., Zheng, M., Zhang, Q. Geometric Design Method of Lightweight Line Gear Mechanism. <i>Stroj Vestn-J Mech E</i> 71 199-206 (2025) DOI:10.5545/sv-jme.2024.1184.
Yongping Liu, Qi Chen, Changbin Dong	Tooth Contact Analysis of Involute Beveloid Gear Based on Higher-Order Curve Axial Modification	71 (5-6), 192-198 https://doi.org/10.5545/sv-jme.2024.1254	involute beveloid gear, higher order curve axial modification, tooth contact analysis, transmission error, assembly error	Liu, Y., Chen, Q., Dong, C. Tooth Contact Analysis of Involute Beveloid Gear Based on Higher-Order Curve Axial Modification. <i>Stroj Vestn-J Mech E</i> 71 192-198 (2025) DOI:10.5545/sv-jme.2024.1254.

Jintao Zhang, Zhecheng Jing, Haichao Zhou, Yu Zhang, Guolin Wang	Identification Method of Tire-Road Adhesion Coefficient Based on Tire Physical Model and Strain Signal for Pure Longitudinal Slip	71 (5-6), 179-191 (2025) https://doi.org/10.5545/sv-jme.2024.1036	intelligent tire, tire-road adhesion coefficient estimation, slip point, slip rate, nonlinear regression	Zhang, J., Jing, Z., Zhou, H., Zhang, Y., Wang, G. Identification Method of Tire-Road Adhesion Coefficient Based on Tire Physical Model and Strain Signal for Pure Longitudinal Slip. <i>Stroj Vestn-J Mech E</i> 71 179-191 (2025) DOI:10.5545/sv-jme.2024.1036.
Fu-sheng Ding, Hong-ming Lyu, Jun Chen, Hao-ran Cao, Lan-xiang Zhang	Multi-Objective Optimization Design of the Ejector Plate for Rear-Loader Garbage Trucks	71 (5-6), 169-178 (2025) https://doi.org/10.5545/sv-jme.2024.1185	garbage truck, ejector plate, multiobjective optimization, NSGA-II, Kriging	Ding, F., Lyu, H., Chen, J., Cao, H., Zhang, L. Multi-Objective Optimization Design of the Ejector Plate for Rear-Loader Garbage Trucks. <i>Stroj Vestn-J Mech E</i> 71 169-178 (2025) DOI:10.5545/sv-jme.2024.1185.
Qijiang Ma, Zhenbo Liu, Sen Jiang	Study on the Influence of the Splitter Blade Length on Radial and Axial Force of a Centrifugal Pump	71 (5-6), 157-168 (2025) https://doi.org/10.5545/sv-jme.2024.1259	centrifugal pump, axial force, radial force, splitter blade length, pressure fluctuation	Ma, Q., Liu, Z., Jiang, S. Study on the Influence of the Splitter Blade Length on Radial and Axial Force of a Centrifugal Pump. <i>Stroj Vestn-J Mech E</i> 71 157-168 (2025) DOI:10.5545/sv-jme.2024.1259.
Anton Bergant, Zlatko Rek, Kamil Urbanowicz	Analytical, Numerical 1D and 3D Water Hammer Investigations in a Simple Pipeline Apparatus	71 (5-6), 149-156 (2025) https://doi.org/10.5545/sv-jme.2024.1179	pipeline, water hammer, analytical solution, method of characteristics, computational fluid dynamics, unsteady skin friction	Bergant, A., Rek, Z., Urbanowicz, K. Analytical, Numerical 1D and 3D Water Hammer Investigations in a Simple Pipeline Apparatus. <i>Stroj Vestn-J Mech E</i> 71 149-156 (2025) DOI:10.5545/sv-jme.2024.1179.
Xinrong Liu, Hao Li, Yu Fang, Diqing Fan	Design and Evaluation of a Passive Compliance Control Method of an Offshore Wind Turbine Blade Grinding Robot	71 (3-4), 67-74 (2025) http://doi.org/10.5545/sv-jme.2024.1121	improved active disturbance rejection control, gravity compensation, deadzone compensation, offshore wind turbine blade, pneumatic loading system	Liu, X., Li, H., Fang, Y., Fan, D. Design and evaluation of a passive compliance control method of an offshore wind turbine blade grinding robot. <i>Stroj Vestn-J Mech E</i> 71 67-74 (2025) DOI:10.5545/sv-jme.2024.1121.
Rajamani Rajagounder, Jayakrishnan Nampoothiri	Impact of Excitation Frequency and Fill Levels on Fuel Sloshing in Automotive Tanks	71 (3-4), 75-82 (2025) http://doi.org/10.5545/sv-jme.2024.1200	liquid sloshing, fuel tank, finite volume analysis, visualization, wave frequency	Rajagounder, R., Nampoothiri, J. impact of excitation frequency and fill levels on fuel sloshing in automotive tanks. <i>Stroj Vestn-J Mech E</i> 71 75-82 (2025) DOI:10.5545/sv-jme.2024.1200.
Peng Liu, Qing Zhao, Shijian Peng, Wenwen Quan, Zhida Gao	The Effects of Oil Temperature and Oil Return Pressure on Oil Film Damping Characteristics of a High-Speed Solenoid Valve	71 (3-4), 83-91 (2025) http://doi.org/10.5545/sv-jme.2024.1168	high-speed solenoid valve, oil temperature, oil return pressure, damping force of the oil film, cavitation	Liu, P., Zhao, Q., Peng, S., Quan, W., Gao, Z. The effects of oil temperature and oil return pressure on oil film damping characteristics of a high-speed solenoid valve. <i>Stroj Vestn-J Mech E</i> 71 83-91(2025) DOI:10.5545/sv-jme.2024.1168.
Ahmet Çalık	Optimizing Support Patch Geometries in Adhesively Bonded Single Lap Joints: A Finite Element Analysis Approach	71 (3-4), 92-102 (2025) http://doi.org/10.5545/sv-jme.2025.1265	Adhesive bonding, stress optimization, support patch geometry, finite element analysis	Çalık, A. Optimizing support patch geometries in adhesively bonded single lap joints: A finite element analysis approach. <i>Stroj Vestn-J Mech E</i> 71 92-102 (2025) DOI:10.5545/sv-jme.2025.1265.
Zhanxiang Cui, Yonghua Lu, Yun Zhu, Zezheng Wang, Ziyuan Wang	A Numerical Simulation and an Experimental Study on the Steady-State Levitation Characteristics of a Magnetic Ball Driven by External Electromagnets in a Fluid Tube: Applications to Micromachines in Human Blood Vessels	71 (3-4), 103-113 (2025) http://doi.org/10.5545/sv-jme.2024.1080	magnetic levitation, blood vessel, steady-state levitation, biomedical micromachines, multi-objective optimization	Cui, Z., Lu, Y., Zhu, Y., Wang, Z., Wang, Z. A Numerical simulation and an experimental study on the steady-state levitation characteristics of a magnetic ball driven by external electromagnets in a fluid tube: Applications to micromachines in human blood vessels. <i>Stroj Vestn-J Mech E</i> 71 103-113 (2025). DOI:10.5545/sv-jme.2024.1080.
Peng Liu, Jinglun Cai, Xuejing Shao, Hui Jin	Research on a Rapid Method for Obtaining the Matching Point of the Static Operating Pressure of a Supersonic Jet in a Wind Tunnel	71 (3-4), 114-126 (2025) http://doi.org/10.5545/sv-jme.2024.1199	supersonic jet, pressure matching, expansion wave, compression wave	Liu, P., Cai, J., Shao, X., Jin, H. Research on a rapid method for obtaining the matching point of the static operating pressure of a supersonic jet in a wind tunnel. <i>Stroj Vestn-J Mech E</i> 71 114-126 (2025) DOI:10.5545/sv-jme.2024.1199.
Trung-Thanh Nguyen, Minh-Thai Le, Thai-Chung Nguyen, Truong-An Nguyen, Xuan-Ba Dang, An-Le Van	Comparison and Optimization of Burnishing Parameters in Various Machining Conditions	71 (3-4), 127-135 (2025) http://doi.org/10.5545/sv-jme.2024.1248	cryogenic diamond burnishing; energy consumption; maximum roughness; circularity; Kriging model	Nguyen, T., Le, M., Nguyen, T., Nguyen, T., Dang, X., Van, A. comparison and optimization of burnishing parameters in various machining conditions. <i>Stroj Vestn-J Mech E</i> 71 127-135 (2025) DOI:10.5545/sv-jme.2024.1248.

Yan Zhang, Haodong Sun, Qi Li, Kaiming Sun, Yuanjing Mou, Shihong Zhang	Research on the Cutting Performance of Self-Lubricating Tools with Microtexture of the Front and Back Surfaces	71 (3-4), 136-145 (2025) http://doi.org/10.5545/sv-jme.2024.1181	hexagonal microtexture, PCBN tools, turning, finite element simulation, solid lubricant integration	Zhang, Y., Sun, H., Li, Q., Sun, K., Mou, Y., Zhang, S. Research on the cutting performance of self-lubricating tools with microtexture of the front and back surfaces. <i>Stroj Vestn-J Mech E</i> 71 136-145 (2025) DOI:10.5545/sv-jme.2024.1181.
Xinrong Liu, Hao Li, Yu Fang, Diqing Fan	Design and Evaluation of a Passive Compliance Control Method of an Offshore Wind Turbine Blade Grinding Robot	71 (3-4), 67-74 (2025) http://doi.org/10.5545/sv-jme.2024.1121	improved active disturbance rejection control, gravity compensation, deadzone compensation, offshore wind turbine blade, pneumatic loading system	Liu, X., Li, H., Fang, Y., Fan, D. Design and evaluation of a passive compliance control method of an offshore wind turbine blade grinding robot. <i>Stroj Vestn-J Mech E</i> 71 67-74 (2025) DOI:10.5545/sv-jme.2024.1121.
Rajamani Rajagounder, Jayakrishnan Nampoothiri	Impact of Excitation Frequency and Fill Levels on Fuel Sloshing in Automotive Tanks	71 (3-4), 75-82 (2025) http://doi.org/10.5545/sv-jme.2024.1200	liquid sloshing, fuel tank, finite volume analysis, visualization, wave frequency	Rajagounder, R., Nampoothiri, J. (2025). Impact of excitation frequency and fill levels on fuel sloshing in automotive tanks. <i>Stroj Vestn-J Mech E</i> 71 75-82 DOI:10.5545/sv-jme.2024.1200.
Govindasamy, M., Mangalakaran Joseph Manuel, L.J., Thamilkolunthu, S.	Corrosion Studies on Post-Weld Heat Treated Dissimilar AISI2205 and AISI310 Joints Using Electrochemical Noise Analysis	71 (1-2), 3-9 (2025) https://doi.org/10.5545/sv-jme.2024.1084	AISI2205, AISI310, corrosion, electrochemical impedance spectroscopy, CaCl2	Govindasamy, M., Mangalakaran Joseph Manuel, L.J., Thamilkolunthu, S. Corrosion studies on post-weld heat treated dissimilar AISI2205 and AISI310 joints using electrochemical noise analysis <i>Stroj Vestn-J Mech E</i> 71 3-9 (2025) DOI:10.5545/sv-jme.2024.1084
Afsharzadeh, N., Eftekhari Yazdi, M., Mirabdollah Lavasani, A.	Thermal Design and Constrained Optimization of a Fin and Tube Heat Exchanger Using Differential Evolution Algorithm	71 (1-2), 10-20 https://doi.org/10.5545/sv-jme.2023.887	Fin and tube heat exchanger, Thermal design, Constrained optimization, Differential Evolution (DE) algorithm, Total weight, Total annual cost	Afsharzadeh, N., Eftekhari Yazdi, M., Mirabdollah Lavasani, A. Thermal design and constrained optimization of a fin and tube heat exchanger using differential evolution algorithm <i>Stroj Vestn-J Mech E</i> 71 10-20 (2025) DOI:10.5545/sv-jme.2023.887
Krishnasamy, S., Sambasivam, S., Vaiyampalayam Govindaraj, B.	Microstructural and Mechanical Characterization of WAAM fabricated Inconel 625: Heat Treatment Effects	71 (1-2), 21-27 (2025) https://doi.org/10.5545/sv-jme.2024.986	pneumatically controlled pick-and-place robots, automation, reliability, LabVIEW software, failure analysis	Krishnasamy, S., Sambasivam, S., Vaiyampalayam Govindaraj, B. Microstructural and mechanical characterization of WAAMfabricated inconel 625: heat treatment effects. <i>Stroj Vestn-J Mech E</i> 71 21-27 (2025) DOI:10.5545/sv-jme.2024.986
Durairaj, S.P.	Quantitative Sequential Modelling Approach to Estimate the Reliability of Computer Controlled Pneumatically Operated Pick-and-Place Robot	71 (1-2), 28-35 (2025) https://doi.org/10.5545/sv-jme.2024.999	pneumatically controlled pick-and-place robots, automation, reliability, LabVIEW software, failure analysis	Durairaj, S.P. Quantitative sequential modelling approach to estimate the reliability of computer controlled pneumatically operated pick-and-place robot <i>Stroj Vestn-J Mech E</i> 71 28-35 (2025) DOI:10.5545/sv-jme.2024.999
Baralić, J., Petrović Savić, S., Koprivica, B., Đurić, S.	Connection Between the Dynamic Character of the Cutting Force and Machined Surface in Abrasive Waterjet Machining	71 (1-2), 36-43 (2025) https://doi.org/10.5545/sv-jme.2024.1008	abrasive water jet, cutting force, traverse speed, machined surface	Baralić, J., Petrović Savić, S., Koprivica, B., Đurić, S. Connection between the dynamic character of the cutting force and machined surface in abrasive waterjet machining <i>Stroj Vestn-J Mech E</i> 71 36-43 (2025) DOI:10.5545/sv-jme.2024.1008
Adamczak, S., Gajur, M., Kuźmicki, K.	A Mathematical Model of the Dimensional Chain for a Generation 2 Wheel Hub Unit	71 (1-2), 44-50 (2025) https://doi.org/10.5545/sv-jme.2024.1020	rolling-element bearings, dimensional chain, tolerance formula, axial clearance, wheel hub unit	Adamczak, S., Gajur, M., Kuźmicki, K. A mathematical model of the dimensional chain for a generation 2 wheel hub unit <i>Stroj Vestn-J Mech E</i> 71 44-50 (2025) DOI:10.5545/sv-jme.2024.1020
Ayaz Ümütlü, H.C., Kiral, Z., Karadeniz, Z.H.	Numerical and Experimental Investigation of Aspect Ratio Effect on Aerodynamic Performance of NACA 4415 Airfoil Section at Low Reynolds Number	71 (1-2), 51-57 (2025) https://doi.org/10.5545/sv-jme.2024.1155	airfoil, wind tunnel, aspect ratio effect, aerodynamic coefficients, three-component balance, low Reynolds number	Ayaz Ümütlü, H.C., Kiral, Z., Karadeniz, Z.H. Numerical and Experimental Investigation of Aspect Ratio Effect on Aerodynamic Performance of NACA 4415 Airfoil Section at Low Reynolds Number <i>Stroj Vestn-J Mech E</i> 71 51-57 (2025) DOI:10.5545/sv-jme.2024.1155
Manickam, J., Nanjappan, B., Chandrasekaran, N.	Integration of Phase Change Material and Heat Exchanger for Enhanced Solar Desalination - A Comparative Performance Investigation	71 (1-2), 58-63 (2025) https://doi.org/10.5545/sv-jme.2024.949	solar desalination, phase change materials, efficiency enhancement comparative analysis	Manickam, J., Nanjappan, B., Chandrasekaran, N. Integration of Phase Change Material and Heat Exchanger for Enhanced Solar Desalination - A Comparative Performance Investigation <i>Stroj Vestn-J Mech E</i> , 71 58-63 (2025) DOI:10.5545/sv-jme.2024.949

2024

Authors	Title	volume, issue, pages, year DOI	Key words	Citation style
Ozmen, O., Surmen, H.	Design of 3D Printed Below-Knee Prosthetic - A Finite Element and Topology Optimization Study	70, 11-12, 517-530 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1034	3D printing; additive manufacturing; FEM; prosthetic design; topology optimization;	Ozmen, O., Surmen, H. Design of 3D printed below-knee prosthetic - a finite element and topology optimization study. <i>Stroj Vestn-J Mech E</i> 70 517-530 (2024) DOI:10.5545/sv-jme.2024.1034
Wan, Z., Yue, L., Wang, Y., Zhao, P.	Acceleration Harmonic Estimation and Suppression for Hydraulic Load Simulator Based on Artificial Bee Colony with Chaotic Search Strategy	70, 11-12, 531-542 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1047	artificial bee colony; chaos-decision variable; harmonic distortion; harmonic estimation; harmonic suppression;	Wan, Z., Yue, L., Wang, Y., Zhao, P. Acceleration harmonic estimation and suppression for hydraulic load simulator based on artificial bee colony with chaotic search strategy. <i>Stroj Vestn-J Mech E</i> 70 531-542 (2024) DOI:10.5545/sv-jme.2024.1047
Gao, J., Liu, A., Yang, J., Zhao, S., Liu, J.	Optimization of Outer-Rotor FluxSwitching Permanent Magnet Motor Using Response Surface Method	70, 11-12, 543-553 (2024) https://dx.doi.org/10.5545/sv-jme.2023.859	outer-rotor flux switching permanent magnet motor; optimization; response surface method; finite element method; flywheel energy storage system;	Gao, J., Liu, A., Yang, J., Zhao, S., Liu, J. Optimization of outer-rotor flux-switching permanent magnet motor using response surface method. <i>Stroj Vestn-J Mech E</i> 70 543-553 (2024) DOI:10.5545/sv-jme.2023.859
Yang, W., Zhou, Y., Meng, G., Li, Y., Gong, T.	Improving the Efficiency of Steel Plate Surface Defect Classification by Reducing the Labelling Cost Using Deep Active Learning	70, 11-12, 554-568 (2024) https://dx.doi.org/10.5545/sv-jme.2023.900	surface defect classification; multiscale convolutional neural networks; active learning; global pooling;	Yang, W., Zhou, Y., Meng, G., Li, Y., Gong, T. Improving the efficiency of steel plate surface defect classification by reducing the labelling cost using deep active learning. <i>Stroj Vestn-J Mech E</i> 70 554-568 (2024) DOI:10.5545/sv-jme.2023.900
Zhang, Y., Zhou, H., Duan, C., Wang, Z., Luo, H.	Gear Differential Flank Modification Design Method for Low Noise	70, 11-12, 569-581 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1072	tooth modification; low noise; angular acceleration; meshing force;	Zhang, Y., Zhou, H., Duan, C., Wang, Z., Luo, H. Gear differential flank modification design method for low noise. <i>Stroj Vestn-J Mech E</i> 70 569-581 (2024) DOI:10.5545/sv-jme.2024.1072
Xu, T., Guan, Q., Ma, C.	The Impact of Micro-texture Distribution on the Frictional Performance of Straight Bevel Cylindrical Gears	70, 11-12, 582-594 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1033	gear transmission; micro-texture; friction; wear; stress-strain; temperature;	Xu, T., Guan, Q., Ma, C. The Impact of micro-texture distribution on the frictional performance of straight bevel cylindrical gears. <i>Stroj Vestn-J Mech E</i> 70 582-594 (2024) DOI:10.5545/sv-jme.2024.1033
Manikandaprabu, P., Saravanan, K.	Experimental Investigation on SS202 using Tubular and Double D Tubular Electrode Tool in Electrical Discharge Drilling Machining	70, 11-12, 595-606 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1076	modified electrode geometry; material removal rate; over cut; heat affected zone; recast layer; analysis of variance;	Manikandaprabu, P., Saravanan, K. Experimental investigation on ss202 using tubular and double d tubular electrode tool in electrical discharge drilling machining. <i>Stroj Vestn-J Mech E</i> 70 595-606 (2024) DOI:10.5545/sv-jme.2024.1076
Diachenko, S., Balabanov, S., Sychov, M., Litosov, G., Kiryanov, N.	The Impact of the Geometry of Cellular Structure Made of Glass-Filled Polyamide on the Energy-Absorbing Properties of Design Elements	70, 11-12, 607-619 (2024) https://dx.doi.org/10.5545/sv-jme.2024.975	additive technologies; selective laser sintering; polyamide; glass; triply periodic minimal surface; energy absorption; dampers;	Diachenko, S., Balabanov, S., Sychov, M., Litosov, G., Kiryanov, N. The impact of the geometry of cellular structure made of glass-filled polyamide on the energy-absorbing properties of design elements. <i>Stroj Vestn-J Mech E</i> 70 607-619 (2024) DOI:10.5545/sv-jme.2024.975
Senegačnik, A., Sekavčnik, M.	The Illusion of a Green Transition in Slovenia by 2050	70, 9-10, 405-416 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1007	phasing out fossil and nuclear energy sources; renewable energy sources; photovoltaic modules; pumped hydro storage; green transition;	Senegačnik, A., Sekavčnik, M. The illusion of a green transition in Slovenia by 2050. <i>Stroj Vestn-J Mech E</i> 70 405-416 (2024) DOI:10.5545/sv-jme.2024.1007
Denys, K., Vancraeynest, N., Cooreman, S., Rossi, M., Coppieters, S.	Through-thickness Work Hardening Variation in Thick High Strength Steel Plates: A Novel Inverse Characterization Method	70, 9-10, 417-425 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1037	through thickness strain hardening; FEMU; Nelder-Mead; stereo-DIC; S690QL; thick high strength steel;	Denys, K., Vancraeynest, N., Cooreman, S., Rossi, M., Coppieters, S. Through-thickness work hardening variation in thick high strength steel plates: A novel inverse characterization method. <i>Stroj Vestn-J Mech E</i> 70 417-425 (2024) DOI:10.5545/sv-jme.2024.1037
Ma, Q., Cha, L., Zhang, X.	Simulation Research on the Control Method of Bow-Collapse in Gear Cold Roll-Beating	70, 9-10, 426-439 (2024) https://dx.doi.org/10.5545/sv-jme.2023.884	cold roll-beating; bow-collapse; FE simulation; loss coefficient; crosssection radius;	Ma, Q., Cha, L., Zhang, X. Simulation research on the control method of bow-collapse in gear cold roll-beating. <i>Stroj Vestn-J Mech E</i> 70 426439 (2024) DOI:10.5545/sv-jme.2023.884

Xu, F., Yang, H., Ahlin, K., Chen, Z.	Kurtosis Control of Amplitude Modulated non-Gaussian Signals for Fatigue Test	70, 9-10, 440-451 (2024) https://dx.doi.org/10.5545/sv-jme.2023.908	non-Gaussian; amplitude modulation method; fatigue damage spectrum; kurtosis;	Xu, F., Yang, H., Ahlin, K., Chen, Z. Kurtosis control of amplitude modulated non-Gaussian signals for fatigue test. <i>Stroj Vestn-J Mech E</i> 70 440-451 (2024) DOI:10.5545/sv-jme.2023.908
Gao, S., Li, Y., Zhang, Y., Ji, S., Wang, J.	Lifespan Evaluation for a Standard RV Reducer based on Fatigue Strength Theory	70, 9-10, 452-565 (2024) https://dx.doi.org/10.5545/sv-jme.2023.897	RV reducer; lifespan evaluation; crankshaft bearing; simulation analysis; accelerated test;	Gao, S., Li, Y., Zhang, Y., Ji, S., Wang, J. Lifespan evaluation for a standard RV reducer based on fatigue strength theory. <i>Stroj Vestn-J Mech E</i> 70 452-565 (2024) DOI:10.5545/sv-jme.2023.897
Đokić, R., Vladić, J., Jojić, T., Ličen, H.	Analysis of Power Losses and Experimental Method for Determining Resistance in Electric Elevators	70, 9-10, 466-482 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1006	electric elevators; guide rails and driving mechanism resistances; efficiency determination;	Đokić, R., Vladić, J., Jojić, T., Ličen, H. Analysis of power losses and experimental method for determining resistance in electric elevators. <i>Stroj Vestn-J Mech E</i> 70 466-482 (2024) DOI:10.5545/sv-jme.2024.1006
Shao, Y., Chen, Y., Xiao, X., Zheng, M., He, W.	Design and Stress Analysis of Bevel Line Gears with Vertical Flank Suitable for Micro Machining	70, 9-10, 483-493 (2024) https://dx.doi.org/10.5545/sv-jme.2024.917	line gear; bevel gear; meshing theory; stress analysis; micro machining;	Shao, Y., Chen, Y., Xiao, X., Zheng, M., He, W. Design and stress analysis of bevel line gears with vertical flank suitable for micro machining. <i>Stroj Vestn-J Mech E</i> 70 483-493 (2024) DOI:10.5545/sv-jme.2024.917
Li, Q., Wang, B., Ma, C., Guan, Q., Shi, H., Xiao, K., Zhang, S.	Study on the Properties of Sinusoidal Micro-Textured Ball End Milling Cutter for Milling Titanium Alloy	70, 9-10, 494-506 (2024) https://dx.doi.org/10.5545/sv-jme.2024.918	sinusoidal micro-texture; milling performance of milling tools; milling force; milling temperature; surface roughness of the titanium alloy workpiece; parameter optimization; titanium alloy;	Li, Q., Wang, B., Ma, C., Guan, Q., Shi, H., Xiao, K., Zhang, S. Study on the properties of sinusoidal micro-textured ball end milling cutter for milling titanium alloy. <i>Stroj Vestn-J Mech E</i> 70 494-506 (2024) DOI:10.5545/sv-jme.2024.918
Karthik, T., Srinivasan, N., Rajenthirakumar, D., Sridhar, R.	Multi-Response Optimization of Single Point Incremental Forming of Al 6061 Sheet Through Grey-Based Response Surface Methodology	70, 9-10, 507-514 (2024) https://dx.doi.org/10.5545/sv-jme.2023.618	grey based RMS; Single point incremental forming; roller ball tool; surface roughness;	Karthik, T., Srinivasan, N., Rajenthirakumar, D., Sridhar, R. Multiresponse optimization of single point incremental forming of Al 6061 sheet through grey-based response surface methodology. <i>Stroj Vestn-J Mech E</i> 70 507-514 (2024) DOI:10.5545/sv-jme.2023.618
Babić, M., Kovačić, M., Fragassa, C., Šturm, R.	Selective Laser Melting: A Novel Method for Surface Roughness Analysis	70, 7-8, 313-324 (2024) https://dx.doi.org/10.5545/sv-jme.2024.1009	additive manufacturing; selective laser melting; surface roughness; fractal geometry; network theory; genetic programming;	Babić, M., Kovačić, M., Fragassa, C., Šturm, R. Selective laser melting: A novel method for surface roughness analysis. <i>Stroj Vestn-J Mech E</i> 70 313-324 (2024) DOI:10.5545/sv-jme.2024.1009
Yan, H., Chang, Q., Niu, H., Wang, G., Zhao, P., He, B.	Analysis and Research on Energy Consumption of a Non-Contact High-Efficiency Tunnel De-Icing Device	70, 7-8, 325-341 (2024) https://dx.doi.org/10.5545/sv-jme.2023.764	tunnel engineering; laser de-icing; energy consumption analysis; simulation analysis;	Yan, H., Chang, Q., Niu, H., Wang, G., Zhao, P., He, B. Analysis and research on energy consumption of a non-contact high-efficiency tunnel de-icing device. <i>Stroj Vestn-J Mech E</i> 70 325-341 (2024) DOI:10.5545/sv-jme.2023.764
Roy, A., Dhiman, S.K.	Estimation of Surface Temperature and Heat Flux over a Hollow Cylinder and Slab using an Inverse Heat Conduction Approach	70 342-354 (2024) https://dx.doi.org/10.5545/sv-jme.2023.864	surface temperature and heat flux; inverse heat conduction; energy balance approach; hollow cylinder and flat plate; derived equations;	Roy, A., Dhiman, S.K. Estimation of surface temperature and heat flux over a hollow cylinder and slab using an inverse heat conduction approach. <i>Stroj Vestn-J Mech E</i> 70 342-354 (2024) DOI:10.5545/sv-jme.2023.864
Zagórski, I.	Surface Roughness Evaluation of AZ31B Magnesium Alloy After Rough Milling Using Tools with Different Geometries	70, 7-8, 355-368 (2024) https://dx.doi.org/10.5545/sv-jme.2023.885	rough milling; 3D surface roughness; Abbott-Firestone curve; rake angle; helix angle; magnesium alloy;	Zagórski, I. Surface roughness evaluation of AZ31B magnesium alloy after rough milling using tools with different geometries. <i>Stroj Vestn-J Mech E</i> 70 355-368 (2024) DOI:10.5545/sv-jme.2023.885
Li, D., Lv, C., Bu, Z., Yan, X., Lan, Z., Cao, L., Si, H.	Dynamic and Phase-Frequency Characteristics of Rotor Instability Induced by Steam Flow Excited Vibration in Seals	70, 7-8, 369-380 (2024) https://dx.doi.org/10.5545/sv-jme.2023.902	ultra-supercritical unit; labyrinth seal; steam flow excited vibration; dynamic characteristics; phase-frequency analysis;	Li, D., Lv, C., Bu, Z., Yan, X., Lan, Z., Cao, L., Si, H. Dynamic and phase-frequency characteristics of rotor instability induced by steam flow excited vibration in seals. <i>Stroj Vestn-J Mech E</i> 70 369-380 (2024) DOI:10.5545/sv-jme.2023.902
Genc, M.	Cargo E-Bike Robust Speed Control Using an MPC Battery Thermal Lumped Model Approach	70, 7-8, 381-391 (2024) https://dx.doi.org/10.5545/sv-jme.2023.899	cargo e-bike; e-micromobility; MPC; road uncertainty; lump thermal model; state-space modeling;	Genc, M. Cargo e-bike robust speed control using an MPC battery thermal lumped model approach. <i>Stroj Vestn-J Mech E</i> 70 381-391 (2024) DOI:10.5545/sv-jme.2023.899

Korkmaz, F., Dereli, S., Karayel, D., Kolip, A.	The Use of Heuristic Optimization Techniques on RV Cycloid Reducer Design: A Comparative Study	70, 7-8, 392-402 (2024) https://dx.doi.org/10.5545/sv-jme.2024.921	cycloid reducer; finite element analysis; optimization; heuristic algorithm;	Korkmaz, F., Dereli, S., Karayel, D., Kolip, A. The use of heuristic optimization techniques on rv cycloid reducer design: A comparative study. <i>Stroj Vestn-J Mech E</i> 70 392-402 (2024) DOI:10.5545/sv-jme.2024.921
Koc, P.	On Experimental Determination of Poisson's Ratio for Rock-like Materials using Digital Image Correlation	70, 5-6, 211-222 (2024) https://dx.doi.org/10.5545/sv-jme.2024.966	Poisson's ratio; digital image correlation; strain gauge; rock-like materials; uniaxial compression;	Koc, P. On experimental determination of Poisson's ratio for rock-like materials using digital image correlation. <i>Stroj Vestn-J Mech E</i> 70 211222 (2024) DOI:10.5545/sv-jme.2024.966
Do, A., Chernyaev, A.	The Double-Sided Upsetting of the End Thickenings on Rod Blanks	70, 5-6, 223-230 (2024) https://dx.doi.org/10.5545/sv-jme.2023.550	cold forging; upsetting; end thickenings; force; material damageability;	Do, A., Chernyaev, A. The double-sided upsetting of the end thickenings on rod blanks. <i>Stroj Vestn-J Mech E</i> 70 223-230 (2024) DOI:10.5545/sv-jme.2023.550
Giljen, Z., Nedeljković, M., Cheng, Y.	The Influence of Pump-Turbine Specific Speed on Hydraulic Transient Processes	70, 5-6, 231-246 (2024) https://dx.doi.org/10.5545/sv-jme.2023.776	hydraulic transients; pump-turbine; influence of the specific speed; load rejection; working point trajectory; method of characteristics;	Giljen, Z., Nedeljković, M., Cheng, Y. The influence of pump-turbine specific speed on hydraulic transient processes. <i>Stroj Vestn-J Mech E</i> 70 231-246 (2024) DOI:10.5545/sv-jme.2023.776
Li, F., Li, C., Zhou, J., He, J., Wang, J., Luo, C., Li, S.	Effect of Laser Parameters on Surface Texture of Polyformaldehyde and Parameter Optimization	70, 5-6, 247-258 (2024) https://dx.doi.org/10.5545/sv-jme.2023.787	picosecond laser processing; parameter optimization; polyformaldehyde (POM); grey-Taguchi analysis method; Prediction model;	Li, F., Li, C., Zhou, J., He, J., Wang, J., Luo, C., Li, S. Effect of Laser parameters on surface texture of polyformaldehyde and parameter optimization. <i>Stroj Vestn-J Mech E</i> 70 247-258 (2024) DOI:10.5545/sv-jme.2023.787
Van, A., Nguyen, T., Bui, H., Dang, X., Nguyen, T.	Multi-response Optimization of GTAW Process Parameters in Terms of Energy Efficiency and Quality	70, 5-6, 259-269 (2024) https://dx.doi.org/10.5545/sv-jme.2023.890	GTAW; heat input; ultimate tensile strength; micro-hardness; radial basis function network;	Van, A., Nguyen, T., Bui, H., Dang, X., Nguyen, T. Multi-response optimization of gtaw process parameters in terms of energy efficiency and quality. <i>Stroj Vestn-J Mech E</i> 70 259-269 (2024) DOI:10.5545/sv-jme.2023.890
Wilk-Jakubowski, J., Wilk-Jakubowski, G., Loboichenko, V.	Experimental Attempts of Using Modulated and Unmodulated Waves in Low-Frequency Acoustic Wave Flame Extinguishing Technology: A Review of Selected Cases	70, 5-6, 270-281 (2024) https://dx.doi.org/10.5545/sv-jme.2023.893	acoustic flame extinguishing; firefighting systems; deep neural networks; electrical and mechanical engineering; fire extinguisher; flame suppression;	Wilk-Jakubowski, J., Wilk-Jakubowski, G., Loboichenko, V. Experimental attempts of using modulated and unmodulated waves in low-frequency acoustic wave flame extinguishing technology: A review of selected cases. <i>Stroj Vestn-J Mech E</i> 70 270-281 (2024) DOI:10.5545/sv-jme.2023.893
Povše, A., Skale, S., Vojvodić-Tuma, J.	Evaluation of the Condition of the Bottom of the Tanks for Petroleum Products-Forecast of the Remaining Operating Life	70, 5-6, 282-292 (2024) https://dx.doi.org/10.5545/sv-jme.2023.682	pitting; storage tank bottom; timedependent reliability; corrosion model;	Povše, A., Skale, S., Vojvodić-Tuma, J. Evaluation of the condition of the bottom of the tanks for petroleum products-forecast of the remaining operating life. <i>Stroj Vestn-J Mech E</i> 70 282-292 (2024) DOI:10.5545/sv-jme.2023.682
Mu, M., Xie, B., Yang, Y.	Research on Attitude Analysis of Hydraulic Support Based on Column Length	70, 5-6, 293-310 (2024) https://dx.doi.org/10.5545/sv-jme.2024.991	analysis of hydraulic support attitude; simulation analysis; axis pin connection clearance; hydraulic cylinder stiffness;	Mu, M., Xie, B., Yang, Y. Research on attitude analysis of hydraulic support based on column length. <i>Stroj Vestn-J Mech E</i> 70 293-310 (2024) DOI:10.5545/sv-jme.2024.991
Mlakar, U., Koželj, R., Ristić, A., Stritih, U.	Experimental Testing System for Adsorption Space Heating	70, 3-4, 107-115 (2024) https://dx.doi.org/10.5545/sv-jme.2023.788	sorption heat storage; space heating; water vapour; humid air; zeolite 13X; zeolite NaYBFK;	Mlakar, U., Koželj, R., Ristić, A., Stritih, U. Experimental testing system for adsorption space heating. <i>Stroj Vestn-J Mech E</i> 70 107-115 (2024) DOI:10.5545/sv-jme.2023.788
Wan, Z., Yu, H., Xiao, Y., Zhao, Z., Lian, Z., Chen, F.	Research on the Adaptability of Packers for Integrated String Fracturing Operations in Low Porosity and Low Permeability Reservoirs	70, 3-4, 116-127 (2024) https://dx.doi.org/10.5545/sv-jme.2023.662	low porosity and low permeability reservoirs; integrated pipe string; packer rubber ring; acid fracturing; finite element simulation;	Wan, Z., Yu, H., Xiao, Y., Zhao, Z., Lian, Z., Chen, F. Research on the adaptability of packers for integrated string fracturing operations in low porosity and low permeability reservoirs. <i>Stroj Vestn-J Mech E</i> 70 116127 (2024) DOI:10.5545/sv-jme.2023.662
Dong, C., Yang, X., Li, D., Zhao, G., Liu, Y.	Service Performance Optimization and Experimental Study of a New W-W Type Non-circular Planetary Gear Train	70, 3-4, 128-140 (2024) https://dx.doi.org/10.5545/sv-jme.2023.673	Non-circular planetary gear train; reversing device; incremental meshing line method; transmission error; indicator diagram;	Dong, C., Yang, X., Li, D., Zhao, G., Liu, Y. Service performance optimization and experimental study of a new W-W type non-circular planetary gear train. <i>Stroj Vestn-J Mech E</i> 70 128-140 (2024) DOI:10.5545/sv-jme.2023.673

Zhang, X.	Transient Flow Characteristics of a Pressure Differential Valve with Different Valve Spool Damping Orifice Structures	70, 3-4, 141-158 (2024) https://dx.doi.org/10.5545/sv-jme.2023.691	aviation engine lubrication system; pressure differential valve; flow impact; transient flow; valve spool damping orifice;	Zhang, X. Transient flow characteristics of a pressure differential valve with different valve spool damping orifice structures. <i>Stroj Vestn-J Mech E</i> 70 141-158 (2024) DOI:10.5545/sv-jme.2023.691
Liu, W., Wu, C., Chen, X.	An Eigenfrequency-Constrained Topology Optimization Method with Design Variable Reduction	70, 3-4, 159-169 (2024) https://dx.doi.org/10.5545/sv-jme.2023.739	Eigenfrequency constraint; topology optimization; bi-directional evolutionary structural optimization; design variable reduction; Lagrange multiplier method;	Liu, W., Wu, C., Chen, X. An eigenfrequency-constrained topology optimization method with design variable reduction. <i>Stroj Vestn-J Mech E</i> 70 159-169 (2024) DOI:10.5545/sv-jme.2023.739
Sun, J., Xu, P., Chen, M., Xue, J.	Forced Vibration of Time-Varying Elevator Traction System	70, 3-4, 170-180 (2024) https://dx.doi.org/10.5545/sv-jme.2023.852	elevator traction system; vibration; timevarying; dynamics; numerical analysis;	Sun, J., Xu, P., Chen, M., Xue, J. Forced vibration of time-varying elevator traction system. <i>Stroj Vestn-J Mech E</i> 70 170-180 (2024) DOI:10.5545/sv-jme.2023.852
Huang, X., Wei, N., Wang, C., Zhang, X.	Nonlinear Free Vibration Analysis of Functionally Graded Porous Conical Shells Reinforced with Graphene Nanoplatelets	70, 3-4, 181-193, (2024) https://dx.doi.org/10.5545/sv-jme.2023.825	nonlinear vibration; truncated conical shell; graphene nanoplatelet; porous materials; elastic foundation;	Huang, X., Wei, N., Wang, C., Zhang, X. Nonlinear free vibration analysis of functionally graded porous conical shells reinforced with graphene nanoplatelets. <i>Stroj Vestn-J Mech E</i> 70 181-193, (2024) DOI:10.5545/sv-jme.2023.825
Kılavuz, F., Goren Kiral, B.	Design Optimization of Mechanical Valves in Dishwashers Based on the Minimization of Pressure Losses	70, 3-4, 194-208 (2024) https://dx.doi.org/10.5545/sv-jme.2023.768	dishwasher; energy-saving; impeller blade design optimization; statistical analysis; artificial neural network;	Kılavuz, F., Goren Kiral, B. Design optimization of mechanical valves in dishwashers based on the minimization of pressure losses. <i>Stroj Vestn-J Mech E</i> 70 194-208 (2024) DOI:10.5545/sv-jme.2023.768
Zupan, S., Kunc, R.	Overview of Principles and Rules of Geometrical Product Specifications According to the Current ISO Standards	70, 1-2, 3-19 (2024) https://dx.doi.org/10.5545/sv-jme.2023.753	ISO standard; geometrical product specification; geometrical dimensioning and tolerancing; principles; rules; size; tolerance; verification;	Zupan, S., Kunc, R. Overview of principles and rules of geometrical product specifications according to the current ISO standards. <i>Stroj Vestn-J Mech E</i> 70 3-19 (2024) DOI:10.5545/sv-jme.2023.753
Li, Z., Di, X., Gao, Z., An, Z., Chen, L., Zhang, Y., Lu, S.	Improvement of the Dimensional Accuracy of a Ti-6Al-4V Ripple Disc During Electric Hot Incremental Sheet Forming	70, 1-2, 20-26 (2024) https://dx.doi.org/10.5545/sv-jme.2023.545	incremental sheet forming; electric hot forming; electrically assisted sizing; edge warpage; ripple disc;	Li, Z., Di, X., Gao, Z., An, Z., Chen, L., Zhang, Y., Lu, S. Improvement of the dimensional accuracy of a Ti-6Al-4V ripple disc during electric hot incremental sheet forming. <i>Stroj Vestn-J Mech E</i> 70 20-26 (2024) DOI:10.5545/sv-jme.2023.545
Zagórski, I., Kulisz, M., Szczeplaniak, A.	Roughness Parameters with Statistical Analysis and Modelling Using Artificial Neural Networks After Finish Milling of Magnesium Alloys with Different Edge Helix Angle Tools	70, 1-2, 27-41 (2024) https://dx.doi.org/10.5545/sv-jme.2023.596	magnesium alloys; finish milling; roughness; surface quality; statistical analysis; artificial neural networks;	Zagórski, I., Kulisz, M., Szczeplaniak, A. Roughness parameters with statistical analysis and modelling using artificial neural networks after finish milling of magnesium alloys with different edge helix angle tools. <i>Stroj Vestn-J Mech E</i> 70 27-41 (2024) DOI:10.5545/sv-jme.2023.596
Doan, T., Nguyen, T., Van, A.	Multi-performance Optimization of the Rotary Turning Operation for Environmental and Quality Indicators	70, 1-2, 42-54 (2024) https://dx.doi.org/10.5545/sv-jme.2023.692	rotary turning; total energy consumption; surface roughness; noise emission; IQPSO;	Doan, T., Nguyen, T., Van, A. Multi-performance optimization of the rotary turning operation for environmental and quality indicators. <i>Stroj Vestn-J Mech E</i> 70 42-54 (2024) DOI:10.5545/sv-jme.2023.692
Tian, X., Wang, G., Jiang, Y.	A New Calculation Method for Instantaneous Efficiency and Torque Fluctuation of Spur Gears	70, 1-2, 55-69 (2024) https://dx.doi.org/10.5545/sv-jme.2023.709	collaborative robot; instantaneous efficiency; torque fluctuation; friction coefficient; load distribution;	Tian, X., Wang, G., Jiang, Y. A new calculation method for instantaneous efficiency and torque fluctuation of spur gears. <i>Stroj Vestn-J Mech E</i> 70 55-69 (2024) DOI:10.5545/sv-jme.2023.709
Struzikiewicz, G.	Investigation of the Titanium Alloy Turning Process with Prime A Tools under High-Pressure Cooling Conditions	70, 1-2, 70-79 (2024) https://dx.doi.org/10.5545/sv-jme.2023.718	turning; titanium alloy; cutting forces; chip form; chip breakage index;	Struzikiewicz, G. Investigation of the titanium alloy turning process with prime a tools under high-pressure cooling conditions. <i>Stroj Vestn-J Mech E</i> 70 70-79 (2024) DOI:10.5545/sv-jme.2023.718
Şentürk, B., Fetvacı, M.	A Modified Approach to the Rack Generation of Beveloid Gears	70, 1-2, 80-91 (2024) https://dx.doi.org/10.5545/sv-jme.2023.722	beveloid gears; mathematical modelling; rack-type cutters; parametric modelling; involute profile;	Şentürk, B., Fetvacı, M. A modified approach to the rack generation of beveloid gears. <i>Stroj Vestn-J Mech E</i> 70 80-91 (2024) DOI:10.5545/sv-jme.2023.722
Adıyaman, O.	Investigation on the Application of Worn Cutting Tool Inserts as Burnishing Tools	70, 1-2, 92-102 (2024) https://dx.doi.org/10.5545/sv-jme.2023.781	deep rolling; ball burnishing; microhardness; tribology; surface roughness;	Adıyaman, O. Investigation on the application of worn cutting tool inserts as burnishing tools. <i>Stroj Vestn-J Mech E</i> 70 92-102 (2024) DOI:10.5545/sv-jme.2023.781

