

Table of Contents

Preface and Committees

Chapter 1: Advanced Production Technologies

Production Methods of High-Entropy Alloys G. Juhász, F. Hareancz, E.R. Fábián and Á. Vida	3
Shopfloor-Level Material Flow Analysis to Determine the Readiness of a Company for Industry 4.0 P. Molnár-Major and K. Bóna	11

Chapter 2: Tools and Machine Parts

Optimizing the Clamping Components of a Vibrating System on a Plow D. Late and G. Gheorghe	23
Investigation of Surface Roughness Determination Problems in Additive Manufacturing Technologies N. László and P. Ficzer	31
An Analysis of Comparative Static Structural FEA for Spiral Bevel Gears with Various Tooth Angles and Loads M.M.I. Rahat and S. Bodzás	39
Additive Manufacturing of a Flat Form Tool S. Rahman and S. Bodzás	47
Uniform Torsion of Bar Having Cross Section Bounded by Two Hyperbola Arcs I. Ecsedi, A. Baksa, Á.J. Lengyel and D. Gönczi	55

Chapter 3: Transportation Engineering and Vehicles

Review of Connected Autonomous Vehicles Platooning: Technologies, Challenges, and Future Directions I.T. Oargă, B.O. Varga, I. Barabás and G. Prunean	65
Investigation of Heavy Vehicle Underrunning Guard Focusing for the Energy Absorbing Issue J. Kertész, J. Menyhárt and T.A. Kovács	79
Literature Review of Vibroacoustic Simulation in Geared Vehicle Power Transmission Systems for the Reduction of Radiated Noise K. Horvath and A. Zelei	89
Computational Fluid Dynamics Simulation of the Cooling of a Vehicle Alternator's Stator Winding D. Nemes, N. Szűcs and B. Fodor	99