Record Nr. UNINA9910733717103321 Proceedings of the 5th International Conference on Industrial **Titolo** Engineering (ICIE 2019): Volume II / / edited by Andrey A. Radionov. Oleg A. Kravchenko, Victor I. Guzeev, Yurij V. Rozhdestvenskiy Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-22063-X Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XIX, 1512 p. 581 illus., 263 illus. in color.) Lecture Notes in Mechanical Engineering, , 2195-4356 Collana 621.8 Disciplina 658.5 Soggetti Machinery Manufactures Tribology Corrosion and anti-corrosives Coatings **Engines** Machinery and Machine Elements Manufacturing, Machines, Tools, Processes Tribology, Corrosion and Coatings **Engine Technology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Modelling of roll roughness transfer process to strip during skin-pass rolling -- Working surface calculation of teeth bevel gear helical-bevel gearing at milling with hob -- Effectiveness of application of additional strengthening processing of surface plastic deformation on increase in fatigue life of parts -- Determination of rational technological parameters of cold bending with rolling of pipes from corrosionresistant steels -- Recomposition procedure of automatic replacement laser modules for CNC machines -- Tooling backup of cutting and deforming processing of non-rigid shafts -- Determination of flanging parameters and length of screwing in producing holes by the method of

thermal drilling in thin-sheet metal.

## Sommario/riassunto

This book highlights recent findings in industrial, manufacturing and mechanical engineering, and provides an overview of the state of the art in these fields, mainly in Russia and Eastern Europe. A broad range of topics and issues in modern engineering are discussed, including the dynamics of machines and working processes, friction, wear and lubrication in machines, surface transport and technological machines, manufacturing engineering of industrial facilities, materials engineering, metallurgy, control systems and their industrial applications, industrial mechatronics, automation and robotics. The book gathers selected papers presented at the 5th International Conference on Industrial Engineering (ICIE), held in Sochi, Russia in March 2019. The authors are experts in various fields of engineering, and all papers have been carefully reviewed. Given its scope, the book will be of interest to a wide readership, including mechanical and production engineers, lecturers in engineering disciplines, and engineering graduates.