1. Record Nr. UNINA9910377819403321 Design and Modeling of Mechanical Systems - IV: Proceedings of the **Titolo** 8th Conference on Design and Modeling of Mechanical Systems. CMSM'2019, March 18–20, Hammamet, Tunisia / / edited by Nizar Aifaoui, Zouhaier Affi, Mohamed Slim Abbes, Lassad Walha, Mohamed Haddar, Lotfi Romdhane, Abdelmaiid Benamara, Mnaouar Chouchane, Fakher Chaari Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-27146-3 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XVI, 961 p. 614 illus., 526 illus. in color.) Collana Lecture Notes in Mechanical Engineering, , 2195-4356 621 Disciplina Engineering design Soggetti Vibration **Dynamics Physics Engineering Design** Vibration, Dynamical Systems, Control Numerical and Computational Physics, Simulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia From assembly planning to secondary assembly's lines identification --Nota di contenuto CAD tolerancing integration: A tool for optimal tolerance allocation --A Computer Aided Tolerancing (CAT) tool of non-rigid cylindrical parts assemblies -- Why and how to move from SPC (Statistical Process Control) to APC (Automated Process Control) -- Proposal of a new based scenarios eco-manufacturing methodology on CAD phase --Experimental study of vehicle noise and traffic pollution -- Design of an electronic throttle body based on a new Knowledge sharing engineering methodology.

This book offers a collection of original peer-reviewed contributions presented at the 8th International Congress on Design and Modeling of Mechanical Systems (CMSM'2019), held in Hammamet, Tunisia, from

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the 18th to the 20th of March 2019. It reports on research, innovative industrial applications and case studies concerning mechanical systems and related to modeling and analysis of materials and structures, multiphysics methods, nonlinear dynamics, fluid structure interaction and vibroacoustics, design and manufacturing engineering. Continuing on the tradition of the previous editions, these proceedings offers a broad overview of the state-of-the art in the field and a useful resource for academic and industry specialists active in the field of design and modeling of mechanical systems. CMSM'2019 was jointly organized by two leading Tunisian research laboratories: the Mechanical Engineering Laboratory of the National Engineering School of Monastir, University of Monastir and the Mechanical, Modeling and Manufacturing Laboratory of the National Engineering School of Sfax, University of Sfax.