Record Nr. UNINA9910299856903321 Microstructuring of Thermo-Mechanically Highly Stressed Surfaces: **Titolo** Final Report of the DFG Research Group 576 / / edited by Berend Denkena, Adrian Rienäcker, Gunter Knoll, Friedrich-Wilhelm Bach, Hans Jürgen Maier, Eduard Reithmeier, Friedrich Dinkelacker Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-09692-3 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (190 p.) Lecture Notes in Production Engineering, , 2194-0525 Collana 621.4023 Disciplina Soggetti Structural materials Manufactures Mechanics Mechanics, Applied Machinery Structural Materials Manufacturing, Machines, Tools, Processes Solid Mechanics Machinery and Machine Elements Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Introduction -- Project overview -- Methods and models for the design Nota di contenuto of microstructures -- Micro structuring by means of cutting processes -- Micro structured thermal sprayed surfaces -- Surface characterization based on optical metrology -- Tribological mechanisms of micro structures -- Test of cylinder liner under fired engine conditions. This contributed volume presents the final research results of the DFG Sommario/riassunto Research Group 576, which is a joint initiative of five different institutes of the Leibniz Universität Hannover and the Universität Kassel. Germany. The research of the DFG Research Group 576 focuses on improving the tribological behavior of thermomechanically highly

stressed surfaces, particularly on cylinder liner for combustion engines.

The target audience primarily comprises researchers and experts in the field but the book may also be beneficial for graduate students who want to specialize in the field.