Record Nr. UNINA9910437882103321 Process machine interactions: prediction and manipulation of **Titolo** interactions between manufacturing processes and machine tool structures // Berend Denkena and Ferdinand Hollmann (eds.) New York, : Springer, 2013 Pubbl/distr/stampa **ISBN** 1-283-91223-6 3-642-32448-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (516 p.) Collana Lecture notes in production engineering, , 2194-0525 Altri autori (Persone) DenkenaBerend HollmannFerdinand Disciplina 670.42 Soggetti Manufacturing processes Machine-tools Machinery Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto pt. 1. Basics -- pt. 2. Grinding -- pt. 3. Cutting -- pt. 4. Forming. This contributed volume collects the scientific results of the DFG Sommario/riassunto Priority Program 1180 Prediction and Manipulation of Interactions between Structure and Process. The research program has been conducted during the years 2005 and 2012, whereas the primary goal was the analysis of the interactions between processes and structures in modern production facilities. This book presents the findings of the 20 interdisciplinary supprojects, focusing on different manufacturing processes such as high performance milling, tool grinding or metal forming. It contains experimental investigations as well as mathematical modeling of production processes and machine interactions. New experimental advancements and novel simulation

approaches are also included.