Record Nr. UNINA9910830713903321 Autore **Huo Dehong** Titolo Vibration assisted machining: theory, modelling and applications / / Lu Zheng, Wanqun Chen, Dehong Huo Pubbl/distr/stampa Hoboken, NJ:,: Wiley,, [2021] ©2021 **ISBN** 1-5231-5499-3 1-119-50636-0 1-119-50632-8 Descrizione fisica 1 online resource (211 pages): illustrations Disciplina 671.35 Soggetti **Cutting - Vibration** Machine-tools - Vibration Machining Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Includes index. Nota di contenuto Introduction to Vibration-Assisted Machining Technology Review of Vibration Systems Vibration System Design and Implementation Kinematics Analysis of Vibration-Assisted Machining Tool Wear and Burr Formation Analysis in Vibration-Assisted Machining Modeling of Cutting Force in Vibration-Assisted Machining Finite Element Modeling and Analysis of Vibration-Assisted Machining Surface Topography Simulation Technology for Vibration-Assisted Machining "Vibration Assisted Machining: Theory, Modelling and Applications Sommario/riassunto comprehensively covers all key aspects of vibration assisted machining such as cutting kinematics and dynamics, effect of workpiece materials and wear of cutting tools and applications. Case studies with detailed guidance on design, modelling and tests of VAM systems, and machining experiment method are included and state-of-the-art research development on cutting force modelling and surface texture generation is considered. Vibration Assisted Machining: Theory. Modelling and Applications provides engineering students, researchers, and manufacturing engineers with the fundamentals of vibration

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