

1. Record Nr.	UNINA9910476836803321
Autore	Institute of Mechanical Engineers
Titolo	Vibrations in rotating machinery : proceedings of the International Conference on Vibrations in Rotating Machinery (Online, UK, October 2020) // editor, Institutiom of Mechanical Engineers
Pubbl/distr/stampa	Taylor & Francis, 2021 Leiden, The Netherlands : , : CRC Press/Balkema, , [2020]
ISBN	1-00-313263-4 1-003-13263-4 1-000-31849-4 1-000-31853-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (655 pages)
Disciplina	621.8 620.3
Soggetti	Rotors - Vibration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
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Since 1976, the Vibrations in Rotating Machinery conferences have successfully brought industry and academia together to advance state-of-the-art research in dynamics of rotating machinery. 12th International Conference on Vibrations in Rotating Machinery contains contributions presented at the 12th edition of the conference, from industrial and academic experts from different countries. The book discusses the challenges in rotor-dynamics, rub, whirl, instability and more. The topics addressed include: - Active, smart vibration control - Rotor balancing, dynamics, and smart rotors - Bearings and seals - Noise vibration and harshness - Active and passive damping - Applications: wind turbines, steam turbines, gas turbines, compressors

- Joints and couplings - Challenging performance boundaries of rotating machines - High power density machines - Electrical machines for aerospace - Management of extreme events - Active machines - Electric supercharging - Blades and bladed assemblies (forced response, flutter, mistuning) - Fault detection and condition monitoring - Rub, whirl and instability - Torsional vibration Providing the latest research and useful guidance, 12th International Conference on Vibrations in Rotating Machinery aims at those from industry or academia that are involved in transport, power, process, medical engineering, manufacturing or construction.

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