

1. Record Nr.	UNINA9910830572403321
Titolo	Condition Monitoring, Troubleshooting and Reliability in Rotating Machinery // edited by Robert X. Perez
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, Inc. and Scrivener Publishing LLC, , [2023] ©2023
ISBN	1-119-63162-9 1-119-63161-0
Descrizione fisica	1 online resource (439 pages)
Collana	Rotating machinery fundamentals and advances
Disciplina	621.816
Soggetti	Machinery - Maintenance and repair Rotors - Maintenance and repair
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Matter -- CONDITION MONITORING. An Introduction to Machinery Monitoring / Robert X Perez -- Centrifugal Pump Monitoring, Troubleshooting and Diagnosis Using Vibration Technologies / William D Marscher -- Proximity Probes are a Good Choice for Monitoring Critical Machinery with Fluid Film Bearings / Robert X Perez -- Optimizing Lubrication and Lubricant Analysis / Jim Fitch, Bennett Fitch -- Troubleshooting Temperature Problems / Robert X Perez -- Assessing Reciprocating Compressors and Engines / Robert X Perez -- Managing Critical Machinery Vibration Data / Robert X Perez -- TROUBLESHOOTING. Addressing Reciprocating Compressor Piping Vibration Problems / Robert X Perez -- Remember to Check the Rotational Speed When Encountering Process Machinery Flow Problems / Robert X Perez -- Troubleshooters Need to be Well Versed in the Equipment They are Evaluating / Robert X Perez -- Precise Coupling Properties are Required to Accurately Predict Torsional Natural Frequencies / Robert X Perez -- Is Vibration Beating on Machinery a Problem? / Robert X Perez, Andrew P Conkey -- RELIABILITY. Using Standby Machinery to Improve Process Reliability / Robert X Perez -- Gas Turbine Drivers / Robert X Perez -- Reliability Improvement Ideas for Integrally Geared Plant Air Compressors / Abdulrahman Alkhowaiter

-- Failure Analysis & Design Evaluation of a 500 KW Regeneration Gas Blower / Abdulrahman Alkhowaiter -- Operating Centrifugal Pumps with Variable Frequency Drives in Static Head Applications / Robert X Perez -- Estimating Reciprocating Compressor Gas Flows / Robert X Perez -- Use Your Historical Records to Better Manage Time Dependent Machinery Failure Modes / Robert X Perez -- PROFESSIONAL DEVELOPMENT. Soft Skills and Habits that All Machinery Professionals Need to Develop / Robert X Perez -- Developing Rotating Machinery Competency / Robert X Perez -- About the Editor -- About the Contributors -- Index -- Also of Interest

---

Sommario/riassunto

ROTATING MACHINERY This third volume in a broad collection of current rotating machinery topics, written by industry experts, is a must-have for rotating equipment engineers, maintenance personnel, students, and anyone else wanting to stay abreast with current rotating machinery concepts and technology. Rotating Machinery Fundamentals and Advances represents a broad category of equipment, which includes pumps, compressors, fans, gas turbines, electric motors, internal combustion engines, etc., that are critical to the efficient operation of process facilities around the world. These machines must be designed to move gases and liquids safely, reliably, and in an environmentally friendly manner. To fully understand rotating machinery, owners must be familiar with their associated technologies, such as machine design, lubrication, fluid dynamics, thermodynamics, rotordynamics, vibration analysis, condition monitoring, maintenance practices, reliability theory, and others. The goal of the "Advances in Rotating Machinery" book series is to provide industry practitioners a time-saving means of learning about the most up-to-date rotating machinery ideas and best practices. This three-book series covers industry-relevant topics, such as design assessments, modeling, reliability improvements, maintenance methods and best practices, reliability audits, data collection, data analysis, condition monitoring, and more. Readers will find a good mix of theory and sage experience throughout this book series. Whether for the veteran engineer, a new hire, technician, or other industry professional, this is a must-have for any library. This outstanding new volume includes: Machinery monitoring concepts and best practices Optimizing Lubrication and Lubricant Analysis Machinery troubleshooting Reliability improvement ideas Professional development advice.

---