

1. Record Nr.	UNINA9910373900603321
Autore	Verma Nishchal K
Titolo	Intelligent Condition Based Monitoring : For Turbines, Compressors, and Other Rotating Machines // by Nishchal K. Verma, Al Salour
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-0512-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XXX, 302 p.)
Collana	Studies in Systems, Decision and Control, , 2198-4182 ; ; 256
Disciplina	621.80287
Soggetti	Machinery Computational intelligence Quality control Reliability Industrial safety Machinery and Machine Elements Computational Intelligence Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Faults And Data Acquisition -- Preprocessing -- Feature Extraction -- Feature Selection -- Fault Recognition -- Fault Diagnosis System For Air Compressor Using Palmtop -- Improved Fault Detection Model -- Fault Diagnosis System Using Smartphone -- References.
Sommario/riassunto	This book discusses condition based monitoring of rotating machines using intelligent adaptive systems. The book employs computational intelligence and fuzzy control principles to deliver a module that can adaptively monitor and optimize machine health and performance. This book covers design and performance of such systems and provides case studies and data models for fault detection and diagnosis. The contents cover everything from optimal sensor positioning to fault diagnosis. The principles laid out in this book can be applied across rotating machinery such as turbines, compressors, and aircraft engines. The adaptive fault diagnostics systems presented can be used in multiple time and safety critical applications in domains such as

aerospace, automotive, deep earth and deep water exploration, and energy. .
