1. Record Nr. UNINA9910637744503321

Autore	Villalba Mindy
Titolo	Standard Guides and Practices that Support the Lubricant Condition Monitoring Industry / / Mindy Villalba, Lisa Williams
Pubbl/distr/stampa	West Conshohocken, PA : , : ASTM International, , 2022
Descrizione fisica	1 online resource (viii, 386 pages) : illustrations
Collana	Journal of ASTM International, STP ; ; 1634
Disciplina	629.255
Soggetti	Lubrication and lubricants - Testing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Suggested sampling methods for in-service oil and grease lubricated equipment / Victoria Bunchek, Raymond Dalley, Bernie Hall, J.W. Staniewski, Richard Wurzbach -- Failure mode and effect analysis and why it should be considered when establishing a condition monitoring program and writing ASTM test methods / J.W. Staniewski, Bryan Johnson, Allison Toms -- A comprehensive, human-enabled lubricant and machine inspection strategy for early condition monitoring / James Fitch, James Fitch -- Condition monitoring of lubricating oils in power plants / Nabill Huq, Rajesh Shah, David Wooton -- Advancements in on-site oil analysis using industry 4.0 techniques / Lisa Williams, Randi Price -- Marine diesel engine oil condition monitoring / Stuart Lunt -- Particle count testing and its impact on true oil cleanliness / Kurtis Hartlen -- Minimizing the risk of turbine oil and turbine oil system biodeterioration / Frederick Passman -- Lubricant condition monitoring by fluorescence spectroscopy / Oleg Sosnovski, Pooja Suresh, Marianna Vieira, Matthew Hobbs -- Modernizing ASTM D2272 (RPVOT) criteria for long service life duration oils / John Bucci, Bryan Johnson, Eugen Engel, William VanBergen, Greg Miller -- Dry RPVOT as a performance test for condition monitoring of gas and steam turbines / Andres Lantos, John Bucci, Agustin Avalos, William VanBergen, Gabriel Lucchiari, Lantos,Esteban, David Wooton -- Improved phosphate ester condition monitoring using membrane patch colorimetry / Matthew Hobbs, Peter Dufresne -- Root cause studies to investigate phosphate varnish formation by thermal degradation pathways / Keith Schomburg,

David Wooton -- Grease particle detection and quantification via direct imaging evaluation / Richard Janosky, Troy Smith -- Investigating photoacoustic FTIR spectroscopy for enhanced in-service grease analysis / Richard Janosky, Troy Smith -- The identification of grease components using MALDI-TOF analysis / Nathan Rohrbaugh, Dylan Kletzing -- Generating temperature vs viscosity curves to evaluate lubricant impact on machine performance / Richard Janosky, Dylan Kletzing -- The use of the portable field falling needle viscometer to determine engine oil contamination by diesel fuel under in-service or field conditions / Noh Park, Daniel O'Lear, Kay Kim -- Generic method for the rapid and accurate determination of acid number (AN) in lubricants using FTIR spectroscopy / Frederik van de Voort, Micheal Viset -- Thermal stability studies of lubricant additives / Keith Schomburg, David Wooton -- Application of ASTM test methods used for microscopic particle inspection and characterization and their practical digital documentation / Kubale Shamabanse, Bryan Johnson -- Standards supporting the application of imaging technology in the analysis of lubricating oils / Thomas Canty, Paul O'Brien -- Functional criteria for condition monitoring using SRV / Mathias Woydt, Ameneh Schneider, Franz Novotny-Farkas -- Use of a high frequency reciprocating rig (HFRR) as a condition monitoring tool to measure lubricity / Vincent Colantuoni, Rajesh Shah, Nabill Huq.

Sommario/riassunto

The foundation of a lubricant condition monitoring program is the ability to obtain accurate and informative data that can be related to how the machine and/or lubricant may fail. In the last ten years, there have been many industrial advances that significantly impacted the lubricant condition monitoring industry. We've seen these advances impact instrumentation, lubricant formulation, data analytics and delivery, software, and asset management. End-users have many different sources to obtain high quality test data to support their lubricant condition monitoring programs. Some may choose to outsource samples to a third-party lab, while others may perform the work on-site. Whichever path is chosen, the most important concepts that must be followed lie in the proper measurement and analysis of the data to make critical and effective maintenance decisions. These advancements in lubricant condition monitoring are managed by ASTM D02 Subcommittees D02.96 and D02.C0. Both subcommittees' primary responsibility is to promote knowledge and innovation within each standard to ensure the appropriate tests are performed, and data is correctly implemented at the end-user level.