

新しいユーザ・インターフェースが採用されました

Overview Support What's New Terms & Conditions Contact Us SAE Home

SAE INTERNATIONAL DIGITAL LIBRARY

MY ACCESS Logout Provided by ACME Librarian Association of Texas University Austin

Enter Keyword, Title, Product Number, Etc. Search Advanced Search

Search Results: Abstract Modeling and SAE

Content: Article Book Technical Paper

Date: 2013

Viewing 1 to 50 of 2050 Display: List Sort By: Relevance

Email Print Export

Power Cylinder Oil Consumption: Methods of Measurement 2013-12-20 Reaffirmed Historical Aerospace Material Specification

Detailed Analysis of Variables Affecting Wing Kinematics of Bat Flight 2013-01-9003

An Assessment of the Influence of Gas Turbine Lubricant Thermal Oxidation Test Method Parameters Towards the Development of a New Engine Representative Laboratory Test Method 2013-01-9004

New Methodology for Transient Engine Rig Experiments for Efficient Parameter Tuning 2013-01-9043

Filter

My Access

Aerospace Material Specifications

Aerospace Standards

Ground Vehicle Lighting Regulations

UHF-10E437 Fall2014

Journal

Magazine

Magazine Article

Magazine Feature Article

Magazine Issue

Market Research Report

Paper

Journal Article

Technical Paper

Progress In Technology (PT)

Report

Special Publication (SP)

Standard

Aerospace Material Specification

Aerospace Standard

Ground Vehicle Standard

Transaction

US Federal Regulation

Date

Topic

Author

常時表示された契約者名

各ページに設置された検索バー

整理された関連項目

わかりやすいソーティング

便利なプレビュー画面

緑色表示された閲覧済み項目

MY ACCESS Logout Provided by Nigel Watts

Subscriptions

Aerospace Material Specifications

Aerospace Standards

eBook

As part of your subscription you may have access to additional documents.

Login for More Access

Administrator Login

Institutional Access Sign-up

Logout

全文書へのアクセス

DIGITAL LIBRARY: NEW USER INTERFACE

Overview Support What's New Terms & Conditions Contact Us SAE Home

SAE INTERNATIONAL DIGITAL LIBRARY MY ACCESS Logout Provided by SAE International [Sales Team]

Enter Keyword, Title, Product Number, Etc. My Access Search Advanced Search

Vehicle Application Layer

Details Revisions Cross References Share Latest Version Ground Vehicle Standard

Standard: **J1939/71** Published: 2014-04-28

Status: **Revised**

Issuing: **Truck Bus Control and Comm**

Publisher: **SAE International**

Scope: The SAE **J1939** communications network is developed for use in heavy-duty environments and suitable for horizontally integrated vehicle industries. The SAE **J1939** communications network is applicable for light-duty, medium-duty, and heavy-duty vehicles used on-road or off-road, and for appropriate stationary applications which use vehicle derived components (e.g. generator sets). Vehicles of interest include, but are not limited to, on-highway and off-highway trucks and their trailers, construction equipment, and agricultural equipment and implements. SAE **J1939** -71 Vehicle Application Layer is the SAE **J1939** reference document for the conventions and notations that specify parameter placement in PGN data fields, the conventions for ASCII parameters, and conventions for PGN transmission rates. This document previously contained the majority of the SAE **J1939** data parameters and messages for information exchange between the ECU applications connected to the SAE **J1939** communications network. The data parameters (SPNs) and messages (PGNs) previously published within this document are now published in SAE J1939DA. The reference figures and reference information for the SPNs and PGNs associated with the SAE **J1939** -71 document are published in this document. The data parameters (SPNs) and messages (PGNs) associated with this document are applicable to most SAE **J1939** applications. There are several SAE **J1939** -7X documents that collectively define all of the SAE **J1939** application layer data parameters and messages. Diagnostic services and some industry specific data parameters and messages are documented within other SAE **J1939** -7X application layer documents. An ECU may simultaneously use and support data parameters and messages from multiple SAE **J1939** -7X application layer documents.

Sector: **Automotive Sector**

Topic: **Electrical, Electronics and Avionics** **Vehicle Networking** **Electronic control systems** **Trucks** **Buses**

Language: English Published In: United States

便利な参照情報 アクセス

役に立つ履歴情報

Overview Support What's New Terms & Conditions Contact Us SAE Home

SAE INTERNATIONAL DIGITAL LIBRARY MY ACCESS Logout Provided by SAE International [Sales Team]

Enter Keyword, Title, Product Number, Etc. My Access Search Advanced Search

An Assessment of the Influence of Gas Turbine Lubricant Thermal Oxidation Test Method Parameters Towards the Development of a New Engine Representative Laboratory Test Method

Details References Share Technical Paper

Paper #: **2013-01-9004** Published: 2013-12-20

DOI: **10.4271/2013-01-9004**

ISSN:

Citation: **Spencer, M., Shepherd, T., Greenwood, R., and Simmons, M., "An Assessment of the Influence of Gas Turbine Lubricant Thermal Oxidation Test Method Parameters Towards the Development of a New Engine Representative Laboratory Test Method," SAE Technical Paper 2013-01-9004, 2013, doi:10.4271/2013-01-9004.**

Author(s): **Matthew Spencer - Rolls-Royce and University of Birmingham** **Timothy Shepherd - Rolls-Royce** **Richard Greenwood - University of Birmingham** **Mark Simmons - University of Birmingham**

Publisher: **SAE International**

Abstract: In the development of a more accurate laboratory scale method, the ability to replicate the thermal oxidative degradation mechanisms seen in gas turbine lubricants, is an essential requirement. This work describes an investigation into the influence of key reaction parameters and the equipment set up upon extent and mechanism of oil degradation.

The air flow rate through the equipment was found to be critical to both degradation rate and extent of volatilization loss from the system. As these volatile species can participate in further reactions, it is important that the extent to which they are allowed to leave the test system is matched, where possible, to the conditions in the gas turbine. The presence of metal specimens was shown to have a small influence on the rate of degradation of the lubricant. Loss of metal from the copper and silver specimens due to the mild corrosive effect of the lubricant was seen.

The Total Acid Number and viscosity of a series of oil samples from two service gas turbines are discussed. The ratio of these two physical properties was approximately constant between samples, indicating constant evaporation loss. Additionally, Gel Permeation Chromatography was used to compare the molecular weight distribution of a lubricant used in a gas turbine to laboratory samples. The replenishment of oil in service engines was highlighted as key difference between these samples. It is believed that laboratory methods can degrade oil similarly to service engines and therefore can be used to predict oil life and condition in service.

Sector: **Aerospace Sector**

Topic: **Lubricants** **Gas turbines** **Test procedures**

Language: English Published In: United States

優先する基本情報

便利なプレビュー機能