

## SAIT Newsletter, October 2022

### TRIBOLOGY

**Tribology is a science of 'best practice'.** This is clearly demonstrated in an excellent online article from noria.com – 60 Lubrication Best Practices You Should Be Using Now.

<https://www.machinerylubrication.com/Read/31888/lubrication-best-practices>

**In their own words:** If you were to visit twenty different plants, you likely would find 20 different ways of managing machinery lubrication, some of which would be less than ideal. There is no need for this situation to exist. This article outlines 60 best practices that a good lubrication program should contain. These practices cover five major categories: people, methods, lubricants, hardware, and problem solving. They are intended to help you minimize gear and bearing failures as well as reduce lubricant costs and lube-related downtime.

### VLS – Verification of Lubrication Standards:

Do you believe that consumers and end users should be able to make an educated and informed choice about which product to buy?

Are you concerned about false claims in the lubricants market?

Do you want a way to show the quality of your own products?

Well, we are looking at establishing Verification of Lubrication Specifications as an independent organisation providing a credible and trusted means to verify lubricant specifications.

Join us on this journey to bring transparency to the lubricant marketplace and protect and educate the end user.

We are working on the constitution, obtain funding and establish an association

Watch this space ... or join us on this journey

Please visit this link and be inspired by the role that Tribology can play.

<https://ukla-vls.org.uk/what-we-do/>

Let us support the establishment of a South African VLS!

## Contamination Corner

### **Cotton lint destroys a Caterpillar Bulldozer engine**

Fibres of cotton cultivated for commercial use are classified into two types, the first is lint and the other is fuzz. Lint hairs are convoluted or twisted and are suitable for spinning while fuzz is non-extractable and is of less importance. And it is the lint in cotton waste that hooked onto a burr at the bottom of a dipstick to find its way into a crankshaft lubrication channel in a Caterpillar engine with catastrophic failure. Thank you for this real-life example from experience of the SAIT President, Patrick Swan. Cotton waste lying on the floor or on a fuel tank at a refuelling point is a sure-fire indicator of dangerous contamination.



## Observation 'from the coalface'

This incorrectly parked truck has a direct impact on measuring engine oil level at start-up for the day – engine oil levels must be measured cold. With the front cowl parked hard up against a pallet stack, this engine dipstick can only be accessed after the engine has run which will invariably result in a mis-reading and over-filling.



## International Events

For a full list of upcoming international events please visit [Tribonet Conferences](#), where links take you to each event in full detail.



## TERMINOLOGY GLOSSARY

In common with other technologies, lubricants and lubrication have developed their own terminology or jargon, which frequently confounds the newcomer to this field. To this we must also add the terminologies surrounding friction. To demystify matters in this often-confusing area, the following definitions of some commonly used terms are offered.

We are re-opening the file on terminology glossary – it is a living file and you are welcome to comment and contribute:

### **Complex Grease**

A grease in which the thickener is a combination of a conventional metallic soap and a complexing agent which may be either organic or inorganic.

### **Compounded Oil**

A mineral oil to which vegetable and animal oils or similar chemical substances have been added to impart special properties.

### **Copper Strip Corrosion**

A standard test method for measuring the corrosive effect of petroleum products on copper and its alloys. Also used as a method of indicating the amount of free or unreacted sulphur in a product.

### Corrosive Wear

Wear caused by a chemicals' reaction

### Crown

The top of the piston in an internal combustion engine – exposed to direct flame impingement.

## 2022 SAIT Training

**Follow the path from data to information and into knowledge.**

Please visit our website for further

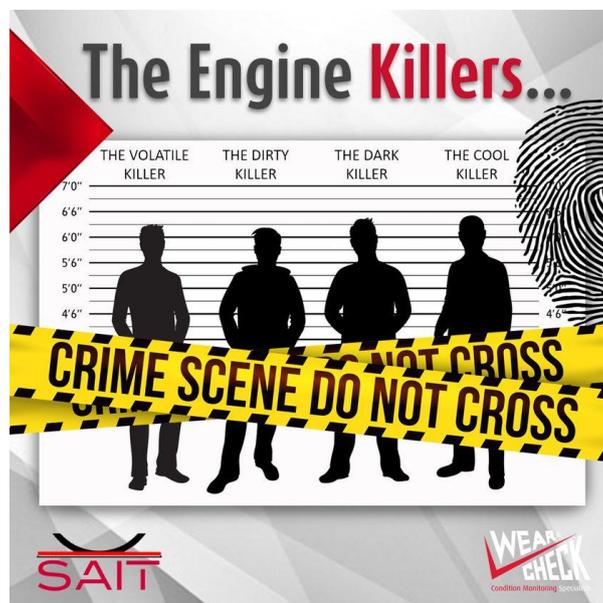
information <https://www.sait.org.za/events/training/> or email us at [secretary@sait.org.za](mailto:secretary@sait.org.za) or [admin@sait.org.za](mailto:admin@sait.org.za).

## Webinar

**Join us - dont miss out!**

**Register with Jo-anne [secretary@sait.org.za](mailto:secretary@sait.org.za)**

12 October at 15H00 - 16H00



## SAIT Membership

If you are not already a SAIT Member, please consider joining us, to help save your machinery running costs, and to benefit the planet. It has recently been said that Tribology is The Science of the Future!

There are several categories of membership, with varying benefits for you, the Members. To find out more about SAIT Memberships, please go to <https://www.sait.org.za/membership/benefits/>, or email [secretary@sait.org.za](mailto:secretary@sait.org.za) or [admin@sait.org.za](mailto:admin@sait.org.za)

Join us now, to learn more about the all-essential triumvirate of **Friction, Lubrication and Wear!**

## Literature / articles of interest

The following articles may be of interest - please click on the images below for the links.

## Tribology & Lubrication Technology

**Tribology & Lubrication Technology (TLT)** is the official monthly publication of STLE and was created to aid in the technical education and professional development of STLE members and industry colleagues. Through its print and digital editions, TLT delivers world-class technical content to some 15,000 lubricant professionals each month. Each issue includes feature articles, best practice analyses, industry surveys, interviews with leading lubrication professionals, emerging-technology reports, lubrication fundamentals and much more.



**SA Mechanical Engineer**



Please share other useful articles and publications that may be of interest to members.



## From the President's Desk

See the President's AGM report on the website

### **John Fitton discusses changes.**

A successful AGM was held virtually on the 31<sup>st</sup> August, with 19 members present.

Report backs were received from Patrick Swan (President) and David Beard (Treasurer). The past 2 years have been tough, and a number of changes have been made to reposition the institute to serve our members better. The Executive Committee was thanked for their support and dedication over the past period. A new Memorandum of Incorporation (MOI) was agreed upon and a new committee nominated.

The institute has been renamed as the “**Southern African Institute of Tribology**” a significant change!

More details from the AGM can be found on the website at the following link: [AGM Presidents Report](#)

We are pleased to introduce the new committee below – please feel free to contact them with suggestions, thoughts, topics of discussion etc [Committee](#)

## South African Institute for Tribology

### EXECUTIVE COMMITTEE



SAIT President 2022/23  
John Fitton



Vice President  
Patrick Swan



Treasurer  
David Beard



Secretary  
Jo-anna Stadler



Training  
Dave Gamble



Committee Member  
Henco Booysse



Committee Member  
Jan-Daniël



Committee Member  
Nico Burger



Committee member  
Martin van Rooyen

**Parting Shot! Noria.com - RULE 60**



**Record All Lube-related Problems**

Quite often, lubricants are blamed for problems unfairly. Breakdowns are generally recorded in some fashion, and the wording may imply a lubricant cause. The prudent lube specialist will investigate all of these thoroughly. Persistent problems should be on the lubrication committee's meeting agenda until resolved. To counter the blame game, let it be known that every incident will be thoroughly investigated, and no person's opinion will stand unchallenged. Another reason for recording these incidents is to have a record of improvement to show upper management. The benefits of this approach can be powerful.

### **We Want to Hear from YOU**



1. Please let us know what topics are of interest to you.
2. Please submit interesting paragraphs or articles that we can share with the SAIT community, by sending them to [secretary@sait.org.za](mailto:secretary@sait.org.za) for forwarding to The Editor. This will assist in disseminating information to all involved in Tribology.
3. Please let us know what would interest you for technical sessions or webinars
4. Please let us know of interesting presenters from whom you would like to hear.

## **SAIT Members**

We have a number of ties available for members - is anyone is interested in these memorabilia, please contact Jo-anne and arrange for collection. Limited time only!!



#### HELP PLEASE

Please note that we will be sending out a survey shortly to find out more about how we should be communicating , and what topics are of interest

Please keep a eye on your inbox and give us feedback..

#### The SAIT Mission:

"Promoting knowledge and skills transfer in friction and wear to achieve a lower Total Cost of Ownership (TCO)."

**SAIT President:** P.G. Swan

**SAIT Directors:** D.P. Beard; D.J. Gamble; P.G. Swan



[Share](#)



[Forward](#)

*Copyright © 2022 SAIT \*, All rights reserved.*

Want to change how you receive these emails?  
You can [update your preferences](#) or [unsubscribe from this list](#).