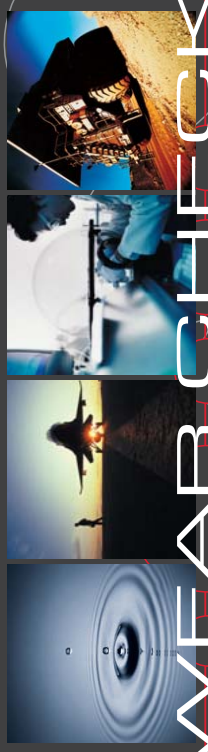
WEAR CHECK® AFRICA
A member of the Set Point group

MONITOR
ISSUE 40

WEARCHECK CONDITION MONITORING THROUGH OIL ANALYSIS



MAY YOUR FACE ALWAYS BE TO THE SUN AND YOUR BACK TO THE STORM

As year-end approaches, a time when we review the past year and contemplate the future, we hope this Irish blessing will bring you good fortune in 2005.

We also hope that you will join us in endorsing the work of the READ organisation in giving increasing numbers of South Africans the gift of literacy. Instead of sending out Christmas cards to customers, we will once again make a donation to READ.

READ

WEARCHECK SPECIALIST CO-AUTHORS OIL ANALYSIS HANDBOOK

John Evans of Wearcheck Africa, co-author of the 'Oil Analysis Handbook' recently published in the UK.

John Evans,diagnostic manager: mobile equipment for Wearcheck Africa, is co-author of a new book, The Oil Analysis Handbook, recently released by Coxmoor Publishing Company in the United Kingdom.

It is written with UK-based Trevor Hunt who has been an independent consultant in condition monitoring of machinery for the last 18 years.

The Oil Analysis Handbook is part of Coxmoor's Machine & Systems Condition Monitoring Series which is edited by Hunt.

'Today, machine efficiency is high, and this means the greater is the loss when there is a breakdown,' says Hunt in his preface to the book. 'Fortunately, monitoring no longer needs to be the monitoring of failure, or even the monitoring of something which eventually will fail, but rather the monitoring of machinery and systems so that they do not fail. Or, if they do, they will fail at the most convenient time, allowing cost-effective replacement. Oil analysis can deal with the early stages of failure.'

Hunt has some 20 years industrial experience on the vibration of aero-engines at Rolls-Royce Limited in Bristol (his doctorate at Leeds University was on this subject) and has researched a variety of techniques at the Fluid Power Centre at the University of Bath. He is the author of more than 50 published articles and papers.

John Evans, who has a B.Sc Chemistry degree from Southampton University in the UK, began his career with a Caterpillar agency in Botswana, establishing oil analysis laboratories in Gaborone and Harare.

He then moved to De Beers in 1986 to build oil analysis laboratories on the Jwaneng and Orapa diamond mines in Botswana. He ran the Orapa laboratory for three years and was responsible for integrating oil analysis into the mine's maintenance planning system before joining Wearcheck Africa in 1989.

A highly experienced industrial chemist, John is involved in diagnostics, customer support, training and managing remote diagnostic facilities for companies running their own oil analysis laboratories. He is in demand as an examiner and lecturer on oil analysis for courses conducted by various professional institutes and universities.

The 150-page hard cover handbook provides a comprehensive review of oil analysis with a practical focus. It covers lubricants, additives, sampling, mechanical and system effects on oil, sampling and analysis equipment and case studies.

It is obtainable from Coxmoor Publishing Company in the UK, www.coxmoor.com, mail@coxmoor.com.

INTERACTION AT ELECTRA

Wearcheck was pleased with the interaction with customers, visitors and other exhibitors at its stand at Electra Mining Africa in September.

Says Keith Finlayson, 'We experienced an extremely positive five days in a hall buzzing with activity and the free flow of information and ideas.'

NEW CAPE TOWN AGENT FOR WEARCHECK

Johan Wilken, Wearcheck's representative in the Western Cape.

Customers in the Western Cape, Northern Cape and Namibia now have a representative based in Cape Town to assist them with technical support, and a new Cape Town Depot will supply Wearcheck kits and accessories.

Johan Wilken, who has more than three decades of experience in the oil industry locally and abroad, was contracted as Wearcheck's agent for this region at the beginning of September.

Johan joined Shell South Africa in 1972, beginning a distinguished corporate career with the group that would last 28 years. When he opted for a retrenchment package at the turn of the century, he occupied the position of lubricants technical manager, heading a team of product managers and laboratory staff tasked with managing technical development and improving quality and efficiencies. This involved close interaction with customers.

In the 1980's, he was seconded overseas for five months to conduct a study on Shell's position in the worldwide mining industry. Although he was based in London, he spent a lot of time in Sweden as their mines were used as a benchmark for the study, and communicated extensively with mining countries across the globe.

He has continued his longstanding association with Shell. During 2001 and 2002 he was a member of the Global Lubricants project team of Shell International Petroleum Co, tasked with establishing a global product portfolio, an electronic product catalogue, a global product management system and supply chain support. His job was to implement the project in Africa and South America.Over the past two years, he has undertaken various contract positions including consulting to Cape Corrosion Systems.

Johan sees his role with Wearcheck as twofold. The first is to reinforce the message with customers that they are on to a good thing with oil analysis. 'It really works,' he says, and he should know. Much of his work at Shell mirrored the service that Wearcheck offers. For the first seven years of his career he worked in a lab undertaking oil analysis. Then, throughout his working life, he has been a technical advisor, interpreting the results of oil analysis and providing customers with in-depth advice on the best course of action to take.

His second objective is to increase customer awareness of how to get the most from their lubricants and their oil analysis programmes.

'There is huge potential for companies, especially equipment manufacturers, to gain greater benefits from proactive maintenance. This is my passion and I am looking forward to sharing the technical knowledge I have gained during my three decades in the industry.'

Johan can be contacted on (021) 910-2290 or 082 879 9363. His e-mail address is johan@wearcheck.co.za.

New Cape Town depot:

Wearcheck Africa - Cape Region
Unit 20 Point Business Park
Marinus Road
Montague Gardens
Tel: (021) 555-4062
Fax: (021) 555-4072
Contact Sonja Punt for all Wearcheck kits and accessories.

FOCUS ON ENVIRONMENT AND QUALITY

Wearcheck hopes to become the first used oil analysis company in the world to achieve ISO 14001 registration for its environmental management system by the end of the year. During a September audit, SABS confirmed that the Pinetown lab, the Barloworld lab and the Johannesburg office complied with ISO 9001:2000. The Pinetown lab also passed the preliminary capability and compliance assessment for ISO 14001 which will be followed by a certification assessment on 2 December.

Members of Ashley Primary School's outdoor club learn about the benefits of growing indigenous trees at the planting of a fever tree by Lesley Crawford (centre), managing director of Wearcheck, at the entrance to the school during Arbour Week in September.

The company also donated a number of indigenous shrubs for a 'butterfly bank' which they hope will attract large numbers of these colourful insects to the playground.

LAB STAFF ARE ON THE MOVE

Since Wearcheck opened its new fuels laboratory in the Isando office in July there have been several new developments in all of the labs to ensure that they are suitably staffed.

Clive Govender

Clive Govender, formerly a diagnostics assistant in the Pinetown mini-lab, has moved to Johannesburg to operate the fuels lab under chemist Greg Morse, who also runs the Barloworld lab.

Mark Manikum

Joining the team in the Barloworld lab is lab assistant Mark Manikum who was doing temporary work in the main Pinetown laboratory.

Denver Naidoo

Denver Naidoo, who used to work the night shift as a lab assistant, has taken up Clive's position in the Pinetown mini-lab.

The trio are committed to maintaining the high standards of accuracy and efficiency that Wearcheck sets in all of its laboratories.

LUBE TIP

QUESTION

I've been told that fine filtration can filter additives out of gear oil. Is this correct?

ANSWER

If the gear oil is formulated without solid additives and if the additives are properly blended (fully dissolved) when new, these additives should not be filterable (even at one micron) until:

1. The additives decompose (dead additives) from normal use.
2. The additives (polar additives such as AW, EP, rust inhibitors, etc.) become attached to solid particles and then are filtered out.
3. The additives condense (desolubilize) into solid suspensions from cold temperatures.
4. The additives mix with an incompatible lubricant or other contaminant forming solid suspensions.

- Courtesy of Noria Corporation

EXCELLENT RESPONSE TO CUSTOMER SERVICE SURVEY

Almost 150 people responded to our recent customer service survey, providing Wearcheck with accurate information on which to base future strategic decisions.

'We were delighted with both the number of respondents to the survey and the results,' said MD Lesley Crawford. 'More than 95% of respondents rated most aspects of customer service as either excellent or good.'

One respondent labelled Wearcheck 'the best in South Africa' and another went so far as to say, 'How can you add to perfection?'

'Whilst positive feedback from customers is always welcome, it will always be tempered by our commitment to continuous improvement and our desire to stay ahead of international standards of quality, systems and service,' Lesley said.

'We would like to thank all respondents for their time and valued input and assure them that we will follow up on any suggestions to meet their needs more effectively.'

When asked to name one selling point to recommend Wearcheck to a friend or associate, these were some of the replies received:

- Reliability
- Professionalism
- Accuracy
- Cost saving
- Early warning
- Planned downtime
- Excellent customer support
- Up to date
- Technically good
- Prevention of extensive damage to vehicle
- Improved resale
- Don't get better service today
- It works

OTHER GENERAL COMMENTS INCLUDED:

'I rely totally on the feedback I get from you to make a decision on whether to run or change ASAP.'

'If/when we have problems, they are speedily resolved.'

'It is a pleasure to deal with the staff and the company.'

'For all the years I have been involved with Wearcheck your accuracy has been good.'

'Wearcheck has helped to improve our maintenance and pinpoint where the problems are.'

'Wearcheck provides valuable information. One becomes proactive.'

'If used correctly, the cost savings to the company are excellent.'

'Wearcheck has saved our company lots of money over the years, especially on our 789 RDT trucks.'

OIL ANALYSIS FACILITATES TRIAL TO EXTEND OIL DRAIN INTERVALS

Wearcheck's oil analysis programme played a key role in an eighteen-month scientific trial completed last year which resulted in oil drain intervals on heavy duty diesel engines operating under controlled conditions being extended by more than five times the norm.

The trial was conducted by Barloworld Logistics, the Mercedes-Benz Commercial Vehicle Division of DaimlerChrysler South Africa and Sasol Oil on 22 Mercedes Benz truck-tractors operating on long haul routes only, using low sulphur diesel and specified lubricants.

It was initiated in mid-2002, and continued until the end of 2003, with the total kilometers travelled exceeding 2,5 million. Whilst under test conditions, the average drain interval obtained during the trial was more than 120 000 km, exceeding the standard drain interval of 22 500 km by more than five times.Since the completion of the intensive test period, all the units are now running with a routine 67 500 km service interval.

Wearcheck conducted continuous oil condition monitoring for the duration of the fleet trial to quantify the oil drain extension benefits and determine the point at which further extension represented an unacceptable risk.

A number of engines involved in the investigation were also dismantled and inspected for wear during the course of the trial.

Says Neil Robinson, technical manager of Wearcheck, 'The trial stretched the oil drain intervals for large trucks way beyond the norm for South Africa. This translates into substantial benefits for fleet operators in the form of improved up-time and cost savings.'

NEW PRODUCTS MAKE OIL HANDLING EASY

Wearcheck has added a range of lubricant dispensing and handling equipment to its product list to make oil handling easier for customers and help them maintain efficient and clean work stations.

These include oil suction machines, drainers, transfer oil pumps and dispensing containers.

The DUMBOX is an essential tool for easy lubricant and fluid decanting. The cap and cover on the jugs protect the contents from contamination and prevent oil spillages. The filter on the funnel ensures clean fluid is dispensed.
Available in 1, 2 and 5 litre sizes.

These air-operated, double-acting transfer oil pumps are ideal for dispensing high density oil. They are suitable for all applications, particularly for centralised installations.
Product code: Art. 37100

The versatile pantograph oil suction/drainers can be used to change the oil of all motor vehicles.
Product code: Art. 46215

For more information contact Wearcheck customer services in Pinetown or Croydon.

If you would prefer to receive future issues of Wearcheck Monitor and Technical Bulletin via e-mail instead of in printed form, please e-mail a request to: support@wearcheck.co.za

THE LEADING OIL ANALYSIS COMPANY IN AFRICA

KWAZULU-NATAL
9 LE MANS PLACE
WESTMEAD, PINETOWN, RSA
PO BOX 15108, WESTMEAD 3608
TEL: +27 31 700 5460
FAX: +27 31 700 5471
support@wearcheck.co.za
www.wearcheck.co.za

WEAR CHECK® AFRICA
A member of the Set Point group

GAUTENG
25 SAN CROY OFFICE PARK
DIE AGORA RD, CROYDON RSA
PO BOX 284, ISANDO 1600
TEL: +27 11 392 6322
FAX: +27 11 392 6340
jhbsupport@wearcheck.co.za
www.wearcheck.co.za

Felicity Howden Public Relations 11/2004