

# WEARCHECK ACQUIRES RELIABILITY TESTING COMPANY, BOOSTS SERVICES

WearCheck recently acquired Anglo Field Services (AFS), adding three new established divisions to our comprehensive reliability solutions portfolio, including non-destructive testing (NDT), technical compliance (TC) and rope condition assessment (RCA).

The fourth AFS division – asset maintenance management (AMM) – was absorbed into our existing Reliability Solutions team, boosting the company's man-power in this section as well as adding technical expertise and additional instrumentation.

Branching into Non-destructive Testing means that WearCheck now conducts a range of analysis techniques through which the properties and condition of a component or system are evaluated without causing any damage to it.

NDT methods are gaining popularity because they do not permanently alter the item undergoing inspection, making NDT a valuable tool that can save both money and time in condition monitoring and inspections — an approach which dovetails perfectly with WearCheck's ethos.

WearCheck's new NDT division offers a range of techniques, including eddy-current-, magnetic-particle-, liquid penetrant-, radiographic-, ultrasonic-, and visual testing.

The new rope testing division provides specialist cable strength assessment and is manned by seven of only 12 people in South Africa who are qualified to conduct these tests.

The technical compliance division provides expert guidance to assist companies to comply with regulatory requirements, and how to rectify violations or problems highlighted during audits.

Prior to merging with WearCheck, AFS operated as part of Anglo's Technical Division under the Anglo Research section, where they provided specialist NDT and materials consultancy services to Anglo Group companies and other clients on a global basis.

WearCheck is now positioned to offer customers access to an augmented portfolio of reliability solutions in a comprehensive one-stop-shop, leading to cost savings and boosted convenience for customers.

Neil Robinson, WearCheck MD, believes that the addition of new services improves the availability of assets operated by WearCheck customers by expanding the choice of condition monitoring options.

'The development and implementation of NDT procedures', says Neil, 'will have a profound impact on keeping operational maintenance costs down for our customers.

'The incorporation of AFS into WearCheck has been a seamless process so far, mainly because the two companies operate with a parallel devotion to data integrity and a shared dedication to customer service excellence.

'All 30 AFS staff members have been absorbed into WearCheck's staff complement, adding their invaluable expertise and knowledge to our team.

'From our side, WearCheck extends a heartfelt welcome to all current AFS customers, and we look forward to bringing new field services clients on board as well as giving our existing clients the benefit of our increased reliability optimisation service offering.'

# WearCheck wins double awards in Europe

WearCheck Africa scooped two awards from top international training body, Mobius, at a condition-based maintenance (CBM Europe) group meeting in Belgium recently. The awards are for first place in the Best Training Partner EUMEA 2018/19 and the Best Student Growth Africa 2018/19.

On hand to receive the awards was WearCheck's reliability solutions consultant and accredited Mobius trainer Dennis Swanepoel, who attended the conference to conduct two full-day reliability solutions workshops, as well as a shorter presentation.

If you would like to sign up for a Mobius course through WearCheck, please contact us for course dates, topics and other information.



Dennis Swanepoel (second from left) proudly accepted WearCheck's awards in Belgium

# **MANAGEMENT REVIEW**

"Plans are of little importance, but planning is essential." This was the philosophy adopted by former British Prime Minister Winston Churchill. WearCheck's management team applies this strategy to keep the business running successfully, and they meet regularly to review current plans and formulate new ones where necessary.

The management review team — clockwise from left: Eddie Perumal, John Evans, Scott Sowman, Meshach Govender, Prinda Narasi, Neil Robinson (MD), Steven Lumley, Philip Schutte, Juliane Strydom, Michelle Padayachee and Gert Nel





# THANK YOU TO OUR INTERNAL AUDITORS!

A big thank you to our internal auditors – these dedicated WearCheck employees take on extra voluntary duties over and above their normal workload to ensure that all the systems and processes in the company continue to run smoothly under the guidance of quality administrator Prinda Narasi.

The internal auditor team is made up of these Pinetown staffers – Wayne Moodley, Daan Burger, Anneline Chinsamy, Charmaine Thumbiran, Sheila Naidoo, Prinda Narasi, Ravi Chetty, Trevor Pillay and Lyn Gengan.

Those in the Johannesburg internal auditor team are Roelf Reyneke, Janneman Smit, Deon Yettian, Christene Fourie, Melissa van Aardt and Salisha Dhanasar (Middelburg) and Josephine Rakolota (Steelpoort)

Internal auditors for ISO 17025:2005 are Loshini Govender, Patience Mokoena and Kefilwe Ntshabele.

'We extend our heartfelt thanks to all our internal auditors for your dedication and for taking on extra responsibilities above and beyond your normal workload,' says Prinda.

Quality administrator Prinda Narasi (second left) thanked all the WearCheck internal auditors for their dedication in 2018. The Pinetown team members were (clockwise from top right) Wayne Moodley, Daan Burger, Anneline Chinsamy, Charmaine Thumbiran, Sheila Naidoo, Ravi Chetty and Trevor Pillay. Inset: Lyn Gengan

## **PRODUCT PICK: On-site laboratories**

In a bid to overcome the lack of infrastructure in certain mining hotspots in Africa, we supply world-class oil analysis services to support industrial operations in those areas by creating mobile laboratories in converted shipping containers and placing them on-site.

The portable laboratories are put together at our head office in Pinetown, South Africa and have every available safety feature such as ventilation and air extraction systems, fire prevention and more. Each lab is fully-equipped with the latest laboratory instruments and technology, and even has an uninterrupted power supply, air conditioning and burglar bars. As industry needs evolve, the mobile labs undergo constant redesigning.

The laboratory instruments and movable components are carefully packed to avoid disturbance during transport and the container is despatched either by road or by sea, depending on its destination.

Our aim is to make world-class condition monitoring services as accessible as possible to operations on the African continent. The extraordinary functionality of the container labs eliminates the need for the customer to supply the services for basic infrastructure such as a building, electricity, internet signal, security and safety features. With these hurdles out of the way, WearCheck then places the designer lab within convenient reach of mining operations.

Once the mobile lab is on-site, a WearCheck technician travels to the location to set up the laboratory and calibrate the instruments. Generally, a local lab manager undergoes training in an existing WearCheck lab and then takes over the reins of the mobile lab along with the necessary technicians. In some cases, the customer manages the laboratory independently.

Offering a wide range of condition monitoring services for the mining sector - including oil analysis, coolant testing, diesel testing and 24 hour sample turnaround time – the mobile labs are also available for use by other industries, such as quarrying, industrial, power generation, transport and shipping operations.

To date, WearCheck has supplied seven container laboratories on-site around Africa, and these are operating successfully in Lumwana (Zambia), Ghana, Mozambique, DRC, Mauritania, Namibia and Burkina Faso. WearCheck operates an additional 16 full-sized laboratories in buildings, in nine countries around Africa and in India and Dubai.



Making sure the laboratory instruments are carefully packed before despatching an on-site laboratory from WearCheck's head office in Pinetown, South Africa are diagnostics manager John Evans (left) and laboratory manager Meshach Govender

# **LUBE TIP:**

# How contaminants affect additives

Particle contamination in a lubricating or hydraulic system is widely known as one of the most devastating contaminants. One effect of particle contamination that is rarely discussed is additive leaching. Many additives attach to particles and are removed, along with the particle, by filtration.

# **LONG SERVICE**

Can you remember back 30 years? 1989 is the year that four of our stalwart WearCheck employees joined the company. For three decades, the careers of John Evans, Lorain de Bruin, Trevor Pillay and Happiness Hlope have revolved around oil analysis and condition monitoring.



John Evans has worked at WearCheck for 30 years



Lorain de Bruin has worked at WearCheck for 30 years



Trevor Pillay has worked at WearCheck for 30 years



Happiness Hlophe has worked at WearCheck for 30 years

# John

John Evans, diagnostic manager, has over 35 years' experience in the oil analysis business and has diagnosed more than two million oil samples. He is involved in diagnostics, customer support, training, R&D, technical writing and managing remote diagnostic facilities for companies running their own oil analysis laboratories. He co-authored a book with Trevor Hunt entitled 'The Oil Analysis Handbook' and has written many of the WearCheck Technical Bulletins.

John holds a B.Sc. (Chemistry) from Southampton University, UK. He began his career with the Caterpillar agency in Botswana, establishing oil analysis laboratories in Gaborone and Harare. After this, with De Beers, he built 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.

# Lorain

Johannesburg branch co-ordinator Lorain de Bruin has worked in several departments over the years, including data capture supervisor, database administrator and software/InfoCheck/ NetCheck/online support. Since 2010, while running the Joburg office and managing customer services, Lorain's passions - IT and helping customers - are true

Some early memories of Lorain's include sleeping in her car for the first month at WearCheck, after relocating from Jhb to find a job by the ocean in 1989. She never imagined that majoring in history would steer her into a scientific company but was given the job because history majors are renowned for their logical thinking!

Lorain recalls fondly the fun of running a WearCheck water stand during Comrades marathon in the 1990s and visiting WearCheck's Zambian operations.

An ardent believer in WearCheck's excellence, Lorain enjoys showing customers just how GREAT WearCheck is. 'I am part of an awesome team. Despite growing and belonging to bigger groups of companies, WearCheck has never lost its feel of "family".'

## Trevor

Nightshift laboratory assistant — this is where Trevor's journey with WearCheck began thirty years ago, and today he holds the position as senior laboratory technician in the company's mini-lab.

Along the way, Trevor did a stint in data capture before joining the diagnostics department as a lab technician in the mini-lab, which handles specialist samples. Here, he analyses samples from aircraft, automotive and industrial filters, greases, coolants, refrigeration and turbine oil samples.

Not one to be stuck behind a microscope every minute of the day, Trevor has enjoyed a variety of other projects at WearCheck. These include setting up foreign WearCheck laboratories and training staff as far afield as Dubai, Zambia, Namibia and Mozambique.

In his spare time, Trevor's hobbies centre around electronics, mechanics and motorcycles. These passions have been useful at work, too. Not only can Trevor repair laboratory instruments, he has also designed and manufactured a variety of mechanical and electronic devices/instruments for the various laboratories.

# **Happiness**

When Happiness Hlope joined the WearCheck family back in 1989, she initially worked in the stores department, where she kept stock neat, tidy and in order. She also handled the company's post and did daily trips to the post office to collect and deliver letters.

After about two years, Happiness was promoted to sample room assistant when the need arose for someone to take charge of the growing number of samples. Today, Happiness works as sample room assistant, and is now one of a team of four – again, to handle the growing quantity of samples.

Does Happiness have any interesting memories of the past three decades at WearCheck? You bet she does! 'I'll never forget one time I opened a sample bottle and smelled an ammonia sample (from an industrial refrigerator) — what a stink! I thought I was going to die! Luckily the labels now warn us what the contents are, so we can avoid that smell!

'And once, when I opened a courier packet containing a sample, a small frog leapt out! My heart nearly stopped - what a shock I got! Happily, we caught the frog and set it free. Never a dull moment at WearCheck!'

# **OUT AND ABOUT**

WearCheck team members have travelled far and wide lately – across RSA, Africa, Europe and the Middle East - conducting condition monitoring training courses, meeting customers, manning expo stands and spreading the word on reliability solutions. Here are some of the trips:

## TRAINING IN BOTSWANA

WearCheck technical consultant Quentin Gustav von Kleist conducted training for Bothakga Burrow mining in Gaborone, Botswana. The course covered both the theoretical and practical elements of oil analysis and predictive maintenance for mining equipment.



Quentin Gustav von Kleist (centre) is flanked by course delegates from Bothakga Burrow mining in Botswana, who completed WearCheck's oil analysis training course

## TRAINING IN AFRICA

Diagnostician Ashley Mayer conducted three two-day courses in the Democratic Republic of Congo (DRC) at Kibali Mining Services, which is based on Kibali Gold Mine.



This group from Kibali mining services in the DRC underwent oil analysis training with diagnostician Ashley Mayer (centre)



Ashley Mayer (second from left) also conducted training in Bamako, Mali for a group from Aggreko

## **AFRICAN UTILITY WEEK**

Thank you to everyone who visited the WearCheck stand at African Utility Week (AUW) in Cape Town earlier this year.

Many good conversations about our specialist condition monitoring services were had, particularly around the electrical/power generation sector.

Maintaining the health of components is so important for improved productivity of transformers, engines, gearboxes and electric motors. Regular assessment and used oil analysis help achieve optimum condition of components. Examination of the physical condition of components helps avoid unplanned failure, while transformer health is monitored through regular assessment of insulating fluid – these are the steps to reducing maintenance costs.

The massive expense of unplanned failure can be avoided with regularly-scheduled oil testing. This reliable maintenance practice helps optimise the life of components. Other condition monitoring techniques include vibration analysis, balancing, alignment, motor circuit analysis and thermography.



WearCheck's stand at African Utility Week featured maintenance of power generation operations

# CM TRAINING KEEPS MALAWIAN WHEELS ROLLING

Nchalo in Southern Malawi was where WearCheck technical support consultant Quentin Gustav von Kleist recently conducted training courses for Unitrans.

Staff from the cartage and transport contracting company were taught all about oil analysis, including the importance of taking samples correctly, how to complete the sample paperwork, how to interpret report results and what remedial action to take where necessary.

## MINING INDABA 2019

The WearCheck team of condition monitoring experts who attended Mining Indaba this year reported that they were delighted to chat with many customers at the WearCheck stand, as well as answering technical questions from people who are new to the concept of condition monitoring.

There was strong interest in WearCheck's mobile laboratories, which are placed on-site in remote areas to make condition monitoring services more accessible in areas with limited infrastructure.

Another popular enquiry was regarding WearCheck's site-specific fuel and lubrication improvement programmes that boost the bottom line for our customers by extending component life, reducing maintenance costs and increasing equipment availability.

# ADIEU, PETER



It is with deep sadness that we remember our Dubai colleague, Peter Safadi, who passed away after a short illness in December 2018.

Peter served as WearCheck PM's regional manager: Middle East, after joining the WearCheck family in 2016. His illustrious career spanned more than 40 years, during which time he ran several industrial businesses in the Middle East, including Jeddah, Riyadh, Oman, Bahrain, Egypt, Spain, Morocco and even Iraq. Peter's absence is keenly felt by the many clients and friends that he made while at WearCheck. We pass on our sincere condolences to Peter's family.

Peter Safadi

# Talking condition monitoring in the UAE

Dennis Swanepoel – WearCheck's reliability solutions consultant, Mobius trainer and CAT IV graduate – attended the CBM (Condition Based Monitoring) conference in the Middle East in April, where he conducted four different presentations for delegates from all over the globe.

The sessions run by Dennis included two oneday presentations – Animated Introduction to Vibration Analysis and Practical Vibration Analysis, and two 45 minute presentations titled Time Waveform Setup Fundamentals and Practical High Frequency Demodulation.

WearCheck MD Neil Robinson says the company is proud of Dennis. 'It is a great honour to be invited to present to such high-calibre delegates on highly technical issues. These topics are Dennis' areas of expertise, and we are delighted that he is gaining

international recognition for his in-depth reliability solutions knowledge.'

To add to the honour, Dennis is currently serving a year-long term as an editorial board member of the international organisation



Dennis Swanepoel, WearCheck's reliability solutions consultant, Mobius trainer and CAT IV graduate, presented four papers at the CBM conference in Abu Dhabi recently

CBMConnect, which is run by the Mobius Institute. The board is made up of nine industry thought leaders from around the world and is tasked with guiding condition-based maintenance multimedia content for CBM professionals.



Dennis Swanepoel is on the editorial board for CBMConnect this year, run by the Mobius Institute. Here, he discusses vibration analysis with another delegate at the CBM conference in the Middle East in April

# **MAKING HEADWAY**



# **NEW TRANSFORMER HEAD**

Gert Nel has been promoted to divisional manager of WearCheck's transformer chemistry division, based in Durban. Gert has been part of the WearCheck family since 2006, when he joined the company as a diagnostician in Isando, specialising in transformer maintenance. More recently, Gert has been running WearCheck's Cape Town transformer oil analysis laboratory for several months before relocating to Durban to head up the transformer section.

Gert Nel is now divisional manager of the transformer chemistry division in Durban

# IN CHARGE IN CAPE TOWN



Jacqueline Hendry has been appointed as WearCheck's Cape Town branch administrator

UPCOMING EXPOS: Watch out for WearCheck at the Investing in African Mining Indaba from 3 - 6 February 2020 at the Cape Town ICC.

# **WEARCHECK 2019 TRAINING COURSES**

Venue	Oil Analysis 1: Understanding oil and its analysis	d its analysis Oil Analysis 2: Report interpretation	
	Two full days	One full day	
Namibia	10-11 September	12 September	
Gauteng	15-16 October	17 October	
Northern Cape	12-13 November	14 November	

Oil Analysis One covers two full days and costs R6 660. Oil Analysis Two course cover one full day each and each costs R3 450. All courses include course material, refreshments, giveaways and certificates. Prices exclude VAT and are subject to change.

For more details on course content, view Training at www.wearcheck.co.za. For bookings contact Michelle van Dyk on training@wearcheck.co.za.

#### ON-SITE TRAINING

All courses can also be presented at the customer's premises for a minimum of seven delegates.

#### WearCheck also offers two more on-site courses:

- WearCheck Practical (in English or Zulu), a half day course (R860 per delegate)
- WearCheck Customised oil analysis for workshop technicians, a full day course (R3 000 per delegate).

All courses include course material, giveaways and certificates. Prices exclude VAT and are subject to change. For on-site training, there may be an additional charge for the lecturer's travel and accommodation, if needed.

#### ARRANGE A TRAINING COURSE NEAR YOU

Training courses can also be arranged in any of the following areas: Bloemfontein, Cape Town, Kimberley, Makopane, Middelburg, Nelspruit, Port Elizabeth, Rustenburg, Steelpoort, Botswana, Namibia, Tanzania (Mwanza), Zambia (Kitwe)

#### **RELIABILITY SOLUTIONS TRAINING COURSES**

Mobius training is offered in 153 countries and is recognised the world over as the standard for reliability solutions technicians. Mobius courses are run by WearCheck and presented either on-site or at the ABB School of Maintenance premises in Johannesburg.

#### **MOBIUS TRAINING COURSES 2019**

Month	Date	Course	Cost ( R )*
August	19 - 21	Asset reliability practitioner CAT I	11 806
	21	Mobius ISO certification exam CAT I	3 996
	21	Mobius ISO certification exam CAT II	4 810
	21	Mobius ISO certification exam CAT III	5 500
September	2 - 6	Vibration analysis CAT II	18 647.36
	6	Mobius ISO certification exam CAT I	3 996
	6	Mobius ISO certification exam CAT II	4 810
	6	Mobius ISO certification exam CAT III	5 500
October	7 - 8	Balancing	7 000
	9 - 11	Asset reliability practitioner CAT I	11 806
	11, 25	Mobius ISO certification exam CAT I	3 996
	11, 25	Mobius ISO certification exam CAT II	4 810
	11, 25	Mobius ISO certification exam CAT III	5 500

\*prices exclude VAT and are valid until the end of 2019.

Note: the condition monitoring overview courses do not include any training material, and a minimum of six candidates is required for all training courses. There may be an additional charge for the lecturer's accommodation and travel.

To book a Mobius training course, please contact Christene on christenef@ wearcheck.co.za or call WearCheck Johannesburg on (011) 392-6322.

# HIGHLIGHT YOUR SUCCESS

If oil analysis has helped prevent a major failure or saved your company money, we would like to feature this in Monitor. Our writer will contact you for the details and will write the article for your approval. Simply email prinda@wearcheck.co.za and we will contact you.

# TECHNICAL BULLETIN TOPICS?

Is there a particular subject you would like to see featured in a Technical Bulletin? Simply email your suggestion to prinda@ wearcheck.co.za. Before you do this, why not check out the more than 60 titles already available on the web site: www.wearcheck.co.za/info/Technical Bulletins

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