

# BEST WISHES FOR THE FESTIVE SEASON



Neil Robinson, managing director

As 2012 draws to a close we reflect on a productive and successful year, including the purchase of new laboratory instruments, the opening of new labs in Johannesburg and Kitwe, Zambia, the launching of a new Reliability Solutions division and the acquisition of ABB's condition monitoring division. Thanks to the ongoing support from you, our customers, WearCheck has been able to take our services even further afield, thereby boosting convenience for regional clients, as well as increasing the range of services that we offer, to meet the constantly-evolving needs of our customers.



## Labs open over Christmas

Please note that WearCheck is dedicated to being available all year, and we will therefore remain open throughout the festive season to process samples.

On behalf of the whole team at WearCheck, we wish you a relaxed, happy festive season and a prosperous 2013.

## WearCheck acquires ABB division, expands services

WearCheck recently acquired the Condition Monitoring division of ABB, making WearCheck the only company in Africa – and one of only a handful globally – that can provide a highly sophisticated, complete condition monitoring service to all industry and mining.

The acquisition of the ABB division fits into WearCheck's strategy to offer a complete industrial condition monitoring solution – which also includes the analysis of heat transfer, turbine and transformer oils.

The former ABB division was responsible for most of the condition monitoring carried out by ABB in the fields of vibration analysis, infrared, laser alignment, shaft balancing as well as oil analysis, which WearCheck had been doing on behalf of ABB for a number of years. This business unit has been incorporated into WearCheck's recently-formed Reliability Solutions division, adding significantly to their capability in this field, and transforming WearCheck into a 'one-stop shop' for condition monitoring.

Neil Robinson, WearCheck's managing director, is quick to assure all ABB condition monitoring customers that the transition to WearCheck will be a seamless one.

'We are committed to honouring all existing ABB contracts, and aim to exceed our new customers' expectations. In addition, the ABB customers will now have access to WearCheck's vast range of alternative

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*WearCheck's reliability solutions manager, Philip Schutte, has integrated the highly-skilled ABB team into WearCheck's reliability solutions division, which has boosted the range of thermography and vibration maintenance solutions on offer*

# PRODUCT PICK: WIND TURBINE TEST KIT

Wind power is the world's largest growing energy source thanks to advancing wind turbine technology. Wind turbines have the potential to generate enough power to meet the growing need for electricity, reduce consumption of water and reducing emission of pollutants such as carbon dioxide.

Wind turbine gearbox warranties generally only last for two years, therefore maintenance programmes are vital to ensure the turbine operates for the recommended 20 years.

WearCheck has launched a brand new Wind Turbine oil analysis kit, which includes the following profile tests:

	Test	WWTS	WWTA
1	Viscosity @ 100°C (ASTM D7279)	✓	✓
2	Viscosity @ 40°C (ASTM D7279)	✓	✓
3	Viscosity Index (VI) (ASTM D2270)	✓	✓
4	Karl Fisher Moisture (ASTM D6304)	✓	✓
5	Total Acid Number (TAN) (ASTM D974)	✓	✓
6	PQ (Particle quantifier) Index (OEM supplied method)	✓	✓
7	Oil cleanliness (ISO 4409)	✓	✓
8	ICP spectroscopy (wear, contaminants & additive concentrations) (ASTM D5185)	✓	✓
9	Fourier Transform Infrared (FTIR) oxidation (ASTM D7414)	✓	✓
10	Fourier Transform Infrared (FTIR) nitration (ASTM D7624)	✓	✓
11	Microscopic Particle Examination (MPE) (In-house method)	✓	✓
12	Remaining Useful Life (RULER) (Advanced oil analysis kit) (ASTM D6971)		✓
13	Foaming characteristics (Advanced oil analysis kit) (ASTM D892)		✓



Product code:  
WWTS (standard kit) | WWTA (advanced kit)

## WEARCHECK AT WINDABA



At Windaba 2012 – South Africa's premier wind energy event for the international wind energy industry, which took place in Cape Town in October – WearCheck launched its brand new wind turbine oil analysis kit, and hosted an exhibition.



WearCheck senior diagnostician Steven Lara-Lee Lumley (left) launched the new wind turbine oil analysis kit at Windaba 2012 in Cape Town recently. She is pictured here at the WearCheck stand with WearCheck's training officer Michelle van Dyk

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predictive maintenance products and services.

'Our customer services team is on standby to handle any queries, and we look forward to welcoming all new customers to WearCheck.'

Robinson is optimistic about the integration of the new division into the WearCheck business model, which is characterised by advanced analytical technology, custom-designed systems and processes, coupled with a strong service ethic and decades of experience. 'We welcome all the new staff members, and hope they will enjoy long and successful careers with WearCheck. Most of the new staff will stay where they

are currently based and some may join our Isando and Middelburg offices.'

Gavin Howard, Minerals and Mining Services Manager of ABB, thanked their existing condition monitoring clients for their support over the years.

'We will be grateful if our condition monitoring customers will afford WearCheck the same loyalty and support they gave to ABB. We are confident that the new enterprise will service the industry well,' says Howard.

WearCheck Africa is currently one of the largest oil analysis companies in the world,

operating seven laboratories, employing 161 people, and with a presence in eight countries (South Africa, Zambia, India, Dubai, Madagascar, Mauritius, Zimbabwe and Namibia).

Future expansion plans include laboratories in several key African countries in early 2013 – with the aim to support our customers as they too build their businesses in Africa.

WearCheck's oil and speciality laboratories serve a cross-section of industry sectors, including mining, earthmoving, aviation, marine, transport and electrical organisations and major industrial plants such as paper mills and refineries.

# WEARCHECK'S NEW RELIABILITY SOLUTIONS (RS) DIVISION

WearCheck's new RS division, headed up by Reliability Solutions manager Philip Schutte, is staffed by 26 full-time employees, 15 of whom were integrated into WearCheck after the acquisition of ABB's RS division, including assistance from a further seven contract personnel.

This is how the RS team is structured, and where they are located.

In Johannesburg, handling RS customer services and reporting directly to Philip is Christene Fourie. The rest of the team is responsible for supplying on-site RS services in locations around the country. The teams are organised as follows:

## GAUTENG PROVINCE

- In Springs, Edward Pieterse manages his team of personnel, who are: Gustav Lourens, Frank Nkhuna, Gideon Louw, Riaan de Beer and Frits Wolmerans.

## New laboratory on track

WearCheck's brand new, state-of-the-art laboratory in Isando – adjacent to the WSL (WearCheck Speciality Laboratory) – got off to a successful start when it began processing its first samples in September.

The new laboratory is fitted out with more than 15 different types of condition monitoring instruments, and multiple versions of high workload instruments.



WearCheck's brand new state-of-the-art laboratory is equipped with high-tech instrumentation and highly experienced staff – a combination which renders a highly reliable, world-class condition monitoring service. Pictured in the new lab are WearCheck MD Neil Robinson and laboratory supervisor Reshma Soojan

- In Rustenburg, Eddie Pieterse Jnr runs the show.
- The sampling service is provided by Marcelle Symons, who travels extensively to take samples on-site.
- The Vaal triangle is serviced by Mathys Estherhuizen.

## MPUMALANGA PROVINCE

- The Camden office in Ermelo is managed by Jan Smit, who is assisted by contractor Johan Opperman.
- The Komati office in Witbank is managed by Roelf Reyneke, with assistance from contractors Philip Wojciechowski, and Alastair Macgillicuddy.
- In Middelburg, RS services are provided by Paul Moodley.

## NORTHERN PROVINCE

- The Matimba office, Dennis Swanepoel, manages his team consisting of Kobus Venter, Surette Roets and Mokale Mosima.

## KWAZULU-NATAL

- The Hillside office in Richards Bay is managed by Marius Grobler, with help from Hein Coetzer and Louis Peacock.
- The rest of the province is serviced by Riaan Geel

## LIMPOPO PROVINCE

- In Potgietersrus, Juan Pieterse is assisted by contractors Amos Aphane and Jovan Combrink.

## NORTH-WEST PROVINCE

- The Lethabo office is serviced by Mathys Estherhuizen.

Watch this space for more in-depth information on this highly talented crew in our next issue of *Monitor*.

## Electra Mining a success



WearCheck's stand at the recent Electra Mining expo was visited by many guests. It was a great opportunity for the WearCheck team to catch up with familiar faces, and also to meet new customers.



WearCheck's stand at the 2012 Electra Mining expo was a popular one

# MAKING HEADWAY

## Bringing condition monitoring to Kuruman

Francois van Eeden has joined WearCheck as the Northern Cape senior sales & technical support consultant, operating out of the new facility in Kuruman, and servicing mainly the local mining industry, and new customers.

Bringing with him extensive experience in the condition monitoring arena, Francois has managed condition monitoring on several major engineering projects. He began his career with Eskom, where he was involved with condition monitoring. Over the next few years he worked his way up through the ranks via Rotek, Predict Engineering Services and finally at ABB, where he spent 13 years, the last six of which he was the site manager at Kendal power station in Witbank.

Francois holds a national diploma in mechanical engineering and has done courses in vibration analysis, thermography and oil analysis. He is well-placed to assist industries in the Northern Cape to get the best possible value from a condition monitoring programme.



## Keeping samples flowing smoothly

Michelle Alexandra is the new despatch clerk for WearCheck's Speciality Laboratory (WSL) in Gauteng. She is responsible for managing the progression of the samples as they arrive from the customer and pass through the analysis process.

Prior to joining WearCheck in Gauteng, Michelle worked in several other industries, namely banking and furniture, including doing some temporary work in WearCheck's Pinetown branch, where she first became acquainted with the company.



## Overseeing WearCheck's foreign operations

Marvin Narainsamy joined WearCheck in July as the foreign operations accountant. Among his current responsibilities are the overseeing and managing of the finances of Set Point Zambia, which includes WearCheck's Kitwe and Lumwana operations; as well as managing the finances for WearCheck's offshore laboratories in India and Dubai. When WearCheck's laboratories in Ghana and Mozambique open in early 2013, Marvin will be in charge of the finances for these operations, too.

Before joining WearCheck, Marvin handled the foreign accounts for a company which manufactured mining drills, with operations in Swaziland and the UK.

Marvin, who hails from Estcourt, completed his B.Com Accounting degree at UKZN in Durban and obtained his Honours degree through Unisa. He completed his articles at Moore Stephens and is currently preparing for his board exam.

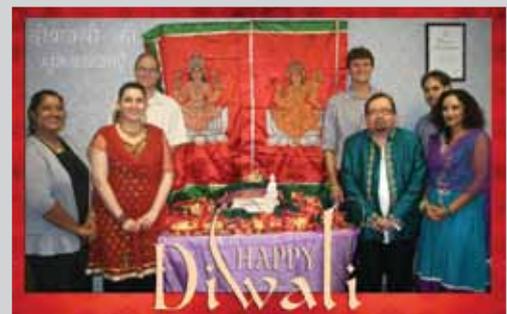


## LONG SERVICE MILESTONE



*Kay Pillay, credit supervisor in the finance department, has been with WearCheck for 15 years. Thank you for your long term loyalty, Kay!*

## SWEETNESS AND LIGHT



*Staff at the WearCheck Pinetown office celebrated Diwali, the traditional Hindu Festival of Lights, recently. Getting into the festival spirit are (front, from left), Michelle Padayachee, Steven Lumley, John Evans and Pinky Singh, while behind them are Neil Robinson, Scott Sowman, and Paul Swan*

# WEARCHECK BRINGS SERVICES TO NORTHERN CAPE

Northern Cape-based mines and industries now have the option of reducing machinery running costs and avoiding catastrophic plant failure, with the recent opening of a new branch in Kuruman by WearCheck.

All the standard WearCheck services are on offer, including automotive, industrial, coolant, fuel and transformer oil analysis. Other options include vibration analysis, thermography and laser alignment services. An on-site sampling service is available.

Running the new branch is WearCheck's local expert – Northern Cape sales & technical support consultant Francois van Eeden – who brings with him a wealth of experience in the condition monitoring arena.

WearCheck Northern Cape is situated in Marietta Crest right next door to sister company Set Point Laboratories – an analytical

chemistry laboratory that assays samples for the exploration and mining industry.

WearCheck managing director Neil Robinson foresees a good relationship between the new branch and the local mining fraternity. 'We have identified a demand for reliable predictive maintenance services in the Northern Cape region, and Kuruman is strategically well-positioned as a regional base for WearCheck.

'We are pleased to welcome Kuruman to the WearCheck family, which already incorporates seven laboratories, a regional South African network and several international operations.'

New sample bottles are available from WearCheck's office in Kuruman, and samples can be dropped off here for analysis.

To contact WearCheck Northern Cape, please call (053) 712-1937 or Francois van Eeden on 082 802-3072.

## Mentees create sustainable futures

Each year, The Set Point Group (WearCheck's holding company) runs an internal mentorship programme during which 10 employees (mentees) are selected from a cross-section of Set Point divisions, and paired up with senior employees (mentors) in order to gain insight into the company and its core values, as well developing themselves through the year-long goal-driven programme. This year, the Set Point mentees were tasked with conceptualising, funding and implementing a self-sustaining community upliftment project.

With this goal in mind, the mentees raised over R400 000 through several events, such as a gala dinner, a golf day, an auction and a comedy evening.

These funds were then allocated to two orphanages – St Vincent's in Mariannhill, KZN and Oliver's House in Johannesburg.

WearCheck has already been a benefactor to the children of St Vincent's Orphanage for several years. Founded in 1899, St Vincent's is home to 120 orphans, most of whom are affected by HIV/Aids.

From WearCheck, those selected to be Set Point mentees this year were Francis Berner (marketing), Steven Lumley (senior diagnostician) and Reshma Soojan (Johannesburg lab). Thanks to the efforts

of them and the other mentees, St Vincent's received seven food tunnels – which can produce enough food for 200 children on an ongoing basis – that were recently installed and planted.

In addition, a computer training centre along with a permanently-employed, qualified trainer was set up at St Vincent's to equip teenagers with essential computer skills, thereby making them more employable and boosting their chances of finding a job once they leave the orphanage.

A brand new library and a media centre completed the donation for St Vincent's from the 2012 Set Point mentee programme.



120 children at St Vincent's orphanage in KZN are benefiting from seven food tunnels which were donated as part of the Set Point mentee programme for 2012

# LUBE TIP:

There are different degrees of severity under which boundary lubrication conditions prevail. Some are only moderate, while others are extreme. Boundary conditions are met by a variety of special lubricants with properties corresponding to the severity of the particular application. These properties are derived from various additives contained in the oil — some singly and some in combination with other additives. Their effect is to increase the load-carrying ability of the oil. Where loads are only mildly severe, an additive of the class known as oiliness agents or film-strength

additives is applicable. Worm-gear and pneumatic-tool lubricants are often fortified with these types of agents. Where loads are moderately severe, anti-wear agents or mild EP additives are used. These additives are particularly desirable in hydraulic oils and engine oils. For more heavily loaded parts, a more potent class of additives is required. These are called extreme pressure (EP) agents.

*(From the book "Practical Lubrication for Industrial Facilities")*

## Thank you for your constructive feedback

'We are grateful to all companies that returned their completed customer services questionnaires. Feedback forms a crucial aspect in the successful development of our business, allowing us to ensure that our products, services and support meet our customers' requirements,' says WearCheck sales developer Kay Meyrick.

'A strong focus on customer satisfaction through active and ongoing dialogue is essential to maintain WearCheck's status as the only condition monitoring company on the African continent to earn ISO 9001, ISO 14001 certification and ISO 17025 accreditation.'

We appreciate these constructive words from some of the survey respondents:

- WearCheck is a well-entrenched part of our maintenance function

- WearCheck assists me in any possible way. I can't thank them enough for the assistance and support
- WearCheck gives me peace of mind that any vehicle owner should strive for
- I would recommend WearCheck – fast, professional service! Thanks a lot
- A company striving for, and achieving, excellence
- Am satisfied with the services and delivery, not to mention the friendly and cheerful phone calls from your staff when I have a sample that is critical, just wished more SA companies had the same enthusiasm for their work.

Each year, as a mark of WearCheck's gratitude for the input from customers, one survey respondent's name is selected via lucky draw to win a grand prize. This year the winner was Thomas Schubert, technical adviser for Engen.



Customer survey 2012 lucky draw winner Thomas Schubert of Engen (right), collects his prize – an Apple Ipad valued at R5000 - from Francis Berner of WearCheck marketing

# WEARCHECK STEELPOORT GOING STRONG

WearCheck Steelpoort celebrated its first anniversary recently by signing up new clients and offering new vibration and thermography services to existing customers – an important growth milestone for the company.

Around 15 different mines in the Steelpoort, Polokwane and Messina areas, including chrome, diamond, platinum and gold mines, are currently registered on WearCheck Steelpoort's predictive maintenance programmes.

As technology evolves, so do the maintenance needs of many of these customers, which require an innovative approach to condition monitoring.

Additional new services are those such as on-line monitoring diagnostics, alignment, balancing, tribology, and gear profiling as well as other specialised techniques, namely ODS (operational deflection shape) and resonance tests using transient and impact analysis – all part of the new Reliability Services package now offered by WearCheck.

Enhancing the availability and reliability of plant is one of the key objectives of WearCheck's managed proactive maintenance options, which aim to provide as much reliable and representative data as possible, to aid customers with decisions on machinery upkeep and repairs.



*The WearCheck Steelpoort team: from left to right: technical support consultant Quintin Ras with sample technicians James Tshabalala, Lopi Molanguane and Thomas Mdhala. The team travels underground regularly to take on-site oil samples from mining machinery as part of the preventive maintenance oil analysis programme*

In Steelpoort, under the guidance of local technical support consultant Quintin Ras, the WearCheck team of sampling technicians travels on site to the mines to take oil samples from mining machinery – which is frequently underground - as part of their condition monitoring service to the mining industry.

## WearCheck team keeps the wheels turning



*For the second year running, a team of dedicated WearCheck cyclists made up of colleagues, family members and friends from around the country, completed the epic 94.7 cycle race in Johannesburg in November. Team members from WearCheck included Neil Robinson, Paul Swan and Kay Meyrick, this year riding in the colours of sister company, Pneumax.*

# 2013 TRAINING COURSES

VENUE	NetCheck Software package	Oil Analysis 1 Understanding oil and it's analysis	Oil Analysis 2 Report interpretation	Oil Analysis 3 Management
Course length	One full day	Two full days	One full day	Half day
<b>Gauteng</b> (Kempton Park)	18- – 22 February	18- – 22 February	18- – 22 February	18- – 22 February
<b>Cape Town</b>	12 – 15 March	12 – 15 March	12 – 15 March	12 – 15 March
<b>Middelburg</b>	11 – 14 June	11 – 14 June	11 – 14 June	11 – 14 June
<b>Gauteng</b> (Kempton Park)	15 – 19 July	15 – 19 July	15 – 19 July	15 – 19 July
<b>KwaZulu-Natal</b> (Pinetown)	19 – 23 August	19 – 23 August	19 – 23 August	19 – 23 August
<b>North West Province</b> (Rustenburg)	17 – 20 September	17 – 20 September	17 – 20 September	17 – 20 September
<b>Gauteng</b> (Kempton Park)	14 – 18 October	14 – 18 October	14 – 18 October	14 – 18 October
<b>Namibia</b>	19 – 23 August	19 – 23 August	19 – 23 August	19 – 23 August

## COSTS

Oil Analysis One covers two full days and costs R4 392. Oil Analysis Two and the NetCheck course cover one full day each and each costs R2 196. Oil Analysis Three is a half-day course and costs R936. All courses include course material, refreshments, giveaways and certificates. Prices exclude VAT and are subject to change.

## BOOKINGS

For more details on course content, view Training at [www.wearcheck.co.za](http://www.wearcheck.co.za). For bookings phone Michelle van Dyk on (011) 392-6322 or email [training@wearcheck.co.za](mailto: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 costing R525.00 plus VAT per delegate
  - WearCheck Customised – oil analysis for workshop technicians, a full day course costing R1278.00 plus VAT per delegate.
- 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	Rustenburg
Cape Town	Steelpoort
Kimberley	Botswana
Makopane	Ghana
Middelburg	Namibia
Nelspruit	Tanzania (Mwanza)
Port Elizabeth	Zambia (Kitwe)

## 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 [melanie@wearcheck.co.za](mailto:melanie@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 [melanie@wearcheck.co.za](mailto:melanie@wearcheck.co.za). Before you do this, why not check out the 54 titles already available on the website: [www.wearcheck.co.za](http://www.wearcheck.co.za)

## JOINING TOGETHER TO SUPPORT THE PLANET ♻️

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