CAPITAL EQUIDADES ENTRY ENTRY

CAT 320D2 GC BEST-IN-CLASS AND LOWEST FUEL CONSUMPTION IN MARKET

DEMAG: CEMENTING A STRONG REPUTATION IN ZIMBABWE PAGE 18 HIDROMEK: evolution of a grader brand METRIC AUTOMOTIVE ENGINEERING: preventing catastrophic failures BOYCO ELECTRONICS: smart and safe mining machines

200

YOUR ONE STOP Quick • Reliable • Convenient TRUCK TYRE FITMENT CENTRE



Best Prices Compare our prices, great SAVINGS guaranteed



Big Range We stock a complete range of tyres for Light Truck, Heavy Truck & Bus



Multi-Brands

A wide variety of trusted brands for every size and application



Services

Precision truck tyre services by expert Technicians with the latest Equipment

ONYX



DUNLOP

Service Excellence We deliver excellent service 1st time, everytime

OCKIST OF ALL SIZES IN BIAS & RADIAL TYRES

GOOD*YEAR*

Ontinental 🟵





012-3570650 VISAGIE STREET, CNR. KGOSI MAMPURU (POTGIETER) STREET, PRETORIA B-BBEE Level 2 Contributor



The new Cat 320D2GC builds on the fine tradition of Cat 320 series hydraulic excavators sold and supported in the Southern African market by Barloworld Equipment over more than 20 years.

COVER STORY

2 NEW CAT® 320D2GC: SAME PERFORMANCE **AT LOWER COST**

MATERIALS HANDLING

- 6 Babcock goes for green with Sennebogen
- 8 Leuze 10 series engineered for high tolerances
- 9 Wacker Neuson plans to open new factory in China
- **10** Evolution of well-known grader brand

WHEEL LOADERS

- 12 New application-specific buckets boost wheel loader productivity
- 14 DRESSTA keeps vital sandpits in operation

EQUIPMENT REBUILDS

15 Metric Automotive Engineering prevents catastrophic failures

LIFTING

- **16** Liebherr Group's turnover reaches €9 237M
- **18** Cementing a strong reputation in Zimbabwe **20** SA French gives African tower crane users
 - a lift

TRANSPORT & LOGISTICS

- 24 APC launches one new automated storage system annually
- **26** Retail motor trade in SA holding on despite challenges
- **28** Bulk fuel filtration improves engine performance

MINING

- 30 Screen specialist shares risks and gains
- **32** Smart and safe mining machines

AGRICULTURE

- 34 'Seasonal services' from Ritlee
- 35 Specialist tanks ideal for farmers

Capital Equipment News is published monthly by Crown Publications cc

Temporary Editor: Wilhelm du Plessis capnews@crown.co.za

Advertising manager: Claudia Bertschy claudiab@crown.co.za

Layout and design: Anoonashe Shumba

Circulation:

Total circulation Q1 2016: 3 740



Karen Smith Publisher: Karen Grant

Deputy Publisher: Wilhelm du Plessis PO Box 140

Bedfordview 2008 Tel: (011) 622-4770 Fax: (011) 615-6108 www.crown.co.za

Printed by Tandym Cape

The views expressed in this publication are not necessarily those of the editor or the publisher.







NEW CAT® 320D2GC: SAME PERFORMANCE AT LOWER COST

B arloworld Equipment sold more Cat 320 series 20 tonne hydraulic excavators in 2015 than any other year since the first 320 arrived in Southern Africa in 1993.

This says a lot about how customers feel about the legendary Cat 320 machines, even in a poor economic climate. So it is not surprising that much excitement surrounds the arrival of the new Cat 320D2GC hydraulic excavator in South Africa in July 2016.

Barloworld Equipment, the exclusive Southern African dealer for Cat earthmoving equipment, received several forward orders for this new model, which promises the market even lower operating costs and fuel consumption, without compromising hydraulic performance.

Desigen Naicker, Barloworld Equipment Product Manager: GCl for sub-Saharan Africa, says Caterpillar's 20 tonne excavators are high volume, popular machines, particularly in the plant hire sector where machines need to be hardy, reliable and adaptable to multiple applications.

"The 320D2GC certainly has a place in the Southern African market as it offers customers competitive pricing and lower operating and maintenance costs without compromising the performance for which the current 320D2L model is known. The engine, hydraulic system and centralised service station provide a simple, cost effective solution in a robust machine that will meet the needs of most contractors."

New engine technology

Capitalising on Caterpillar's continuous power systems R&D, the 320D2GC is powered by a Cat C4.4 engine featuring new fuel injection technology that offers up to 20% lower fuel consumption than the 320D2L. The new machine is also 1,5 tonnes lighter than the 320D2GC and has an 85 kW engine rating compared to the 320D2L's 106 kW while offering the same hydraulic capability.

An optimised oil pan design helps to reduce

overall operating costs by an estimated six percent over 2 000 hours compared to the 320D2L. Repair costs for the new C4.4 engine are also up to 15% lower. A highly efficient fuel-filtration system ensures cleaner fuel injection for trouble-free performance and long engine life even in very harsh conditions.

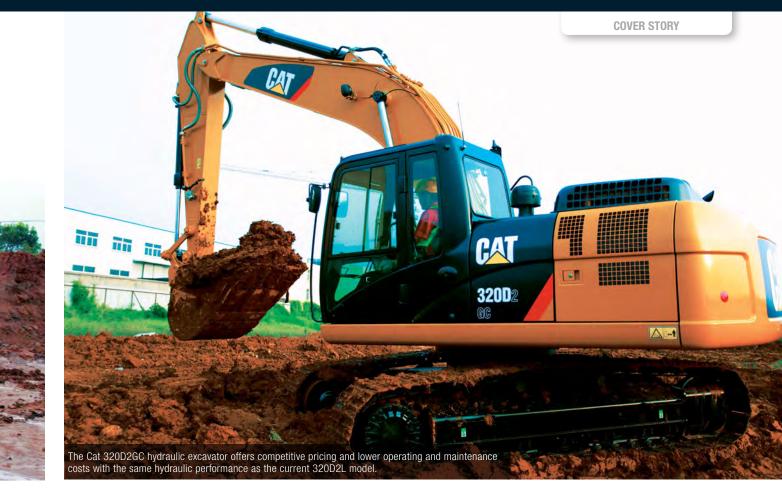
"What makes the new model attractive is that hydraulic performance, including cycle times and break out force for both the stick and bucket, remains the same from the 320D2L to the 320D2GC despite the lower owning and operating costs," says Naicker. In addition to digging and lifting, the boom and stick configuration are suited to various hydraulically powered Cat work tools including hydraulic hammers, making it a true utility machine.

Naicker says that the Cat 320D2GC is expected to add good value for the plant hire sector as well as civil and building construction companies, farmers and light material handling applications.

The operator station will not disappoint, providing low noise levels and comfort with full colour LCD, adjustable seat and large window for all round visibility and safety.

Support

Ease of servicing is a must for customers wanting to keep their machines up and running. As in other Cat 320 models, a



ground level service door on the right side provides access to routine service points including pumps and filters. The rear service door allows easy access to the radiator, oil cooler, air-to-air after cooler and AC condenser.

A reserve tank and drain valve attached to the radiator simplify service and a central grease block on the boom allows easy lubrication of hard-to-reach locations on the front linkage. Fluid samples from the engine, hydraulic and cooling systems are easily obtained from Scheduled Oil Sampling (SOS) ports. The samples can be analysed through Barloworld Equipment to check on machine health and facilitate before-failure diagnosis and repairs.

Barloworld Equipment's extensive dealership network across Southern Africa offers customers a dedicated product and application team to assist customers with machine application advice, a range of Cat work tools to suit the application, and CETA certified operator training to ensure that the machine is used to optimum potential. Around the clock service support and high parts availability are designed to keep Cat machines productive with minimum downtime.

Satellite tracking

Naicker points out that the integration of Cat Product Link capability into the 320D2GC makes the machine easy to manage remotely via satellite- or cellular-based tracking. Offered as a service by Barloworld Equipment, Product Link provides owners with quick and easy information on the location, hours worked, fuel usage, idle time and condition of the machine, no matter where it is.

The Product Link module comes standard on the 320D2GC, giving the customer access to vital machine information based on the level of the EM Solutions package selected from Barloworld Equipment. Cat EM Solutions provides a framework that can be implemented at five levels (Access; Inform; Advise; Support; Manage), enabling Barloworld to standardise support for customers through Product Link depending on their requirements.

Customers are able to obtain detailed machine history reports that improve asset management and resale value.

Naicker is enthusiastic about the many opportunities to put the Cat 320D2GC hydraulic excavator to the test across Barloworld Equipment's Southern African footprint and looks forward to providing feedback on the performance and savings achieved by the first units on the ground.

The legend

The first ever Cat 320 hydraulic excavator was sold in February 1992 and Barloworld

Equipment introduced the 320 to South Africa in 1993. These machines have become widely known and respected by customers across the sub-continent as easy to operate, tough and versatile workhorses with long service lives.

The 320B replaced the 320 in 1997, with the 320C, 320D and 320D2 following in 2002, 2007 and 2014 respectively. Caterpillar dealers around the world have sold more than 215 500 320s since the first unit came off the production line.

Barloworld Equipment has sold close to 2 000 Cat 320 series machines in Southern Africa. Naicker says 205 units were sold in 2015, the best total annual sales in the 22 years since the first Cat 320 machines arrived in southern Africa.

"This was achieved in very poor economic conditions throughout our markets, showing how the legendary reputation of the Cat 320 series has not only endured but intensified over the years. Each model has provided new, improved features to increase productivity and reduce owning and operating costs for customers. With the support of Barloworld Equipment, we fully expect the Cat 320D2GC to continue the tradition."

For more information on the Cat 320D2GC hydraulic excavator, please email marketing2@barloworld-equipment.com

5 REASONS WHY *CAPITAL EQUIPMENT NEWS* IS RIGHT FOR YOUR BRAND



PRINT EDITION

For the past 12 years the magazine has reached a carefully managed target audience every month: Audit Bureau of Circulation figure of 3 740 (Q1 2016).

INDUSTRY SPECIFIC

The magazine covers the latest trends in capital equipment for mining, logistics, agriculture, construction and transport.



WEBSITE

www.capitalequipmentnewsmagazine.com is updated regularly and includes news relevant to those capital equipment sectors covered by the brand.



ONLINE EDITION

It is powered by Flippingbook Publisher, a software application that allows the user to turn pages, zoom in, print and email articles.

All advertisers in the print edition of the magazine receive a hyperlink In the online version to their websites.



e-NEWSLETTER

A growing electronic mailing list (in excess of 2 100) receives the bi-weekly e-newletter. It informs the audience and directs readers to the print edition and website.

Online monthly statistics

- Sessions: 6 282
- Unique visitors: 5 050
- Pageviews: 13 245
- CTR (Click Through Rate) on average: 5 8%

CAPITAL EQUIPMENTE For informated decision-making

Your 360° business-to-business publishing solution

882:66:63 872:9873:72

74:663:62

9:982:73 8

872:9873:72

IMAGINE WHAT'S NEXT.

Register today to get the ultimate view of where construction is going.

Imagine less downtime. Imagine being more efficient. Imagine seeing what's next from over **2,500 exhibitors** spread out over **2,500,000 square feet.**

Imagination becomes reality in Las Vegas on March 7–11, 2017 and if you make your reservation right now, you can ensure your spot at this huge event... and save!

Get the special \$149 rate (and save up to \$100) by registering early at www.conexpoconagg.com.



IF IT'S NEW, IT'S HERE.



BABCOCK GOES FOR GREEN with Sennebogen





Babcock, the exclusive Southern African distributor of leading construction brands including Volvo, Terex Trucks, Tadano, SDLG and Winget, concluded a deal with Sennebogen at this year's bauma trade fair that will see the German construction equipment company's range of duty cycle, crawler, dragline and port cranes, as well as material handlers for all operations, included in the Babcock offering.

The agreement with Sennebogen reflects Babcock's ongoing efforts to deliver top quality construction equipment to new and existing customers.

The German manufactured machinery – suitable for forestry, construction, scrap handling, ports and piling work – is largely custom-built to individual specifications and combines superior quality with straightforward, yet highly effective, technology. Identifiable by its vivid green branding, Sennebogen's 'Go for Green' philosophy embraces quality, sustainability, innovation, value and tailored solutions.

Complement various ranges

"Sennebogen has a unique product line which complements several of our other product ranges. Most of the machines are built to customer specifications which means that customers are able to choose various configurations such as a diesel engine or an electric motor, wheels or tracks – all of which make the Sennebogen range of products highly versatile," says Craig Sanday, National Manager for Sennebogen (it now forms part of Babcock's Equipment business unit) of the rationale behind the partnership.

"A further advantage is the simplicity of the technology coupled with robust designs, allowing customers to continue with operations even in most situations of electronic failure," continues Sanday. "This translates to minimal operator downtime and when situations such as these do arise, Babcock will be on hand with our 'trusted to deliver' after sales support, technical assistance and spare parts."

The Sennebogen material handlers are designed for high performance capacity and maximum reliability and safety. The machines are available with a selection of robust modular undercarriage solutions for customised applications. The applications include timber, port and scrap handling, steel mills, recycling, waste and demolition, available with various quick-changing grabs and attachments. Sennebogen's heavy duty cranes, available locally through Babcock, include lattice boom crawler cranes; duty cycle cranes for dragline applications, available with an optional environmentally friendly electric drive; and powerful port cranes with The Sennebogen factory is located in Straubing, Germany. This family-owned company is a renowned supplier of high quality key components with over 120 sales partners and 300 service support centres worldwide. The 'Go for Green' company has been in operation since 1952 and has seen consistent growth and success based on its philosophy that control should remain in the hands of the operator with a focus on simplicity, rather relying on robust technology to drive their machinery and avoiding over-engineering.

Babcock has a strong track record in sales of reliable construction equipment and trusted after-sales support, working in collaboration with customers to deliver construction and material handling products that meet specific requirements. It aligns itself with Sennebogen's customer-focused approach that places value on long term relationships.

a lifting capacity of up to 125 tonnes and high stability for heavy lifting works.

The environment

Sanday says that the environmentally friendly innovations and technologies employed by Sennebogen are a further advantage, as they promote the reliability of the machines while at the same time contributing to reducing the demand for energy. Sennebogen's E-Series technology translates into a 25% saving on fuel. Electro hydraulic drives have the potential to reduce costs by 50% and their green hybrid cylinders can achieve up to 30% on energy savings.

Totally Committed Taking the load off your shoulders!





Kawasaki More than a machine, a

complete solution

Kawasaki is a leading supplier of a full range of high quality wheel loaders in various configurations. In fact, Kawasaki is one of the largest and oldest manufacturers of wheel loaders in the world.

In seeking solutions to global environmental issues, Kawasaki continuously develops and provides new technologies that contribute to environmental protection, energy-saving and resource conservation. Kawasaki thus meets all international requirements in terms of safety, technology and mining standards.

Together, ELB and Kawasaki are totally committed to making your investment in a Kawasaki loader a sound business decision that will pay dividends for years to come.

H/OFFICE:

14 Atlas Road, Anderbolt, Boksburg • Tel: (011) 306-0700 • Fax: (011) 918-7208 e-mail: Elb@elbquip.co.za • Website: www.elbequipment.com

BRANCHES & DEALERS - SOUTH AFRICA: BRITS: (012) 250-1565 • CAPE TOWN: (021) 933-2383 DURBAN: (031) 464-6522 • EAST LONDON: (043) 740-4530 • GEORGE: (044) 878-0874 KIMBERLEY & KATHU : (053) 841-0040 • MIDDELBURG: (013) 246-2312 • POLOKWANE: (082) 334-1564

SUBSIDIARY: ELB EAST AFRICA: NAIROBI, KENYA: (00254) (0) 20 807-0728

DEALERS - SOUTHERN AFRICA: BOTSWANA: (00267) 390-9972 • LESOTHO: (00266) 2831-3926 MOZAMBIQUE: (00258) 219-00469 • NAMIBIA: (00264) 61-234-052 • SWAZILAND: (00268) 518-5348 ZAMBIA: (00260) 212-210-642 • ZIMBABWE: (00263) (4) 448-990-3 Distribution and Product Support by:



LEUZE 10 SERIES engineered for high tolerances



Engineered with a high tolerance to different materials, the Leuze 10 Series optical sensors are able to detect objects and measure distances with an incredible accuracy.



The small size of this sensor does not impact on the overall performance of the Leuze 10 Series.

ngineered with a high tolerance to different materials, Leuze 10 Series optical sensors are able to detect objects and measure distances with accuracy of +/-30 mm. The high performance sensors have an operating range of up to 8 m.

The high tolerance of the Leuze 10 Series sensors further extends to angle of incidence, colour, surface structure and brightness of reflective material. This means that the sensor is capable of detecting different materials, such as wood or matt as well as glossy metal, and this is possible even under varying environmental conditions. The Leuze 10 Series is also suitable for sensing applications where deep black materials are found or where objects are not ideally aligned or are moving rapidly.

Ease of use is facilitated through the highly visible status indicators on the devices as well as large control buttons. The LED display has been designed to facilitate step-by-step commissioning and diagnosis at the press of a button.

The compact housing, with integrated recesses for M4 screws or nuts, means installation is possible in applications where space restrictions exist. However, its small size does not impact on the overall performance of the Leuze 10 Series.

A comprehensive range of Leuze sensing solutions is available from official distributor, Countapulse Controls. The company, which is based in Johannesburg, is able to assess any sensing application and provide a fit-for-purpose solution that will meet the specific needs of an operation. The company also offers a 24/7 hotline to assist end users with technical challenges that may be experienced owing to lack of knowledge or experience.

PMSA CEMENTS ITS REPUTATION for innovation

PMSA, the leading manufacturer of brick, block and paving machines on the continent, celebrated its 40th anniversary at Totally Concrete 2016 in May with the launch of its new Ultravibe vibrating system.

"We have an array of options to suit all client needs, having been building on our technology, leadership and expertise in the concrete products sector over the past 40 years," PMSA MD Walter Ebeling says.

The manufacturer used Totally Concrete 2016 to showcase its latest developments, which form part of an overall innovation and technology drive. "Having all this technology and skills available to us in-house, it makes absolute sense that we drive the technology," Ebeling notes.

Ultravibe has been designed specifically to

run maintenance-free for up to three years. The new vibrators have the capacity to produce 170 kN of vibration force on PMSA's flagship RE1400 machine. This will allow for the production of extra-large concrete elements, from 300 mm to 500 mm in height.

As part of its automated brick, block and paving manufacturing equipment, PMSA also offers locally-developed automation and handling systems for large-scale brick and block plants to increase productivity and boost end quality.

Another example of PMSA's ongoing product development is its new Eco range of automated handling systems, also unveiled officially at Totally Concrete 2016. This latest technology gives customers the option of automated handling plants at a far more affordable price compared to that of top-ofthe-range systems. The new Eco range of



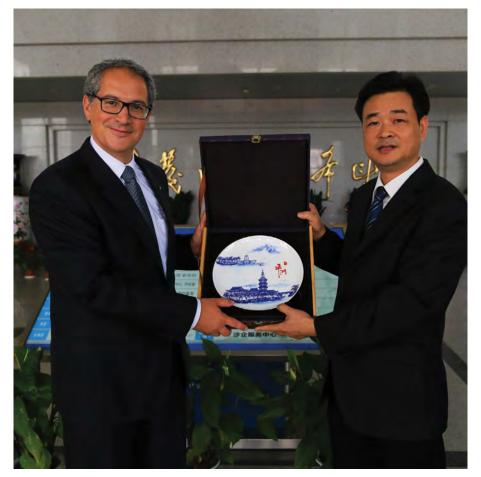
Totally Concrete 2016 showcased latest developments from PMSA.

handling systems includes forklift options as opposed to more conventional but higher-cost finger and transfer car systems.

"We are unique in the industry, being a specialist manufacturer able to cover the entire business spectrum, from establishing a business to boosting the bottom line through the application of appropriate technology," Ebeling concludes. CONSTRUCTION

WACKER NEUSON

plans to open new factory in China



Start of a partnership: from left: Cem Peksaglam (CEO Wacker Neuson SE) and Yongbiao Qian (Vice Mayor of Pinghu City).

W acker Neuson will further extend its production capabilities in Asia and strengthen its local presence in China with the construction of a new production plant in Pinghu, about 30 km from Shanghai. Cem Peksaglam, the chief executive officer of Wacker Neuson SE, recently signed the corresponding contracts.

"We decided on the Pinghu location in Zhejiang Province as it best fulfills our requirements, and the support of the local authorities has been outstanding," says Cem Peksaglam. "We are continuing our strategy of internationalisation and with this step into the largest construction machine market, we underline our commitment to our Chinese customers and trading partners."

The strategically favorable position, between the cities of Shanghai and Hangzhou, as well as a good infrastructure are key advantages of the new location. Manufacturing facilities, research and development, quality management, logistics, service and training will be located on approximately 135 000 m² of ground with approximately 30 000 m² of building space. Construction is planned to start towards the end 2016, with completion slated by the end of 2017. At first, compact excavators will be produced for the local market and further products will follow. It is planned that the first compact excavator should roll off the production line at the beginning of 2018.

The Wacker Neuson Group has sold construction equipment in China for over 20 vears. The product portfolio for the Chinese market was extended in 2015 to include compact equipment. An increasing need for improved infrastructure and the extension and modernisation of the road and rail network while trending towards more efficient and environmentally friendly compact construction equipment, offers attractive growth opportunities for the Wacker Neuson Group. A stronger presence in the country, including R&D and production will lay the groundwork for being part of future growth and improvements in the Asia-Pacific region. Initially the Chinese and later the Asian markets will be served with products tailored to local requirements. O

Together we can move the world.



HPE Africa has a proud reputation in supplying world-leading earthmoving equipment and attachments to various industries throughout SA. Backed up by excellent after-sales service, HPE Africa are specialists in the industry and are well represented nationwide.



Evolution of **Well-KNOWN GRADER BRAND**



O ne of Africa's well-known grader brands, Mitsubishi, has been acquired by new stakeholders. It has ambitious plans for the future. Under the new banner of Hidromek, these stalwart machines are set to become still more popular owing to ongoing improvements to make them more efficient and reliable than they already are.

While processes and procedures at the factory have remained largely unchanged, the new leadership, based in Europe, has brought about fresher, more modern thinking that is in touch with modern requirements. Without changing the successful design and construction of the machines, the factory is evolving and adding features that build on the original design, adding extra value for fleet owners.

On African soil, the machines have gained a strong following from users who require machines that can work reliably for extended periods, in rough terrain, with minimal support.

Tough for Africa

Peter Kaliszka of ELB Equipment, the longstanding distributor of Mitsubishi/Hidromek graders in Southern Africa, says Mitsubishi graders have made their mark in Africa for decades. "They were often used to prepare some of the most desolate and remote roads on the continent. Here they perform without hassles and with very little requirement for maintenance."

This has earned them a reputation for toughness and reliability that is unsurpassed in the industry and is a driving force behind ever rising sales amid fierce competition. Their popularity is due in part to the sheer simplicity of the machine: they lack fancy electronics and potentially troublesome gadgetry.

Instead, the Hidromek has been cleverly designed to be near indestructible, using the best Japanese materials and designs to develop a machine with the least possible chance of failure. Instead of searching for efficiency through smaller high-tech engines, the Mitsubishi/Hidromek is equipped with a bigger engine that is hardly taxed when grading at low revs.

"The end result of this is a grader that is more economical than small engine competitors in hard working environments. Similarly, the engine is not strained and as a result is more reliable with less chance of breakdowns. That is why in the 25 years since the first machines went into operation in Southern Africa, we have only ever replaced two engines (one as a result of a flooded river, the other as a result of misuse)," says Kaliszka.

Conquering Namibia

One of the toughest testing grounds on earth is in Namibia. Here the machines have excelled. The country has some of the toughest terrain on earth with conditions varying from hot sandy deserts to rugged mountains. Apart from this, it is also sparsely inhabited with vast distances between towns. This requires grader crews to head into the wilderness for weeks with enough diesel and supplies to reach places and grade roads in order to keep communities connected.

Erich Bartsch of Barex Equipment, ELB Equipment's dealer in Namibia, has sold many new Hidromek graders to Namibia's road construction and maintenance crews over the past three years. Based on his own personal experience in the 1990s as a mechanic for previous dealers, Windhoek Hire and Services, he maintains that the graders are rock solid and worthy of staking one's reputation on. Since taking over the dealership and forming his own business 10 years ago, he has sold many graders into the marketplace and is currently responsible for after-market support of the country's large fleet of Mitsubishi/Hidromek graders.

"Namibia boasts some of the best graded gravel roads in the world despite the rural nature of the country. It relies on our



Michael Nghulondo runs Cango Construction in Ongwediva.

"On African soil, the machines have gained a strong following from users who require machines that can work reliably for extended periods, in rough terrain, with minimal support."

machines to maintain the toughest parts of the country's roads and has done so for the past two decades when the newly-formed Government received a gift of 14 Mitsubishi graders from the Japanese government. Those machines have proved themselves and are still in operation across the country today," Bartsch says.

Contractors' favourite

He adds that contractors responsible for road construction and maintenance also rely on Mitsubishi/Hidromek because of their low running costs and continuous availability. Fuel savings also play a major role with contractors who operate mixed fleets. He maintains that fuel savings of the Mitsubishi/ Hidromek amount to approximately NAD2million over five years. "These are not my words; it is feedback from subcontractors who have given me the figures."

Contractors appreciate the simplicity of the machines as fewer things can go wrong and there is no need for out-of-town technicians in the event of a fault. This applies to all models: from the Hidromek MG 460 18-ton to the Hidromek MG 431 16-ton and Hidromek MG 330 14-ton machines. Fuel savings also help to keep the machines out in the field for longer where the size of the diesel bowser may decide how far the grader can venture into the bush to clear roads.

In remote areas such as those in the north of Namibia – surrounding towns like Oshakati – graders are essential for road building, but also for assistance with other infrastructural projects such as the delivery of water infrastructure and building schools and hospitals.

Trusted machines

Michael Nghulondo, who owns Cango Construction in Ongwediva, recently insisted on buying a Hidromek MG 460 grader when his business expanded into site preparation for construction sites, local road maintenance and construction projects.

"I know and have worked with Mitsubishi graders in the past. As a result, when the requirement for a grader was warranted, I insisted on purchasing a new Hidromek MG 460 to assist with the growing number of projects we are undertaking for rural communities. I trust Hidromek and know it will be a good investment in years to come.

"My operators have built up a high level of respect for the machine and its ability and power compared with other brand-name graders that I have hired until now. It is more efficient in terms of fuel. These graders are in line with my strategy of growing the business to be self-sustainable. Out here our reputation is everything.



Owner of Northern Auto Repairs, Braam Ellis, supports Nghulondo's views and adds that the northern region of Namibia is in the grip of a severe drought. Budgets have been cut, making efficiency a top priority for local contractors. "Payments can take some time to materialise out here, so as far as contractors are concerned, it pays to have machines that deliver the quickest return on investments.

More to come

With the overall responsibility for grader sales across the entire sub-region, Kaliszka says that Namibia is just one example of the many countries in Africa, including South Africa, where the Hidromek grader brand is a trusted partner for road construction companies.

"In future, fleet owners who have become loyal to the brand will have more choices as newer and more sophisticated machines get added to the line-up to fill niches in urban and specialist applications. So watch this space."

NEW APPLICATION-SPECIFIC BUCKETS

boost wheel loader productivity and profitability

he latest additions to Volvo Construction Equipment's range of wheel loader buckets combine clever design with unbeatable durability for long-lasting performance matched to the application and conditions on the jobsite.

Volvo Construction Equipment has introduced three new buckets specifically designed to fit Volvo L110-L350 wheel loaders – Volvo Sand bucket, Volvo Rehandling Flat Floor bucket, and Volvo Rehandling bucket, which will replace the current model.

Optimised for the application, Volvo Rehandling and Volvo Sand buckets enable wheel loaders to perform at maximum capacity, helping customers save time, money and effort. From a wide range of attachments, Volvo customers can choose the best match to meet – and exceed – jobsite requirements, ensuring a more profitable operation.

Shaped to perform

The intelligently-designed Volvo Rehandling, Volvo Rehandling Flat Floor and Volvo Sand buckets are easy to fill, thanks to the bucket shape, balanced floor back ratio and countersunk holes. These productivityenhancing features enable operators to do more at a faster rate, while improving fuel efficiency by up to 20%.

Optimised spill guards deflect material for greater linkage protection, while curved side plates provide excellent containment, securing the material for more efficient operation. To prevent different material grades from mixing, the buckets feature minimised pockets.

Profit in every bucket

Whether in a quarry or gravel pit, Volvo Rehandling bucket is the ideal partner to ensure a highly productive and fuelefficient rehandling operation. Owners can expect the highest levels of performance, plus reduced fuel costs thanks to the easyto-fill bucket, which cuts cycle times. With Volvo Rehandling bucket, operators can do the same tasks using less fuel, resulting in more loaded material for less money.

For handling, stockpiling and loading processed materials such as sand, gravel and aggregate, Volvo Rehandling Flat Floor bucket is the perfect fit. For sand or other soft terrain, the bucket maximises traction and break-out force, maintaining a clean work environment for good productivity and efficiency.



When operating in soft ground conditions where tyre traction is compromised, Volvo Sand bucket is the ideal choice. Designed for handling sand or aggregate in small fractions, the long bucket floor maximizes penetration for improved traction, while its flat design helps to maintain a clear and level work area.

Made by Volvo, for Volvo

Durably designed to withstand harsh conditions, Volvo Rehandling, Volvo Rehandling Flat Floor and Volvo Sand buckets are built on decades of engineering experience to ensure a long lifetime. As with all Volvo attachments, the latest additions have undergone extensive testing for the highest standards of productivity and durability across any application.

To ensure long-lasting buckets, high tensile

steel and wear-resistant parts are positioned in critical areas, minimising unscheduled downtime. No matter how hard they are pushed, Volvo buckets are built to last for ultimate machine uptime and profitability.

In addition to receiving the most productive and reliable buckets on the market, customers also receive outstanding support from Volvo's global dealer and service network. When a wear part needs replacement, availability is guaranteed. Volvo is committed to positive returns on its customers' investments.

Available with bolt-on edge as an option. Bolt-on edge adds 0,2 m³.

Capacity based on bucket without wear.



Construction Equipment



DOOSAN. The closer you look, the better we get.

DISA Equipment (Pty) Ltd T/A Doosan SA

 Johannesburg:
 Tel: +27 11 974 2095 | Fax: +27 11 974 2778 | 60c Electron Avenue, Isando, Kempton Park

 Durban:
 Tel: +27 31 700 1612 | Fax: +27 31 700 1646 | 4B Stockville, Mahogany Ridge, Pinetown

 Wolmaransstad:
 Tel: +27 18 596 3024 | Fax: +27 18 596 1015 | 72 Kruger Street, Wolmaransstad

 E-mail:
 info@doosan.co.za

 Mpumalanga - Tienie Ferreira / Ryno Smith 013 246 2678
 East London - Rowan Weyer 043 748 4077

 Port Elizabeth - Vaughn Coetzee 041 484 6240
 Cape Town - Neville Black 021 380 2600

 Bloemfontein - Mike Phillips 051 433 1249

www.doosan.co.za



DRESSTA KEEPS VITAL SANDPITS in operation

The construction sector is heavily reliant on sand and gravel – it always has been and always will be. The amount processed and consumed globally each year is over 8 billion tons, so the rate at which it is collected is vital to keep construction sites operational worldwide.

In Poland, sand and gravel pits are numerous and widespread, with 9,7 billion tons of material located in deposits across the country accounting for some 54,9% of natural resources. Such is its importance to the Polish economy, that sand and gravel extraction falls under the jurisdiction of the country's principal mining authorities.

Naturally then, sand and gravel extraction is a serious business for the companies involved and specifying the right equipment for use on their sites is very important.

One such company is PIASKARZ SA (Sandblaster SA), operational in the construction sector since 1988 and headed by CEO, Richard Kuciel. "The composition of our company includes five production plants located in the Mazowieckie Province – four sandpits in Warsaw and a mining plant at Osówka near Zuromin," says Kuciel. "Material is extracted primarily from river beds. The raw material is sucked from the bottom of the river by specialised dredgers – without causing environmental harm – before being transported to shore. Once here, we need the assistance of quality, reliable wheel loaders and crawler dozers."

DRESSTA fleet

To carry out a number of vital auxiliary tasks, PIASKARZ SA uses a fleet of 27 wheel loaders and crawler dozers across its plants – all manufactured by DRESSTA in Stalowa Wola, Poland.

"Once dredged, we have two storage systems on the shore – one for wet sand that requires draining, and one for the dry sand that has already been drained," explained PIASKAR SA Chief Technical Specialist, Krzysztof Wałachowski. "We dry the sand using gravity. Specially formed drains, ditches and slopes are created to allow excess water to flow back into the river. It is for this process that our DRESSTA machines are essential."

DRESSTA 534E wheel loaders are the latest in a line of DRESSTA machines that have been used at PIASKARZ's sites since 1997. Alongside the need to form drainage systems to assist the efficiency of the



specialised dredging equipment, the machines are also entrusted with a number of other essential tasks to help maintain maximum productivity.

The DRESSTA wheel loaders' shorter V-cycles greatly improve the productivity of these loading operations resulting in a lower cost per cubic metre per hour for the material being moved.

The DRESSTA 534E is equipped with additional work tools to meet PIASKARZ's needs. The loaders have also been specified with hydraulic grapples and adjustable forks, enabling them to lift tree trunks and pipes weighing up to 5,5 tons, or move stone blocks weighting up to 7 tons - obstacles commonly encountered during site preparation and maintenance across the PIASKARZ plants. Owing to their excellent, robust design, DRESSTA wheel loaders offer a high tipping load combined with strong lifting performance (7,5 tons), making light work of a 7-ton block. This versatility helps reduce site operational cost.

The 534E is powered by a Cummins QSC8.3 engine that produces 227 hp and meets EU Stage IIIA emission standards. The QSC Advanced Technology, electronic controls and a durable block design give rise to improved engine performance and greater torque, in the toughest working conditions.

The machine's operator has excellent visibility around all sides of the vehicle, and the loaders are equipped with ROPS/FOPS to protect the operator in the rare event of the vehicle rolling.

Alongside the versatile wheel loaders, PIASKARZ employs 11 DRESSTA crawler dozers, including five of DRESSTA's latest TD-15M Extra medium-sized dozer. Each model has so far amassed between 5 000 and 7 000 hours without major fault since they were first deployed in 2007.

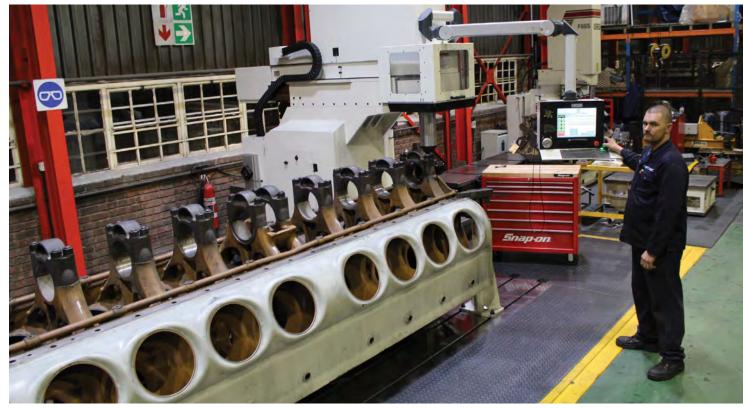
The principal tasks for the crawler dozers at PIASKARZ sites are to remove overburden, form shafts and manoeuvre crushed minerals to various locations around each plant. In order to do so effectively, DRESS-TA can equip the bulldozers with robust attachments on four different chassis types – standard, XL, LT and WT.

With a simple, reliable design and operating parameters that exceed and outlast many other recognised brands, PIASKARZ SA is extremely satisfied by the DRESSTA machines commissioned at its gravel and sandpits.

"My job is to ensure that the company can acquire and maintain quality equipment throughout the continuous operating periods in which our company functions," concludeds Wałachowski. ©

METRIC AUTOMOTIVE ENGINEERING

prevents catastrophic failures



The cylinder block machining centre at Metric Automotive Engineering.

A ccording to Andrew Yorke, operations director of Metric Automotive Engineering, major engine failures occur as a result of poor maintenance practices, and adopting a sound preventative maintenance regime will save fleet owners significant direct and indirect costs.

Metric Automotive Engineering is well known in the earthworks, mining and quarrying industries for its ability to remanufacture diesel engine components to original equipment manufacturers' (OEM) specifications, and even exceed these standards.

Yorke is concerned that many fleet operators are cutting down on their maintenance programmes in these challenging economic conditions. He warns that this practice will inevitably lead to catastrophic engine failures on costly equipment in industries that simply cannot afford unwanted downtime and unnecessary costs. This is especially likely in the African context where contaminated and diluted diesel can cause major damage to new, sophisticated engine technologies.

"In addition to poor combustion and an increase in diesel burn, long term issues that can arise from ongoing exposure to inferior quality diesel include fuel dilution and premature component wear problems, ultimately leading to a catastrophic engine failure," he warns.

Yorke says that one of the critical benefits of implementing a sound preventative maintenance programme is that it allows fleet owners to manage and prevent an unscheduled failure. Corrective intervention can be implemented timeously to eliminate the large costs associated with repairing a failed engine and the expensive price tag attached to downtime on a mine, quarry or construction site.

Yorke says other drastic measures are being taken by fleet operators to cut costs and these are also compromising their remanufacturing programmes. In some instances, remanufactured engine dyno tests are being neglected despite the significant investment into remanufacturing engine components. These tests ensure that the vital performance specifications of the remanufactured engine have been achieved to ensure a full service life performance.

He encourages fleet operators to analyse oil samples regularly as this can help to identify issues such as coolant contamination and other factors that lead to high wear on engines and components. One of Metric Automotive Engineering's heavy industrial customers has never experienced a catastrophic engine failure because of its stringent preventative maintenance strategies, which involve weekly oil sample analysis practices to identify exactly where fatigue is occurring. Importantly, it also reveals trends and patterns that allow this customer to schedule repair services to avoid catastrophic engine failures.

Yorke believes that most of the pitfalls in preventative maintenance can be attributed to the limited role that technical departments now play in choosing best practices to keep fleets operating at optimal levels. This important function has increasingly been delegated to purchasing departments.

As he points out, sound maintenance decisions can only be based on a thorough understanding of the complexities of the various components, including a quality remanufacturing operation.

There is a reason why all of Metric Automotive Engineering's customers keep returning. The company has saved them exorbitant costs, while keeping tonnages moving.

LIEBHERR GROUP'S TURNOVER

reaches €9 237M



iebherr's total turnover in 2015 was 9 237 million €, the highest figure in the Group's history and an increase of 414 million € or 4.7 % compared with the previous year.

Business developed guite differently in the various sales regions: in Western Europe, the most important for Liebherr, an increase in turnover was recorded. Among the contributing factors were positive developments in Germany, Great Britain and the Netherlands. Sales revenue dropped, however, in France, the Group's third-largest market. Turnover increased in volume in America and in the Far East/Australia region, and Liebherr also enjoyed a satisfactory year in the Near and Middle East. A downturn was recorded in Eastern Europe and in certain African markets.

Growth was achieved in the construction machinery and mining product areas and also in the area comprising maritime cranes, aerospace and transportation systems, machine tools and automation systems, domestic appliances, components and hotels. Turnover from construction machinery and mining equipment, including the earthmoving, mining, mobile cranes, tower cranes and concrete technology divisions, rose by 330 million € or 6.2 % to 5,624 million €. Sales revenue in divisions not included in the construction machinery and mining area rose by 84 million € or 2.4 % to 3,613 million €.

In 2015, the Liebherr Group recorded a surplus of 294 million \in , 22 million \in below the 2014 figure. The operating result was slightly above the previous year's level. The financial result was lower, primarily because of negative exchange-rate influences.

The workforce increased slightly in 2015 and at the end of the year, Liebherr employed 41 545 people, 706 or 1.7% more than at the end of 2014.

The Liebherr Group has always placed emphasis on investing in its production facilities and in its international sales and service network. Last year, investments to-talled 751 million \in and thus maintained the existing high level. Offset against this figure was depreciation valued at 448 million \in .

Global economic development in the current year will probably be similar to 2015 with approximately the same rate of growth as in the previous year in both industrial countries and emerging markets.

In 2016, the Liebherr Group expects the turnover to be at 2015's level. It will continue to invest considerably in its international production sites and its sales and service network. There will again be a slight increase in the numbers of employees at the Group's companies.

BSK HOSTS CRANE EVENT at Manitowoc facility



BSK, the German Association for Heavy Transport and Lifting, recently held a day-long event at Manitowoc's facility in Wilhelmshaven, Germany, which included a number of workshops that highlighted latest technological innovations in the crane industry as well as presentations and seminars presented by representatives from Manitowoc and BSK.

Over 80 customers attended along with representatives from several leading equipment manufacturers. The event included a detailed tour of Manitowoc's factory that showcased the recent improvements in safety and technology, and concluded with a presentation on the crane introductions Manitowoc unveiled at bauma 2016.

Wolfgang Draaf, managing director at BSK, was pleased with the successful exposure BSK received as a result of this event as it provided them with a great opportunity to network and meet new people, and to share latest trends in the crane industry. He said that the association was delighted to work in close collaboration with Manitowoc and looked forward to working alongside them again.

At the event, customers were invited to participate in a number of workshops including, 'working at height' and 'latest development in synthetic ropes'. The workshops were presented by BSK and the FEM group (the European Materials Handling Federation), which consists of representatives from the all-terrain crane line.

Jens Ennen, senior vice president for mobile cranes in Europe and Africa at Manitowoc, said the conference gave visitors a valuable opportunity to learn about the company's recent crane innovations and provided Manitowoc with the opportunity to demonstrate the company's newest job site safety-related technology, which was a major highlight. "It was a pleasure to work with BSK and we hope to develop this relationship by hosting another event in the near future," he concluded. \bigcirc

Experience the Progress.

























Liebherr-Africa (Pty.) Limited Vlakfontein Road, Springs 1559 Phone: +27 11 365 2000 E-mail: info.laf@liebherr.com www.facebook.com/LiebherrConstruction www.liebherr.com



CEMENTING A STRONG REPUTATION

in Zimbabwe

Specialist crane and components manufacturer Demag was part of the team that completed a US\$750 000 cement manufacturing project at Lafarge-Holcim Zimbabwe. It supplied its state-of-the-art 8 t electric overhead travel crane, 200 m of crane rails with Gantrex pads, and new down shop power supply leads, via its regional distributor O. Conolly.

Infrastructure development in Zimbabwe is still constrained owing to institutional and regulatory inadequacies. However, opportunities exist for new modernised infrastructure, which requires strong local partnerships for benefits to be realised. Over the past five years there has been a significant increase in multi-national companies looking to engage with the Zimbabwe market.

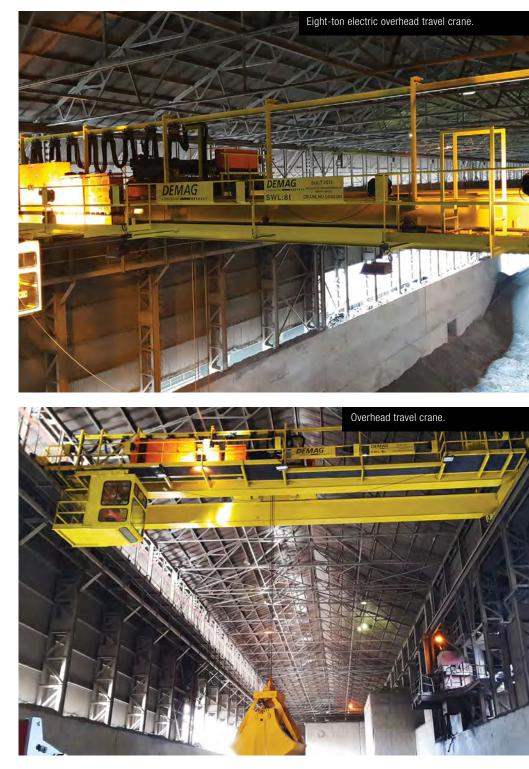
O. Conolly director lan Conolly explains that although the project began in 2014, the installation of the crane was delayed to March 2016. "The customer required a dependable and efficient overhead crane for the loading of clinker – a grey nodular material made by heating ground limestone and clay into the hoppers. The clinker is used for manufacturing cement, and loading is a crucial part of the process, so reliability was vital," he says.

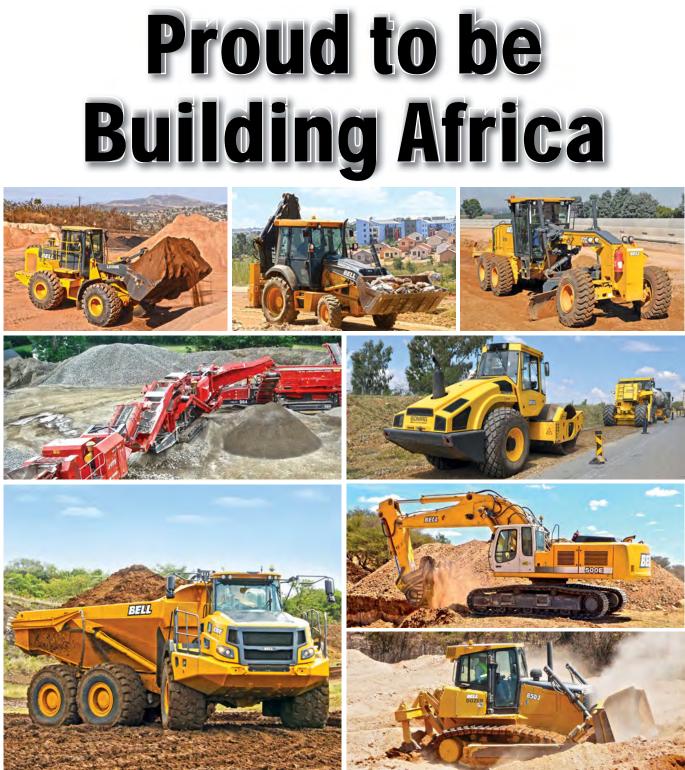
Lafarge-Holcim Zimbabwe's clinker plant is one of the major cement companies in the country, and manufactures and markets cement, aggregates and special products. According to Conolly, many of the mines and manufacturing businesses in Zimbabwe make use of antiquated cranes, which are often poorly maintained. "Newer cranes are lighter, faster and easier to maintain, and the cost of keeping old cranes operating is prohibitive." he says.

The team endured some tough challenges as Conolly outlines: "We had to design a crane suitable for the harsh and dusty operating environment, with limited mobile crane capacity. It was also a challenge to install the crane in a dusty clinker factory without affecting the customer's production schedule. To withstand the harsh operating environment, Demag also designed and supplied a robust grab bucket with the crane."

Conolly says that since the 10-man installation team is proficient in working in harsh conditions, it performed well. "In order to navigate through the challenges, the site team needed to be flexible and maintain good communications with the onsite engineers. We were able to install the crane without any shut down or taking away from operation times. What's more, we ensured that the crane was installed within the given time frame," he adds.

Owing to the quality of Demag design, manufacturing and components, and local support offered by O. Conolly, the project has been hailed as a success. "We succeeded in designing and installing some tough components and some innovative add-ons to minimise wear, and have proven that we can handle any environment and have reliable units. Our working relationship with the customer was excellent owing to our transparency and daily engagement," Conolly concludes.





Bell is Africa's very own global equipment supplier. With support from our strategic partners we deliver a full range of premium machines well suited to a variety of industries and applications.

Whether it's mining, general and bulk earthworks, construction, roads and rehabilitation or waste management, our machines are all built tough for our harsh environment and are fully supported by Africa's most comprehensive network of people dedicated to your success.

Bell Equipment - a proudly South African company that's committed to helping businesses to realise Africa's potential.



Strong Reliable Machines • Strong Reliable Support Tel: +27 (0)11 928 9700 • E-mail: sales@bell.co.za • Web: www.bellequipment.com

LIFTING

SA French GIVES AFRICAN TOWER CRANE USERS A LIFT

WW ith the backing of its parent company, Torre Industries, SA French is growing the popularity of Potain tower cranes in sub-Saharan African countries.

Quentin van Breda, managing director of SA French which is a division of Torre Lifting Solutions, says one of the company's major competitive edges in Africa is Potain's ongoing investment into research and development. This has facilitated access to the latest lifting solutions that are now being demanded by a rapidly changing crane market on the continent.

Van Breda says he is seeing an increasing need for cranes that use less than half the electrical energy of earlier units; an African trend that is in line with international practices. Also, African contractors are exploring state-of-the-art technologies from tower crane original equipment manufacturers (OEMs) that assist in improving preventative maintenance strategies and optimise the overall performance of the machines on site.

Van Breda says all Potain cranes leave the factory floor pre-equipped for the system that informs the project manager when they are due to be serviced and when adjustments need to be made to mechanical componentry.

There are also more onerous demands on tower crane OEMs and distributor networks. Van Breda says the fast track nature, as well as complexities of modern buildings, mean that contractors have less time to prepare the site for the arrival of the tower cranes and, as a result, now rely more heavily on a full turnkey service from the OEM supplier.

The need to mobilise a tower crane as swiftly as possible on the site for work to start timeously has seen a growth in demand for tower crane rental services. Van Breda says SA French has a comprehensive fleet of quality tower cranes that can be quickly mobilised to and demobilised from site. Optimum uptime also has to be ensured through high levels of tower crane reliability. Van Breda says it is not unusual for construction companies to demand a response rate of as little as three hours from their supply chain partners.

The growing distances between construction sites and their support points call for careful logistical planning by equipment



Potain offers a premium product for global blue chip western companies that are constructing in Africa and a value product for emerging contractors.

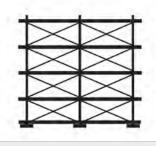


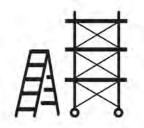
suppliers to ensure that critical contractual obligations can be met. Support often has to be undertaken on a weekly basis to keep to demanding construction schedules.

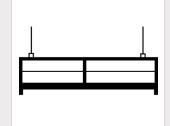
Van Breda believes that the market will be-

come even more demanding, challenging conventional sales and after-market support roles of equipment distributors and their principals. However, under his leadership, SA French continues to adapt to keep Potain a common sight on the continent.









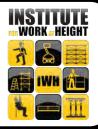
INSTITUTE FOR WORK AT HEIGHT



- Fall Arrest
- MEWPS
- Rope Access
- Suspended Access Platforms
- Access Towers & Ladders
- Falsework
- Scaffolding



www.profbody.co.za TEL: +27 11 450 1804/450 2896



WORK @ HEIGHT: FROM THE BOARD

NEWS

ACCESS BY ROPE

Vertical Logic Rope Access was founded in 2007 to provide rope access services to industries that require work to be performed in inaccessible areas or areas where it would not be feasible to use traditional access methods such as scaffolding or hoists. All directors and managers in the company have had field experience in rope access and offer a combined expertise of over 25 years.

Rope access in South Africa is a rapidly growing industry as is offers fast, cost-effective solutions that are safer than many traditional methods such as scaffolding or mobile/static platforms. Given this, rope access companies are able to offer services that were previously accomplished using these methods. Rope access, although a fairly young industry, has made immense strides in the past number of years owing to the user's ability to access difficult-to-reach areas through the use of ropes and abseiling techniques. And it shows every sign of continuing this growth.

More and more companies are contracting rope access rather than traditional methods such as cradles/ platforms or scaffolding because it is deployment instantaneous (which saves money and setting up time) and is regarded as one of the safest forms of work at height. Also, it does not interfere with the aesthetics or the operation of the building.

Vertical Logic Rope Access has worked tirelessly to implement a safety system that complies with legal requirements and ensures that all work is done to the highest standards of safety. The company undertakes regular evaluations of its employees' abilities and continually assesses team interaction through onsite inspections and feedback from clients and peers. This allows the company to select the best team for any specific job, thus improving work efficiency.

With its focus on efficiency and management, Vertical Logic is able to offer its clients top quality service and excellent rates.

Qualification versus Professional Designation

Does a qualification give its holder the right to do work in a specific field? The answer might be found in the following questions:

- Why does a person with a BComm degree have to gain the designation Chartered Accountant (CA) before practicing as an Auditor?
- Why does a person who does the trade of electrician have to register with the Department of Labour to become a 'licensed electrician'? Formerly known as a 'Wireman's Licence'
- Why does a person do a degree in Law but then have to be accepted by the Law Society to become a practicing lawyer or admitted to the bar as an Advocate?
- What about studying medicine at university? The degree does not automatically make that person a doctor. The title and the right to practice as a medical doctor come from the Health Professions Council.
- Millions of people have been found competent against a qualification called 'K53' before being awarded a licence to operate a motor vehicle by the RMTC.

In each case, the 'right-to-practice' in a particular field of occupation comes from an authorised body and in each case the right to practice is conferred onto a person with the requisite, underlying qualification plus other requirements as determined by the body that confers the right to practice onto that person.

In each case the 'right-to-practice', i.e. the licence to operate has a set validity period and requires renewal/ re-registration at set intervals and yet, it is common knowledge that qualifications in SA do not expire.

What is a qualification?

There is common understanding within the Quality Council for Trades and Occupations (QCTO) and the South African Qualifications Authority (SAQA) of an occupational qualification. It states, "... an occupational qualification means a qualification associated with a trade, occupation or profession, resulting from workbased learning and consisting of knowledge unit standards, practical unit standards, and work experience unit standards as defined in the Skills Development Act and has an external summative assessment."

Please take note of the last part of this definition '... has an external summative assessment'.

The term Assessment Quality Partner (AQP) is defined by the QCTO to mean "a body delegated by the QCTO to develop assessment instruments and to manage external summative assessments of specific occupational qualifications".

In simple terms then – a 'qualification' only becomes a qualification once an external summative assessment has been carried out. Thus, the learner needs a Statement of Results (SoR) issued by the Assessment Quality Partner that carries out the external summative assessment before the learner is deemed qualified.



Brian Randall, President – IWH.

The training provider has to 'inform' (viz. upload) learner information to the delegated QAP/AQP and await the results of that body's external summative assessment before issuing certificates. Ever since the start of the SAQA/SETA structure this has been the one major weakness in the system. The SETAs are simply not geared to perform the huge number of external summative assessments required by the Work at Height industry simply because the vast majority of 'training-per-learners' in this industry are less than a part qualification and nowhere near a full qualification!

The SETAs do not have sufficient numbers of subject matter experts in their employ to undertake the volume of assessments required in this industry, given that some ten thousand persons are trained annually. So the vast majority of learners cannot get legitimate certificates from the Training Providers in the timeframe required by industry.

What happens if the SETA does not issue the SoR timeously owing to its internal protocols or apparent inefficiencies? The answer is simple – the learner is not qualified. And the training provider should not be issuing certificates.

Professional Designation: What is it and who awards it?

According to §13(1)(i) of the National Qualifications Framework Act 67 of 2008, SAQA was instructed to develop and implement policy and criteria for recognising a Professional Body and registering its Professional Designations. SAQA subsequently developed a policy which includes the following relevant definitions:

Professional Body:

Any body of expert practitioners in an occupational field, including an occupational body.

WORK @ HEIGHT: REGIONAL NEWS – GAUTENG



Professional Designation:

Means ' ... a title or status conferred by a Professional Body in recognition of a person's expertise and right to practise in an occupational field'.

And furthermore, §42 of The Policy requires *inter alia* that, for a professional designation to be registered on the NQF it must:

v. Be linked to a validated database of the names of individuals conferred the professional designation.

vi. Include, as an initial requirement, an underlying qualification which may include an occupational qualification.

vii. In the case of an individual's qualification having been obtained at an institution not registered in South Africa, the individual applying to a Professional Body for a professional designation, must ensure that the qualification has been evaluated by SAQA and found comparable to the South African underlying qualification.

ix. Include as retention requirements Continuing Professional Development (CPD) and adherence to a code of professional ethics/conduct.

Notes relating to §42

(v) The Professional Body (PB) must thus upload its registered practitioners onto the NLRD but can only do so if the training providers upload learner results to the PB.

(vi) This is the stumbling block we are faced with – If the SETAs don't issue SoRs then the PB cannot confer a designation onto a person (see below).

(vii) Only Professional Bodies offer CPD. There you have it: A SAQA recognised Professional Body registers its designations with SAQA and then confers the designation onto a person with the underlying qualification provided that person also meets other requirements of the PB.

The PB therefore does site audits to verify the training provider is fulfilling the duties of a training provider as required. The PB also has the authority to recognise and approve workplaces where the learner gains workplace experience.

These functions are given to Professional Bodies in terms of the National Qualifications Framework Act 67 of 2008 and The Policy document developed by SAQA.

The Policy, §19 (v) states '... recognise suitable workplaces and be involved in the assessment of workplace experience' and, 19(vi) states '... recognise suitable education and training providers and be involved in the curriculation of learning programmes offered by the education and training providers.'

As a result of several complaints received from training providers regarding SETA inefficiencies or protocols preventing them from issuing SoRs, the IWH Professional Body raised the issues with the relevant SETA on several occasions and was forced to escalate the matter to the QCTO in order to find a solution.

What followed was several meetings between the SETA, IWH Professional Body and the QCTO and owing to an apparent inability to service the needs of our industry (requiring SoR almost immediately following the upload of the learner), the QCTO acknowledged that the Professional Body must continue registering persons, provided that the Professional Body followed suitable QA processes including making sure that affected learners were uploaded to the SETA.

Thus the PB has found a legitimate way around the problem and continues to serve its recognised training providers in this manner.

The PB must do a site audit to ensure that the training facilities of the training provider meet our needs and that the training provider's assessors and moderators are registered. We are facilitating a process of allowing certified persons access to work opportunities.

In the near future the SETAs will become 'advisory boards' and lose their status as Sectoral Education and Training Authorities. How this will impact on the functions of the PBs is not yet clear but that lies in the future.

To sum up

Training providers cannot issue certificates of competence unless they have received the SoR.

Even if they receive the SoR, they cannot put an expiry date on the certificate.

They cannot use the professional designation titles reserved by SAQA for the IWH Professional Body.

They cannot implement any form of CPD training without the Professional Body.

To gain the benefits provided by the Professional Body they need to become a Recognised Provider of the IWH Professional Body.

Brian Randall President - IWH ۞

Rope access restores coal flow in silo

Leading rope access specialist Skyriders has successfully completed the maintenance project of a large coal silo at a power station in Mpumalanga. The silo, which houses 10 000 tonnes of coal, needs to be cleaned at least once a year. Coal builds up for various reasons, such as moisture, and needs to be removed before a blockage occurs. Rope



access is a more cost effective and less time consuming means of inspection and maintenance than traditional access systems.

Skyriders undertook work on various silos at the power station. Maintenance on the last silo began at the beginning of December 2015 and, owing to outage schedules, was completed in mid-February this year. The physically demanding task required specially trained technicians to access the silos from the top.

According to Mike Zinn, marketing manager of Skyriders, silos experience areas of coal build up for various reasons. As a result, the coal does not flow out of the silo and instead adheres to the walls and, in so doing, changes load dynamics. "During the maintenance period, our technicians go inside the silo from the top using rope access and loosen the coal to restore flow to the hoppers until the silo is completely empty. Then they start loading the silo with new coal."

The maintenance shutdown allowed the eight-man team to undertake its work during the day only. In the coal dust environment, they used safety lighting for visibility and specialised gas monitors to monitor toxic gases, such as carbon monoxide. Since gas levels inside confined spaces can change at any time, a detector sends a warning for the quick exit of the team.

According to Zinn, the dust levels in the silo are very high because of the volumes of moving coal inside. He explains that, "Extreme caution is applied when entering the silo and the team is required to be aware of spark hazards or anything that will create sparks or a potential explosion. In spite of the hazards, however, before carrying out maintenance and inspections, the team has to 'help' the coal move out of the silo and this can be a challenge for untrained personnel".

Skyriders rope access technicians boast high performance capabilities, skills and expertise, based on years of experience of undertaking maintenance projects for various power stations. Other services include cleaning, fumigation of silos, inspection, non-destructive testing and standby rescue. "Only trained personnel can do this type of work or should be on stand-by at the very least, as this is one of those dangerous areas of speciality, where a mistake can lead to an injury or a fatality," Zinn concludes.

APC Storage Solutions SA

LAUNCHES ONE NEW AUTOMATED STORAGE SYSTEM ANNUALLY

PC Storage Solutions SA, through its partnership with Mecalux, a leading global specialist design and manufacturer of storage and warehouse solutions, now launches one new automated warehouse storage system in South Africa each year.

This is in addition to its consistent offering of the latest European trending warehouse and storage solutions to local companies, some of which have been developed specifically for the African market based on input from APC Storage Solutions SA.

The 16 year-long partnership has seen the local company install an average of 10 000 tonnes of storage systems each year. This equates to 150 000 tonnes in more than 5 000 projects across South and Southern Africa, that has contributed to APC Storage Solutions SA organic growth.

Beginning with the head office in Johannesburg and installing quality small solid angle shelving, the company has opened three additional branches in South Africa's main provinces that design, install and service comprehensive storage and automated storage solutions around the country.

Additionally, APC Storage Solutions SA has undertaken a large number of conventional racking and shelving projects as well as semi-automated and automated installations in Southern Africa, and continues to service countries in this region.

Setting the benchmark

As the first South African storage and warehouse solutions company to import technologically advanced European racking and shelving, APC Storage Solutions SA has set the benchmark in warehouse and storage system quality in South Africa. "Mecalux's superior quality across its range and the current technology incorporated into its automated solutions, gives customers a longer lasting warehouse solution that ultimately lowers the overall cost of storage ownership. This lower total cost of ownership effects savings across a company's entire supply chain, that in turn improves our customers' bottom-line over the long term," says APC Storage Solutions SA Managing Director, Fred Albrecht.

Shared IP and product development

The shared intellectual property between manufacturer and distributor is significant.

After each installation, APC Storage Solutions SA conducts an in-depth project analysis and provides recommendations to Mecalux's RD&I department. It now spends approximately $\in 6$ million (about R110 million) on research, development and innovation annually.

Feedback from APC Storage Solutions SA is used by Mecalux to tailor products for the African environment and associated logistical storage systems. Albrecht says that this dual development process is indicative of the collaborative partnership and the trust shared between the two companies.

"Our feedback has been incorporated into a number of storage solutions," Albrecht states. "One example was the suggestion to innovate and introduce an electro-magnetic system incorporated into our Pallet Shuttles – which attaches the Shuttle to a Forklifts fork – thereby facilitating an anti-fall protection system. The final product, the first of its kind, was rolled out on an international scale, which is testament to the innovation brought to market through our involvement."

Albrecht says that the Mecalux partnership grants additional value for customers through technological advances and a market offering that exceeds anything available locally.

He cites a turnkey project in the making: a 26 m high self-supporting warehouse in Lordsview, consisting of eight gangways (walkways), developed by APC Storage Solutions SA and manufactured by Mecalux. "This will be a true landmark for generations to follow and, again, it is a first of its kind in the world."

Business expansion

"Our dedicated approach as the South African partner and brand ambassador of Mecalux, has positioned us as a significant Mecalux partner, which now also considers us part of its core team," says Albrecht. "Since we began our partnership with Mecalux, it has multiplied its annual international turnover almost tenfold. It is gratifying that installations in South and Southern Africa, via APC Storage Solutions SA, are contributors to this growth." He adds that, on the other side of the coin, no other South African warehouse and storage solutions provider has been able to meet



APC Storage Solutions SA's Managing Director, Fred Albrecht, says that the Company has reached a stage where it now launches one new automated warehouse storage system in South Africa each year.

"Mecalux's resources, combined with the deeprooted relationship we have with them has enabled APC Storage Solutions SA to make the impossible possible when it comes to tailored, robust, efficient and cost-effective conventional, semi-automated and fully automated storage and warehouse solutions."

APC Storage Solutions SA's product quality and diversity, and its geographic support to customers.

"Mecalux's resources, combined with the deep-rooted relationship we have with them has enabled APC Storage Solutions SA to make the impossible possible when it comes to tailored, robust, efficient and cost-effective conventional, semi-automated and fully automated storage and warehouse solutions," Albrecht concludes.



SCANIA: Part of the solution

tudies show that by 2030 there will be over two billion vehicles on the world's roads. which in turn will lead to increased carbon dioxide in the earth's atmosphere and a subsequent increase in global warming. According to a UN report published in July 2014, over half of the world's population lives in urban areas and this proportion is expected to increase to 66 per cent by 2050, with much of the shift taking place in Africa. The move to urbanisation leads to an increased use of transport so if we are to limit further damage to our environment, it is vital that those of us living on this continent adopt green technologies. This was the theme at Scania's 2016 Conference on Sustainability.

Reducing carbon footprint is a major force behind environmental change and many companies have built sustainability into their business strategies so that competitiveness, once restricted to product development, now includes achieving sustainability levels that are in line with the ethical, social and environmental standards in whichever countries they operate.

Scania has a holistic view of the transport system in which different forms of transport, infrastructure, policy, and business models are linked. Being part of an industry that contributes to pollution, Scania therefore believes it has a responsibility also to be a part of the solution and spends considerable effort on establishing 'greener' ways of powering vehicles. The company is currently a frontrunner in gas, ethanol and biodiesel solutions. A leading a manufacturer of heavy duty vehicles, Scania has a tradition of consideration for the environment. The company has introduced various product innovations that have helped customers dramatically reduce costs and carbon emissions while continuously improving road safety. It goes further though and to ensure that its vehicles can operate across the world, Scania has extended its approach and works with partners to reduce dependency on fossil fuels by involving itself in the creation of fuel for local transport that is sustainable.

According to Anthony King, key account manager alternative fuels at Scania South Africa, the concept of sustainability is immersed in the company. "We are in the process of establishing a footprint for Africa and have embarked on a programme of working with various governmental bodies to create an awareness of the benefits of renewable energy by promoting the use of sustainable transport in all spheres of our economy," he explains.

He notes that with more politicians and businessmen throughout Africa becoming interested in and aware of the need for sustainability, there is every chance that the continent will play catch-up with the rest of the world and, by focusing on sustainability at this stage, be able to 'leapfrog' from poor quality diesel straight to Euro-5 and Euro-6 technology, while providing a social solution through creating biofuel from first generation biomass although second generation biofuels could also be an option. Nomonde Kweyi, Marketing & Communications Manager; Scania South Africa, confirms this, adding that when planning longer term solutions, transport companies must remember that they can immediately lower their carbon footprints and save fuel costs simply by implementing a Driver Training programme. "A well trained driver can reduce fuel expenses by as much as 15%, and this will also lead to a reduction in emissions," she says.

Because Scania has a global engine platform that is based on a modular engine concept, customers with access to different fuels are able to opt for engines with outstanding environmental performance and fuel efficiency, no matter where they are. The Scania modular engine solution has standardised interfaces between component series, enabling clients to install solutions with improved performance in engines that are required to meet different fuel types. Through the use of compression and spark ignition technologies, Scania is able to offer engines suitable for biodiesel, ethanol, biogas and natural gas.

To ensure the success of its sustainability strategy, Scania has the technical leadership with the right power train irrespective of whether it involves diesel, biofuels or future electrical solutions. On the product front, Scania's main focus in the future will continue to be on sustainable transport and alternative fuels.

RETAIL MOTOR TRADE IN SA

holding up despite challenges



The franchised retail motor trade in South Africa is holding up well despite the continuing economic slump and subsequent decline in the sale of new vehicles. This is evident from the retail dealer financial health indicators that are computed monthly by Sewells Group, the well-known global consulting and outsourcing company that specialises in the automotive industry.

"The indicators for the first quarter of 2016 differ quite a bit when compared to the same data for the first quarter of 2015, but there are still far more positive than negative trends in the various operational divisions," explains Warren Olsen, CEO of Sewells SSA.

"Using the key indicator of return on operational assets (%ROOA), we still see a year-on-year rise, even if it is only by 8,3% for passenger car dealers. Heavy truck dealers do not fare as well, with an improvement of only 1,7% over the first quarter of 2015. However, in both cases the total return on assets is still in the vicinity of 22%, excellent when compared to dealer return on assets in most other countries in the world."

Sewells obtains its data by analysing the monthly financials of more than 85% of retail dealers and is able to track their financial and operational performance. This information is then utilised by Sewells Group to assist dealers to improve underperforming areas of their operations.

"Our long-running service of providing this financial analysis to dealer networks monthly allows them to find fixes for the negative trends and to build on the positives," adds Olsen.

In terms of the mix or gross profit as a percentage of sales, the situation is fairly stable among car dealers; while heavy truck dealerships are faring far better, with an improvement of 20,7% in the indicator for all departments. The new truck sales mix indicator is up by 53,1%.

There are a number of downward trends in the pre-tax profit margins comparison for

"Our long-running service of providing this financial analysis to dealer networks monthly allows them to find fixes for the negative trends and to build on the positives."

both car and truck dealers. These include finance and insurance (F&I), parts and service for cars and F&I, new truck sales, parts and service for truck dealers.

A negative trend is evident in terms of asset activity, particularly in terms of used cars (down 14,2%) and used trucks (down 32%). This is generally related to rising stock levels as the markets remain relatively depressed.

"We continue to find that dealers in South Africa are able to manage their businesses well and profitably in changing economic environments, which is a tribute to the high quality of management and training in the major groups and companies," concludes Olsen.

FAW HOISTS ITS FLAG

in sub-Saharan Africa ... again

AW Vehicle Manufacturers South Africa has again confirmed its growing customer base in sub-Saharan Africa with a delivery recently of 20 FAW 28.460FT (J6) truck tractors to Universal Trans-Logistics LDA (UTL) Mozambique, part of the Capital Foods Group, headquartered in Lilongwe, Malawi.

To coincide with the expanding operational requirements of the Capital Foods Group, (encompassing UTL) FAW compounded its commitment in this African region and started to diversify operations to include warehousing and logistics in the UTL portfolio.

Estimated to be worth around R20 million, this deal affirms the unequivocal confidence displayed by Capital Foods in the FAW brand.

When receiving the 20 FAW J6s, Juber Shaikh, UTL Operations Manager, said, "UTL based in Beira, Mozambique, is convinced of this strategic partnership with FAW SA.

"While this is our first investment into the FAW truck brand, we are satisfied with our choice following the very favourable reports we had from other fleet owners and our due diligence that indicated reasonable costs of operation. The FAW brand is reputed for providing vehicles that are 'more than tough enough for Africa'. This gave us the assurance that FAW is the definitive African-based truck manufacturer to take us forward in our expansion. UTL is a leading provider of efficient and reliable transportation and logistic management services throughout the South East Africa region.



"While UTL only commenced operations in 2010, we've had a constant need for fleet expansion. Malawi and other landlocked countries (such as Zimbabwe), rely heavily on road transportation for essentials.

"FAW South Africa proved to be the best choice because of its proximity and its proven record for robust and reliable vehicles, which sanctions their suitability to operating in the harsh African terrain," Shaikh concludes.

FUCHS LUBRICANTS SOUTH AFRICA

wins private label deals

Fuchs Lubricants South Africa has won both Mercedes-Benz and Scania Trucks private label OEM supply tenders.

ohn Anderson, Automotive Sales Manager at Fuchs Lubricants South Africa said: "Mercedes-Benz is the world's oldest automotive brand and the world's leading luxury vehicle supplier. Swedish Truck and Bus manufacturer, Scania, markets their commercial vehicles across the African continent with market leadership positions in numerous African countries."

"The success of Fuchs Lubricants South Africa in these tenders can be attributed to a number of factors. Both tenders were multi-country contracts with Mercedes-Benz tendering for 10 countries across Africa, South East Asia and Australasia. Scania tendered all six Southern Africa countries and awarded all countries to Fuchs Lubricants South Africa."

"Another factor was our communication between global tender teams and local tendering countries giving the ability to respond quickly and accurately to changing tender demands," he said. Anderson added that Fuchs Lubricants South Africa's local manufacturing facilities were also recognised. Local manufacture means shorter lead times and quicker response to changing order patterns with product quality levels required to be the same throughout the world.

"Mercedes-Benz felt the benefit from day one: demand increased from 15 tons per day to a monthly average of 18 tons per day. This makes it one of the biggest direct accounts Fuchs Lubricants South Africa has ever supplied," said Anderson.

"Scania started with a soft launch early in April and demand is steadily increasing. The Scania tender has the added challenge of delivery through our partners in neighbouring countries. All were supportive in assisting us to deliver Scania product to remote locations where Scania services its vehicles."

Mercedes-Benz and Scania join an extensive list of other OEM private label products that are produced at Fuchs Lubricants South Africa, including John Deere, Honda, Suzuki, Kubota and MTU.



BULK FUEL FILTRATION

improves engine performance

The quality and cleanliness of fuel is a major contributing factor to the performance of diesel engines and components. Contaminated fuel leads to higher maintenance costs and engine downtime. Good fuel filtration is vital for the performance of the engine. Fuel contaminants such as dirt, sediment and water can be introduced into the fuel through channels such as the processing stages, transportation and when the fuel is delivered to the point of use.

As a result, Cummins Filtration designed a Bulk Fuel Filtration system with an engineering company for a customer in Egypt. Cummins Technical Sales Manager for Africa, Gerald Annandale, notes that the system will be installed on site for a main storage tank to achieve cleaner fuel. "This Bulk Fuel Filtration system has a filter with a micron (μ) rating of 3, which means it will filter the contaminants of 3 μ or larger. The filter's efficiency to remove contaminants does, however, depend on the quality of the fuel initially received," he explains.

Annandale explains that fuel injection system suppliers require that fuel meet the ISO 12/9/6 cleanliness standard at the injection system, as contaminated fuel can cause components to wear prematurely. "The Bulk Fuel Filtration system will help with reducing contamination levels whereby cleaner fuel can be obtained at the point of entry into the machine's tank (ISO 18/16/13), resulting in less maintenance and labour costs which will lead to greater productivity," he continues.

How it works

Fuel is pumped from the bulk fuel tank on the tank farm downstream into the Bulk Fuel Filtration system. The fuel can either be recycled to the main tank, on a kidney loop basis, or delivered to the tank of the mobile machine directly. At this point, the cleanliness level of ISO 18/16/13 or better is achievable. The cleanliness level can be improved upon at this point by running the unit as a kidney loop system, whereby ISO 16/14/12 can be achieved. Downstream of the vehicle's tank, there is a first and second stage on-board system that is designed to achieve the desired ISO 12/9/6 cleanliness level with Fleetguard on-board NanoNet technology.

According to Nomfundo Maseko, Cummins' Marketing Communications Co-ordinator, the Fleetguard range of products provide a solution of achieving cleaner fuel in conjunction with the Bulk Fuel Filtration system. "The Bulk Fuel Filtration system features a visual glass window that displays a rotating impellor that starts turning as soon as the filters restrict and this indicates that it is time to change the filters."

Maseko adds that the pump on the unit is sized to give a flow rate of $300 \ \ell/\text{min}$, and the elements fitted are at $3 \ \mu$ absolute. "The unit is designed to handle up to 1 500 ℓ/min and the elements range from 3, 5, 6, 12 and 14 μ (Beta 200). The suction side of the pump is protected by a 150 μ 'Y' type strainer as well as an internal relief setting of 15 bar on the pump to protect the system."



Cummins Technical Sales Manager for Africa, Gerald Annandale.



iCAM helps protect **AND MONITOR FLEETS**



AM Video Telematics has launched iCAM 852 allowing fleet owners to stream live videos from multiple vehicles and from multiple cameras. It is a 4-camera mobile CCTV system and is manufactured locally.

The iCAM 852 is designed to provide video solutions with combined vehicle tracking and fleet management capabilities. It will not only ensure reduced time to settle insurance claims, but fleet owners can now increase driver productivity, reduce fuel theft and increase load frequency with reduced turnaround times.

It is a powerful video streaming and fleet management product designed for safety and driving analysis through video technology. The iCAM 852 was designed from ground up, with scalability in mind in order to support any sized fleet.

iCAM Video Telematics managing director Gary Wels says the scalability allows fleet owners to add vehicles and administer them without any increases to computers and hardware, because all files are viewable over the web. "Fleet owners can set auto record, time record, event record and manual record. All of this is done on top of the live tracking offered by normal tracking systems," he says.

"It includes video and image verification, driver behaviour monitoring for risk reduction, goods monitoring for theft prevention and full fleet video telematics for monitoring and event management with traditional live tracking," Wels explains.



With up to four cameras including the option of infrared, the iCAM 852 now offers live video streaming and continuous video recording while the vehicle ignition is turned on and for up to four hours after ignition is turned off. GPS is embedded into all recorded video data with GPS + Map trip playbacks.

With video recording on all trips, speeding and idling is tracked and owners can have event triggers on behaviours like harsh braking, acceleration or accidents. Other triggers could include cabin doors, CANBus or trailer doors.

Wels says the iCAM 852 offers peace of mind and provides factual evidence for insurance claims. "It has real-time live capability on 3G streaming and the GPS accuracy and G-force measurement provide highly reliable impact speeds and force – to prevent any challenges to the validity of data." Fleet owners can choose to receive immediate email alerts upon exceptions or triggers and they have direct contact with the driver via auto answer mic and speaker. This innovative solution offers a fully integrated tracking system with trip playbacks and reports.

Web based software offers video clips, incident set up and management, maps, live location, speed, live tracking and trip playback. It is possible to manage geo fences and Points of Interest. Live reports include a trip report, log book and area reports. Also offered is a video dashboard with live video streaming and it is possible to play events, incidents and triggered videos.

SCREEN SPECIALIST SHARES RISKS

and gains

 $S_{\rm selling \ plant \ and \ equipment \ and \ then \ moving \ to \ the \ next \ sale.}$

This is according to Joest Kwatani, a Level 3 Broad-Based Black Economic Empowerment manufacturer of screens for the African mining industry.

Kim Schoepflin, managing director of Joest Kwatani, says the company has established open and transparent communication channels with the mines, sharing best practices in screening and how to feed optimal tonnages of ore at the lowest cost with its customers.

An example of this is Joest Kwatani's contractual risk or gain sharing business relationship with mines. "Instead of merely supplying a screen to a mine at a fixed price, this model sees Joest Kwatani share in the gains mines enjoy from efficient screening solutions," she says.

According to Schoepflin, the model incentivises vendors and mines to make better decisions concerning the project.

"At this point in time, I'm not convinced that suppliers are being adequately incentivised to deliver optimal solutions for projects. However, this type of contractual arrangement aligns the interests of both mine and supplier. The formula of sharing tonnage and risk positions Joest Kwatani as a provider of value rather than a purveyor of products and services," she says.

Joest Kwatani is able to offer such a service because it has an intimate understanding of its customers' businesses and operational challenges, and, as Schoepflin points out, without this knowledge "there is simply no basis for gain sharing".

A milestone for the company, in terms of these agreements, is its 11 year contract with a Limpopo-based miner to replace, refurbish, service and maintain 96 coal screening machines at the largest coal processing complex in the world.

Owing to the dearth in skills on mines, Joest Kwatani is also entering into customised service level agreements.

"Sub-standard maintenance is undertaken on plants. At times, it is reactive, as opposed





to being proactive, leading to further costs to the mines. Screening machines are such important elements in the process that regimented maintenance programmes are crit-





ical to ensuring ongoing efficient operation and improved yield," says Schoepflin.

A structured service programme allows mines to select a package that matches their existing needs and the resources of the plant. This offering has been well received by mines and Joest Kwatani has fixed-year, multi-service level agreement in place with coal, diamond, iron ore and manganese plant operators.

COMPREHENSIVE MINING SECURITY

requires effective substance abuse policies and procedures

By Rhys Evans, Director of ALCO-Safe

When it comes to security in mines, the major focus tends to be on preventing theft and unauthorised access. However, comprehensive safety and security needs to cover so much more, including aspects such as theft of time as well as risk to employees. When one considers that the mining sector has some of the highest rates of intoxication in the workplace, the importance of this security aspect becomes clear.

Employees entering the mining workplace while under the influence of alcohol or drugs not only pose a health and safety risk, they are less productive than their sober colleagues. While substance abuse is not traditionally considered an element of mining security, it does introduce risk and an element of theft, and should form part of any comprehensive security solution.

Mining is a hazardous environment, involving heavy and dangerous equipment and challenging working conditions. Accidents can happen even if the entire workforce is sober and alert. The chances of an incident occurring increase when one introduces alcohol and drugs into the mix. These have a negative effect on behaviour and reaction times, and the productivity of employees.

Employees who are not productive as a result of such intoxication are not working to their full capacity, and this theft of time is an aspect that is often not considered as part of security strategy. In addition, risk mitigation should always form part of security strategy.

In order to achieve this, it is essential to put effective substance abuse policies and procedures into place. Mandatory testing of each employee at the start of every shift needs to be included in the security policies of mining organisations. This approach has been proven to be highly effective, particularly where safety regulators enforce this as a daily, compulsory practice.

In addition to compulsory daily testing, it is essential to include educational programmes on the dangers of alcohol consumption in the workplace. Such programmes should include real-world examples of the consequences of actions taken under the influence.

The Occupational Health and Safety (OHS) Act



specifies a zero tolerance approach toward alcohol and drug use in the workplace. In addition, the South African Mine Health and Safety Act states that employers must provide conditions for safe operation, and may not permit intoxicated employees to enter mines. However, the benefits of minimising the risk posed by substance abuse in mining go beyond simple compliance. By including substance abuse into security, identifying intoxicated employees and not permitting them to enter a mine, mine owners can improve employee safety as well as ensuring maximum productivity.



UNEARTH POSSIBILITY

Discover all the latest in products, services, technologies and trends at the largest mining, industrial, machine tools, electrical and power generation trade show in southern Africa.

UNEARTH | DISCOVER | EXPLORE

- 850+ Exhibitors
- 6 Halls, 3 Marquees
- Outside Exhibits
- Newly Launched Powerex Show
- Free-to-attend SAIMechE Seminar



INCORPORATING:

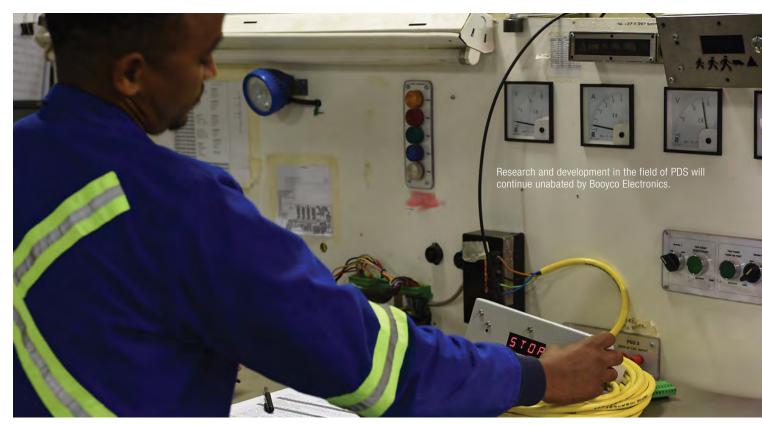




FOR MORE INFO CONTACT: Leigh Miller leighm@specialised.com Tel: +27 (0)10 003 3060

Brought to you by: SPECIALISED EXHIBITIONS MONTGOMERY

Smart and safe MINING MACHINES



egislation mandating the use of pedestrian detection systems (PDS) came into being in South Africa in 2015, driving the deployment of Booyco Electronics' locally manufactured systems on local mines.

Booyco Electronics' fully integrated PDS represents the latest generation of this technology and offers a supply of information, which allows the safety intervention capability coupled with a data hub that enables integration with trackless mobile machinery (TMM) and other OEM underground vehicles and equipment. Each PDS is deployed based on application specific risk assessments ensuring that it is fit-for-purpose.

Anton Lourens, managing director of Booyco Electronics, says the company's PDS incorporates very low frequency technology for pedestrian detection either on surface or underground together with GPS technology for vehicle detection on surface. It delivers specific warning, controlled slow-down and stopping zone alerts around a vehicle when detecting pedestrians or other vehicles. This is unique in that it is able to achieve zone shaping and create narrow band zones in close proximity to the side of vehicles.

It features full self-diagnostics, and has visual and voice display activated in the case of a PDS warning or a system failure. The technology incorporates various downloading options for recorded data including wireless when at an access point. It is supplied complete with testing equipment for both the surface and underground areas to ensure maximum functionality.

Lourens says the company has also developed a high processing power controller. It acts as a processing gateway and all sensing technologies and informational data is channelled through this. "This enables the user to create the requisite artificial intelligence which is fed to the control systems of the trackless mobile machinery on a site."

Importantly, it facilitates the enormous inflow of information, the processing thereof and then the presentation of it in a simple, easy to understand manner.

Research and development in the field of PDS will continue unabated, considering Booyco Electronics' ongoing interaction with mines and its participation in initiatives, such as The Earth Moving Equipment Safety Round Table (EMESRT) forum.

Participation at EMESRT, for example, has allowed the company to gain insight into global requirements for PDS equipment and share its own extensive experience gained over more than 10 years in this sector with leading international mining houses. "It is satisfying to be able to collaborate with these organisations in terms of the strides Booyco Electronics has made with its technology," Lourens concludes. ©



All Booyco Electronics PDS systems are subjected to quality control and testing systems to ensure reliable operation.

Sandvik reinvents

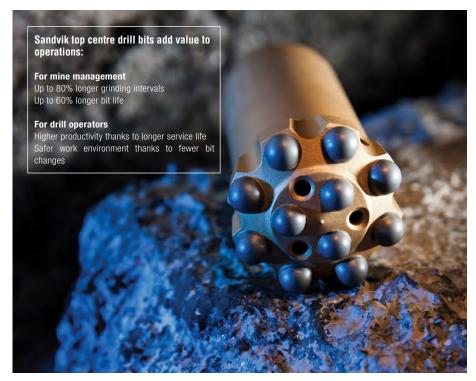
TOP HAMMER DRILL BIT DESIGN

Solving a problem that a customer experienced when drilling in abrasive rock conditions, has led to a ground-breaking new design for drill bits. The resulting Sandvik top centre drill bits, which incorporate the largest upgrades to face drilling bits in decades, are now available as standard products in three sizes. Primary applications for the top centre drill bits include face drilling and bolting in mining and tunnelling environments where long bit life is essential for cutting costs and improving productivity.

The top priority when developing the new top centre drill bit was to increase service life. Since the main reason for discarding a drill bit is excessive wear on the diameter, the simplest way to achieve longer service life is to add more gauge buttons. However, this can prove problematic because of the minimal space available. Furthermore, an increase in the number or size of the carbide buttons generally decreases the penetration rate: the same impact force yields a lower net force per button.

The new design solves these problems with a so-called raised front, elevating two or three front buttons – depending on diameter size – a few millimetres above the gauge buttons located on the periphery of the bit. Furthermore, the front buttons are set at a slight angle relative to the symmetric axis of the bit. The raised front creates a somewhat recessed hole bottom pattern that alters the rock-breaking action to achieve improved performance.

In addition to the new design, the top centre bit also features a new, innovative cemented carbide grade, the GC80. "The problem with the carbides that exist on the market today is that they are either wear-resistant or tough," says Robert Grandin, Product Manager Top Hammer Tools at Sandvik Min-



ing. "When developing the GC80, we wanted to combine the best of those two worlds in order to get as much as possible out of the top centre design."

The key to this is a completely new production method, which makes it possible to produce a button that improves wear resistance on the outside, yet combines toughness with a softer centre, pushing the service life and long grinding intervals even further.

Tool life improvements brought about by the Sandvik top centre design also yield significant health and safety benefits, since operators spend less time near an unreinforced face. "The new bit design essentially delivers more metres per shift compared with a standard bit thanks to less frequent bit changes," Grandin says. More than 1 000 hours of testing in widely varying conditions and sites in countries including China, Turkey, Bulgaria, Georgia, Zimbabwe, Australia, Mexico and Sweden have shown operators logging more drilled metres and more holes between each regrind. Less regrinding means less wear on the drill diameter. An additional benefit is more accurate collaring, which directly impacts the accuracy of drilled holes and consequently blasting results. "What started as a solution for an extreme customer problem is now a standard solution that can be used everywhere," Grandin concludes.

Top centre drill bits are available in bit sizes 43, 45 and 48 mm with 2–3 raised end buttons and 7–8 gauge buttons in grade GC80 and connections R32, Sandvik Alpha 330 and R35. ♥



'SEASONAL SERVICES' from Ritlee

itlee, a South African family business, has been in operation for 33 years. From supplying simply the 750 Industrial Rotary Mower, which remains a best seller, the company now offers wood chippers, wood shavers, compost turners, lawnmowers and related equipment to the agricultural, forestry and sawmill industries as well as to parks, commercial properties, schools and other institutions that are required to upkeep large premises. Started by Marc Custers, Ritlee has become well known for listening to its customers and supplying equipment and solutions that are of value. The company operates from Sebenza in Johannesburg and has an office on the KZN South Coast.

Many of the products supplied by Ritlee are designed in-house and manufactured locally. They take into account the conditions in which they will operate and, where required, will offer a customised solution for a particular application.

The company offers the following locally manufactured products, known as the 'yel-low range':

- Ritlee RHM garden and small farmer chippers and hammer mill.
- Ritlee 100 Junior Wood Chipper and Grinder.
- Ritlee 225 Termight Wood Chipper with both trailer and PTO options.
- Ritlee Compost Trommel screen.
- Ritlee Compost Turner.
- Ritlee Wood Shaver for the chicken and horse industries.
- 750 Ritlee Industrial rotary mowers.
- Springkaan lawnmower.
- Ritlee Slasher Mowers, Mulch Mowers and Hay Cutters.

In addition, the company imports and is a dealer for Morbark, Wright, Barber Beach cleaners, Backhus Compost turners and Koham Power pruners. The ranges here include hand-fed wood chippers (150 mmm to 508 mm); tree stump grinders, recycling equipment, industrial rotary mowers, beach cleaners, compost turners, tyre cutters and shredders and power pruners for the citrus, grape, nut, olive and forestry industries.

According to Nicolas Custers who manages the Johannesburg branch of the company, working within their industry it is important to be able to offer 'seasonal' services to clients. In winter, for example, there is less need for lawnmowers, but it is a good time to cut down unwanted trees and use, for example, the Ritlee 225 PTO wood chipper – with mulcher – to reduce wood chips to a size suitable for bulking up animal feed or for use as mulch in park beds. This technique can also be extremely valuable during times of drought when grass is at a premium and there are herds of cattle or batches of chickens to be fed.

The RHM 800 wood chipper can be used as a grinder and offers the option of different sized grates, to the size that they can be used to make mealie meal suitable for human consumption. This piece of machinery is used by small farmers in particular as it is both effective and cost effective.

The Ritlee wood shaver is ideal for making soft bedding for pigs, horses, sheep and chickens.

Crucial to the upkeep of land is compost. Composting and compost provide numerous opportunities for farmers or park-keep-



ers to improve their production systems. There is also the possibility of potential income either from selling surplus compost or from increased production supported by compost-improved soil. The TM3 compost turner hooks onto a tractor for windrow composting. This process aerates the compost making it organic and brown in colour, which is ideal for plants. The organic matter in compost improves soil nutrient-holding and water-retaining capabilities which, in turn, reduces fertilizer requirements and erosion while the enhancing soil. Wood chips can be added to the compost to feed the bacteria. The machine is ideal for making compost on site.

The company's business has extended into Africa and Ritlee sells equipment in Kenya, Zambia, Botswana, Mauritius and Madagascar. Aftersales support is offered to all customers and spares are kept on hand for Morbark products. A great benefit of using Ritlee products, however, is that most of them can be serviced at an average lawnmower shop, and belts and bearing are available over the counter. The only items that are imported are the blades.

THE FUTURE IS HERE

Southern Africa, has announced the arrival of one of Toro's finest utility vehicles, the Workman GTX series.

SPE's Stephen Mangold says that the Workman GTX is of such quality that it represents the future of easy, efficient and economical operation on golf courses, parks, farms, small-holdings and anywhere where carrying materials over unusual terrain is required. "The Workman GTX is a grounds and turf crossover vehicle that boasts an unequalled combination of comfort, utility and control, making it superior to any competitive product on the market right now," says Mangold. "The GTX's increased power, improved steering and exclusive suspension and braking systems make it the most versatile, practical and comfortable utility vehicle in its class."

He adds that amongst the most important differentiating factors of the Workman GTX are its futuristic features, including:

- Comfort coil-over shocks all around the vehicle deliver greater suspension, travel and adjustability resulting in a smoother ride and less operator fatigue.
- Control an automotive-grade rack and pinion steering system provides more control and lowers steering effort in loaded and empty operation.
- Versatility the Workman GTX is adaptable for any task. Two or four-seat configurations come with bench or bucket seats. Durability



 virtually unbreakable exterior components and a powder-coated frame and underbody give the Workman GTX superior durability.

 Power – whether you choose the 429 cc petrol or 48 V ac electric Workman GTX, power and performance come standard. An improved power to weight ratio boosts payload capacity and productivity.

SPECIALIST TANKS ideal for farmers



otoTank[™] is an owner driven business with over 35 years' experience In plastic roto-moulding and resins. The company produces polyethylene tanks that are ideal for the storage of most industrial chemicals, including a wide range of herbicides and fertilisers. The tanks are manufactured using food grade approved resin - the highest quality virgin, UV stabilised linear low density polyethylene plastic resin - so they are also suitable for the safe storage of potable water. They are impact resistant, non-corrosive and constructed in a single piece. All polyethylene water and chemical tanks go through a strict quality control procedure and each plastic rotomoulded polyethylene plastic resin product is embossed with a tracking serial number. The products are further backed up by an eight year warranty.

With its years of rotation moulding experience RotoTank is able to combine quality products and competitive prices to meet challenges faced by the agricultural market and prides itself on providing solutions that help farmers to remain sustainable during periods of drought and food shortage. For example, horizontal plastic tanks can be used to transport liquid feeds to livestock safely and easily for immediate relief.

According to sales manager, Wesley Bemelman, the strength of the company is that it offers the largest range of locally manufactured, custom designed tanks in Africa, which it delivers free of charge to customers throughout South Africa. The company also goes to great lengths to offer advice to clients on how best to make use of these tanks. Says Bemelman: "Because we deal only in tanks and we do not mass produce them, we take



the utmost care to provide our clients with affordable products they can trust".

RotoTank offers a full back-up service including site visits, general installation assistance and specialised additional servicing through its broad range of contacts. With the current drought and the country's ongoing threat of water scarcity, water tanks are an excellent way of collecting rainwater, especially as rainwater harvested from rooves does not require treatment before consumption.

On customer request, RotoTank[™] will cater for special colour finishes, including marble effect requirements, and can further attach the highest definition moulded on/in patented graphic design signage and decorative detail (MIGS[™]). ♥



ROVIC LEERS: Focused on a broad front

Rovic Leers, a supplier of equipment to South African farmers since 1927, is able to meet the bulk of the commercial farmer's requirement for mechanisation solutions. The contradiction of 'focus on a broad front' is the challenge Rovic Leers negotiates in the following ways:

Focus on:

- 1. Optimal mechanisation solutions rather than individual products.
- Knowledge of agricultural processes to resolve the needs of customers through original solutions.
- 3. Sound quality rather than inferior, unreliable products.
- 4. Brands with the best after-sales service available.

Broad front:

- Hay making, silage and straw handling
 - Mowers and mower conditioners
 (Kuhn)
 - Balers, small square (Cicoria) and round/big pack (Krone)
 - Forage harvesters (Kuhn and Krone)
 - Rakes (Tonuttl and Kuhn)
 - Bale wrappers (Kuhn)
 - Bale accumulators (Kuhns Mfg)
- Front end loaders (Rovic and Quicke) Animal nutrition

Horizontal (Seko) chopper/mixer feeder wagons, where cut length and quality are the main objectives in a homogeneous mixture; and vertical (Kuhn) chopper/mixer feeder wagons, where capacity and speed of mixing are the outstanding features. **Plant nutrition**

Precision fertiliser spreaders (Kuhn), fertilizer and lime spreaders (Rovic) and organic material spreaders (Kuhn) form a complete range of equipment and can be supplied with GPS compatibility.

Plant protection

- Boom sprayers
- The Degania sleeve boom
- Self-propelled boom sprayers
- Mist blowers

Primary and Secondary soil preparation

- Rovic Super 25 and Super 32 deep rippers
- Rovic Super/DLB 19 rippers
- Rovic DLB 12 chisel ploughs
- Remlinger strip cultivation equipment
- Rovic trash handicult and field span
- Kuhn rotary tillers and power harrows

Planters large seeds (maize, soya, sorghum, beans)

- Conventional pneumatic planters
- No tillage plate planters
- No tillage pneumatic planters
- Conventional and no-till trailed





purpose-built pneumatic planters Planters small seed and fine seed

- No-till Rovic tine planters
- No-till Kuhn, SDM and Select disc planters

Consumer and commercial items

- Net and twine for baling (Krone).
- Nozzles, filters, pumps, pressure

regulators and all spray components.Fire-fighting equipment+69-

- Ball valves, Bibcocks, Geka quick couplers
- Knapsack sprayers

Rovic Leers: www.rovicleers.co.za

FOTON LOVOL ROBUST. RELIABLE. SUPPORTED



MAXIMUM PRODUCTION MINIMUM DOWNTIME

Full backup and Support

100% Parts Availability

Full Workshop Facilities

On-site Support

46 Viewpoint Road, Bartlett, Boksburg

Dura Equipment Sales are the SOLE AGENTS for Foton Lovol Wheel Loaders in South Africa.

Visit our showrooms in

Gauteng:011 918 4760North West:072 820 3744Western Cape:021 988 6606Kwazulu Natal:082 359 9199

Contact the sales team

Coenie:083 251 8046 | coenie@durasales.co.zaJerry:082 895 5611 | jerry@durasales.co.zaPrinsloo:071 611 7281 | prinsloo@durasales.co.zaPottie:083 600 0729 | pottie@durasales.co.zaCurtis:082 359 9199 | curtis@durasales.co.za



LOVOL

www.durasales.co.za



You're not buying this.

What you're buying is so much more than a truck. It's a commitment. A partnership.

A whole solution designed and built around the working life of a vehicle, where Total Operating Economy is more important than just the initial purchase cost.

Uptime is crucial. If the vehicle is not working, it's not generating income. That is why the highest levels of reliability and durability are built into every model in our extensive range.

As a one-stop shop, the complete vehicle is also supported by one of the most proficient service networks in SA. Offering the greatest availability of parts and assistance, whenever and wherever you need it.

Payload is the next big thing. We have engineered our trucks to be the lightest yet strongest they can be. This is the key to offering the greatest payloads on the market.

And then there's the fluctuating cost of fuel. With Scania you can be confident that you are operating one of the most fuel efficient vehicles on the market. We can proudly say that this has been the case for decades.

Adding all this up, also taking the cost of R&M, finance, insurance and residual values into consideration, you will understand why we focus on total operating economy.

So if you're just buying trucks, we're probably not the supplier for you. But if you're buying a partnership, a commitment, a total construction solution, then we should talk.



There is a better way.