

CAPITAL EQUIPMENT¹ NEWS

For informed decision-making

AUGUST 2021



FUSO FJ26-280C HYP GETS 6 M³ STAMP OF APPROVAL

TOTAL COST OF OWNERSHIP: Driving transport operators' profitability

ELECTRIC TRUCKS: eActros – setting the benchmark in carbon-neutral goods transport

AFTERMARKET SUPPORT: Giving mines quality support, the way they choose



RENTAL

**36T, 50T, 80T EXCAVATORS
AND 5T LOADERS AVAILABLE**



Sany Southern Africa (Pty) Ltd

Tel: +27 11 9180318

WhatsApp: +27 768106195 /+27 637172510

info@sanysouthafrica.com

www.sanysouthafrica.com



CONTENTS

FEATURES

COMMENT

- 2** Casting the spotlight on TCO

COVER STORY

- 4** FUSO FJ26-280C HYP gets 6 m³ stamp of approval

TOTAL COST OF OWNERSHIP

- 8** Driving transport operators' profitability
12 Quality parts vital in balancing cost and availability

ELECTRIC TRUCKS

- 14** eActros – setting the benchmark in carbon-neutral goods transport

AFTERMARKET SUPPORT

- 18** Giving mines quality support, the way they choose

AFTERMARKET – RIGHT TO REPAIR

- 22** Imminent transformation for SA's aftermarket sector

CRUSHING

- 26** The evolution of crushing equipment

DEMOLITION ROBOTS

- 32** Benefits of remote-controlled demolition equipment for mining

TOTAL COST OF OWNERSHIP – TRAILERS

- 36** A holistic approach to trailer total cost of ownership

THOUGHT LEADERSHIP

- 31** The importance of tracking and fleet management
35 Driving profitability through innovative solutions

NEWS

MINING NEWS

- 40** BELAZ presents prototype of an all-electric mining dump truck
40 thyssenkrupp sells mining business to FLSmidth
41 Liebherr to present its latest innovations at MINExpo 2021
41 Hytec appoints new partner to support growing mine market in Zimbabwe

TRANSPORT NEWS

- 42** Latest DAF trucks hit the highways
42 Volvo Trucks donates R1,68-million to help rebuild SA

CONSTRUCTION NEWS

- 43** Smith Power appointed distributor of Bomag's light compaction range
43 Kemach is the new distributor of BULL backhoe loaders

Capital Equipment News is published monthly by Crown Publications

Editor:

Munesu Shoko
capnews@crown.co.za

Features writer:

Mark Botha
markb@crown.co.za

Advertising manager:

Elmarie Stonell
elmaries@crown.co.za

Design:

Ano Shumba

Publisher:

Karen Grant

Deputy publisher:

Wilhelm du Plessis

Circulation:

Karen Smith

PO Box 140
Bedfordview 2008
Tel: (011) 622-4770
Fax: (011) 615-6108

www.crown.co.za

Printed by Tandym Print

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



Total circulation Q1 2021: 9 127

<https://crown.co.za/capital-equipment-news>



CASTING THE SPOTLIGHT ON TCO

Everyone wants to save a buck. Yes, we all do. However, in our pursuit of savings, there are some areas where we shouldn't skimp. One area where the majority of people seek to save is on the sticker price. However, in big ticket purchases such as capital equipment, spending more cash up front can be worth every penny in the long run.

For mission-critical assets such as trucks and yellow metal equipment, the capital cost shouldn't be the only factor buyers

consider when evaluating the cost of their acquisitions. Cheap equipment may seem like a bargain, but you could end up spending more overall if, for example, you have the equipment standing all the time.

A machine that appears to be competitively priced may end up costing hundreds of thousands more than a higher priced machine because it may deliver lower productivity, increased fuel and maintenance costs, and a lower resale value.

As you will see in this edition of **Capital Equipment News**, we cast the spotlight on total cost of ownership (TCO), an important metric that helps capital equipment owners make better decisions when acquiring assets. Total cost of ownership includes everything from the original purchase price to the daily running and maintenance costs, depreciation, finance and even 'hidden' costs such as insurance and employee wages.

TCO is an assessment of all costs, direct and indirect, involved with an item over the useful life of that item. Most frequently, TCO is used at the beginning of the purchase process to evaluate which is the most cost-effective choice. When TCO is calculated at the time the selection decision is being made, many of the included costs are estimated, because they have not yet been incurred.

Calculating the total cost of ownership can give an organisation more detailed information with which to make the purchasing decision. Most buyers know that quoted purchase price is not the only cost involved in obtaining and using an item. Inclusion of all other known cost factors allows a more complete picture to emerge.

TCO requires a purchaser to identify and measure costs beyond the standard unit price, transportation and tooling when

evaluating purchase proposals or supplier performance. Formally, total cost of ownership is defined as the present value of all costs associated with a product that are incurred over its expected life.

Forward-thinking companies base purchase decisions and evaluate suppliers on cost elements beyond unit price, transportation and tooling. Research indicates, however, that companies differ widely about what cost components to include in a total cost analysis. Typically, these costs can be broken into four broad categories: purchase price, acquisition costs, usage costs and end-of-life costs.

Purchase price is the amount paid to the supplier for the product, service or capital equipment. Acquisition costs are all costs associated with bringing the piece of equipment to the customer's location. Examples of acquisition costs are sourcing, administration, freight and taxes.

In the case of capital equipment, usage costs are all costs associated with operating the equipment through its life. Examples of usage costs are inventory, conversion, scrap, warranty, installation, training, downtime and opportunity costs. End-of-life costs are all costs incurred when the equipment reaches the end of its usable life.

When procurement departments use TCO to get a complete picture of the overall costs associated with a product or service acquisition, the benefits go beyond just cost reduction over time. Supplier relationships strengthen because they are no longer strained by extreme cost-cutting measures, competitive advantage improves, and the company gains visibility over its overall performance. TCO typically produces a win-win result for both the buying organisation and for its supplier-partners. 🌟



Munesu Shoko – Editor



capnews@crowd.co.za



[@CapEquipNews](https://twitter.com/CapEquipNews)

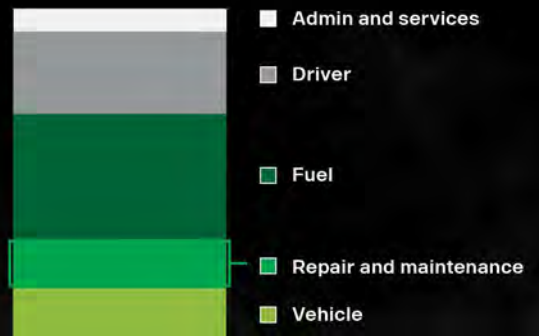


Scan QR CODE to visit and read our latest news



REDEFINING YOUR TOTAL COST OF OWNERSHIP

USE PROVEN **10%** FUEL SAVINGS TO PAY ZERO
MONTHLY MAINTENANCE COSTS



Using the Scania New Generation proven fuel efficiency cost savings to maintain every truck at zero cost, has the potential to remove significant costs from an operator's total cost of ownership. This is revenue that can boost profitability giving New Generation Truck owners a compelling and sustainable competitive advantage.

Get the gamechanger. Get the Scania New Truck Generation.

Redefine total cost of ownership. Visit www.fuelefficiency.co.za

*Fuel consumption figures calculated using monthly data collected from Scania Fleet management monitoring system on the NTG R500.

SCANIA



Métier Mixed Concrete is the first company in South Africa to trial the FUSO FJ26-280C HYP.

FUSO FJ26-280C HYP GETS 6 M³ STAMP OF APPROVAL

Métier Mixed Concrete is the first company in South Africa to put the FUSO FJ26-280C HYP through rigorous testing for a month. Both management and drivers give the enhanced product a thumbs up and declare it fit to accommodate a 6 m³ capacity. This is one of the key buying factors for the company, which has just purchased six models of this game-changer to further expand its fleet of almost 100% Daimler products.

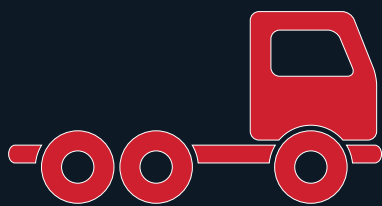


Métier Mixed Concrete has been a customer of Daimler Trucks & Buses Southern Africa for the past 13 years, operating predominantly the Mercedes-Benz Axor and Arocs models

Métier Mixed Concrete started from humble beginnings in 2007 with one plant in Durban, and despite a relatively volatile operating environment over the years, the company has made great strides which



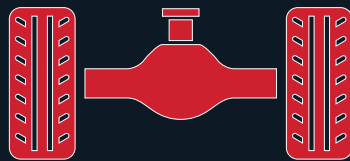
The company has purchased six models of the vehicle, further expanding its fleet of almost 100% Daimler products.



Métier Mixed Concrete is the first company in South Africa to put the FUSO FJ26-280C HYP through its paces



After a month of testing the vehicle, the company is impressed with its overall performance



The FUSO FJ26-280C HYP is specifically fitted with hypoid rear axles (single reduction axles), contributing extensively to low fuel consumption and reducing the tare weight of the vehicle

led to the development of six additional plants in Gauteng. The flourishing company is a wholly owned subsidiary of Sephaku Holdings Limited and is well-positioned as a market leader in the construction industry, remaining at the forefront of ready-mix concrete technology.

The company has been a long-standing customer of Daimler Trucks & Buses Southern Africa for the past 13 years, operating with predominantly the Mercedes-Benz Axor and Arocs models. With a near 100% Daimler fleet, it proudly boasts 100 – 170 vehicles between its fleet and owner-

drivers. Métier Mixed Concrete confirms that it has been waiting in great anticipation to add reliable and durable FUSO products to its fleet.

First FUSO FJ26-280C HYP
Fast-forward to April 2021, FUSO Trucks



JP van Dyk, plant manager at Métier Mixed Concrete's Lyttleton Plant.



"We are exceptionally happy that FUSO has set the bar high with the FJ26-280C HYP to meet our business needs. After obtaining the weighbridge results, the vehicle quickly proved that it is suitable for the application. I can safely say that it is an impressive truck that can operate under the toughest conditions and is suitable for the South African market."

Doug Thring, national operations manager at Métier Mixed Concrete

KEY BUYING FACTORS FOR MÉTIER MIXED CONCRETE



Suitability for the application



Price, service and after-sales support



6 m³ payload



Approximately 8 operating hours a day

lives up to its promise of delivering "Simply Better Trucks" with the successful launch of the FUSO FJ26-280C HYP. Since its entrance into the market, it has had everyone wondering so "What's the HYP all about?" Métier Mixed Concrete is thrilled to be the first company in South Africa to give feedback on the outstanding performance of the vehicle.

Doug Thring, national operations manager at Métier Mixed Concrete, says: "Being the first company to be granted the opportunity to test the truck is a privilege for us. We are delighted to see that FUSO Trucks values constructive feedback from its customers; this tells you a lot about the brand and what it stands for. After a month of testing the vehicle, we are extremely impressed with its overall performance. We strongly believe that it is the best product for our current and future business growth, and a perfect solution for the greater industry. The 6 m³ payload capacity is a game-changer, given the low fuel consumption and driver comfort. These key factors have influenced our company to purchase six models directly after testing."

Suitable for application

The FUSO FJ26-280C HYP is specifically fitted with hypoid rear axles (single reduction axles), contributing extensively to low fuel

consumption and reduction of the tare weight of the vehicle. This is to ensure that the vehicle can accommodate a 6 m³ concrete mixer and still comply with the permissible axle loads.

"We are exceptionally happy that FUSO has set the bar high with the FJ26-280C HYP to meet our business needs. After obtaining the weighbridge results, this vehicle quickly proved that it is suitable for the application. I can safely say that it is an impressive truck that can operate under the toughest conditions and is suitable for the South African market," comments Thring.

Fuel economy goes a long way

In every corner of South Africa, fuel costs continue to be a challenge for fleet owners. The fluctuation of these costs and consumption play a significant role in the overall profits of fleet companies. As the price of fuel may be beyond the fleet owner's control, the only way to mitigate these costs is to focus on vehicle fuel efficiency, operating parameters and driver behaviour.

Thring adds: "After a month of intensive testing, the fuel economy achieved on the vehicle met our expectations. We are pleased with its consumption and the better turnaround time as they will contribute significantly to fuel efficiency and reduce the total cost of ownership. With the new models that we have recently purchased, we certainly look forward to further savings, which will become tangible profits in the long run."

Increased productivity

Looking at the construction industry, it is evident that most truck manufacturers are investing further in several options to enhance driver comfort and safety to increase productivity. The FUSO team has invested heavily in the FJ26-280C HYP to ensure that these key factors are a priority.

Thring says: "From a driver's point of view this is a robust truck suitable for the South African terrain. The vehicle drives very well, offers smooth gear changing and better handling on turning circles. There were absolutely no issues even driving it on wet sites; it went everywhere and showed no signs of getting stuck. I can confidently say that it is a vigorous vehicle and drives very well in most conditions."

SA construction future

It is no secret that the construction industry has been under significant pressure for some time.

"It has been tough for a while even before the pandemic, and it got tougher after the first hard national lockdown. We only started to see a pick-up in construction works within two months of lockdown for a sustainable level of production. For this reason, we have witnessed many small to medium, independent and some of the large operators closing down."

"With that said, we remain optimistic that the industry is starting to build its way back to positive growth, while in the same breath, we are also cautious as in the past 10 years we have had a lot of peaks and valleys. We are seeing an increase in tender activity and some decent infrastructure projects. These positive developments have given us the courage to further expand our business in Cape Town," he says.

"As we continue to grow our business, we look forward to further invest in the FUSO brand when a business need arises. The team has done its homework with this new model, it aligns perfectly with our business ambitions of building a concrete legacy in South Africa and I would certainly recommend it to any ready-mix concrete company looking into expanding its fleet," concludes Thring. 🌐



RGM Cranes' 30 years in the heavy lifting industry have allowed it to amass a wealth of knowledge in the manufacture and supply of overhead cranes and gantries in Africa. By acquiring an uncompromising understanding of the very specific requirements of various business environments, the company is able to design, manufacture, install and maintain lifting equipment for optimal safety and productivity.

HEAD OFFICE
+27 11 422 3690
info@rgm.co.za

CRANE SALES
Emel Fleischmann
+27 82 653 8824

www.rgmcranes.co.za





A fleet of Scania mining tippers has proven to be a cost-effective hauling solution for a South African limestone operation.

DRIVING TRANSPORT OPERATORS' PROFITABILITY

In the midst of a challenging business environment, transport operators are being squeezed in every direction, hence a renewed focus on total cost of ownership (TCO). With its TCO business model that entails a three-pillar approach, Scania delivers an accurate measurement tool that covers various elements critical to customer profitability, writes *Munesu Shoko*.

When times are this tough, price tends to dictate whatever people buy. Understandably, in a difficult economy capital isn't always available, and procurement decisions are forcibly taken based on capital cost, without necessarily factoring the 'hidden' lifecycle ownership costs.

Total cost of ownership is no new term, but what does it mean for cash-strapped transport operators who need to make wise decisions on their capital equipment purchases? Ongoing costs after you have written the cheque for the truck are just as important, if not principal, as the purchase price.

A focus on TCO analysis uncovers both the obvious and the hidden costs of ownership. TCO highlights the difference between purchase price and long-term costs. There is actually a general school of thought according to which owning the equipment could cost between five and eight times the purchase price, if not more.

Scania's value creation, explains Harold Donachie, Scania Truck sales manager, is built on the company's ability to provide its customers with profitable and sustainable transport solutions that contribute to the success of their businesses.

Various factors

"Our TCO business model applies a three-pillar approach to sustainable transport solutions and delivers an accurate measurement tool that covers various elements – energy efficiency, renewable fuels/electrification, as well as smart and safe transport – that deliver lasting value for our customers," says Donachie.

TCO, he says, is a successful tool that most customers use within their operations, as it covers all the critical elements, such as vehicle cost plus finance charges, insurance, driver cost, tyres, service cost, and fuel and toll fees, among others.

The importance of being able to design a completely



Reduced R&M rates with longer service intervals have a great impact on a truck's TCO.

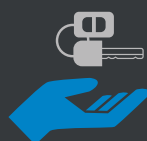
QUICK TAKE

A focus on TCO analysis uncovers both the obvious and the hidden costs of ownership

Scania's TCO model has a special focus on three key pillars: energy efficiency, alternative fuels and electrification, as well as smart and safe operations

With alternative fuels and electrification, Scania seeks to provide realistic solutions that work today

TCO is a true reflection of the actual vehicle performance that allows Scania to tailor solutions that meet customer requirements



used is a litre saved) over the life of the truck, and reduced R&M (repair and maintenance) rates with longer service intervals," he says.

Three pillars

Scania's TCO business has a special focus on three key pillars: energy efficiency, alternative fuels and electrification, as well as smart and safe operations.

The OEM ensures energy efficiency in multiple ways – from engineering to the driver, by constantly improving its engines to use less energy; by coaching drivers to use less fuel and following up on the results, and by using operational data to optimise vehicle specifications.

"With alternative fuels and electrification, we are seeking to provide realistic solutions that work today. While electrified vehicles might be the best alternative for some, biogas and HVO will be the only option for others. By offering a solution for every problem and circumstance, we help each business become as sustainable as it can be," he says.

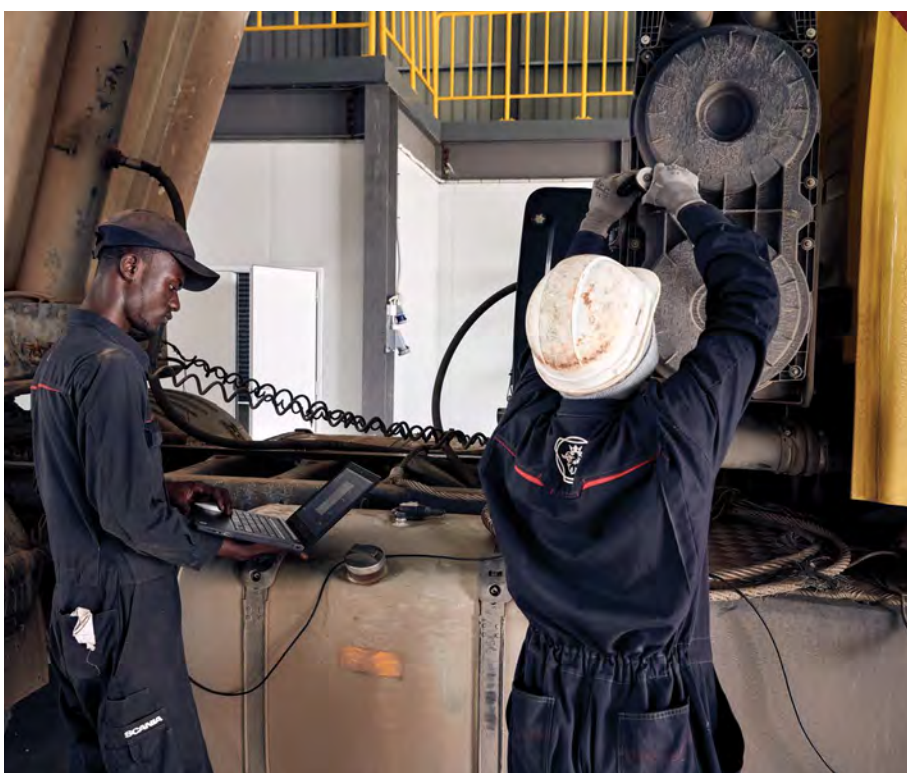
Smart and safe operations are all about increasing efficiency and eliminating waste in the logistics system. "Connectivity plays a major part in sustainable transport solutions. With connectivity for every vehicle, business get real-time data to make smarter choices. With data driven services such as fleet management, transport companies can optimise routes and fleet utilisation, and improve overall efficiency," he says.

optimised vehicle and support both its ownership and use with related services such as financing, service contracts and fleet management is difficult to overestimate in today's competitive transportation world.

"When compiling the TCO costing with the customer, the critical elements that have a great impact on the cost would be the cost of capital, linked with preferential insurance rates, fuel efficiency improvement (a litre not



Scania's value creation is built on the company's ability to provide its customers with profitable and sustainable transport solutions that contribute to the success of their businesses.



Scania's solutions integrate the company's collected expertise on both trucks and various transport solutions as well as their specific characteristics.

Tailored solutions

For Scania, each truck is a production unit. The better adapted it is for its unique assignment and the more supported it is by applicable customised services, the greater the transport operator's chances of getting a return on their investment. Scania's solutions integrate the company's collected expertise on both trucks and various transport solutions as well as their specific characteristics. By focusing on each customer's unique needs, based on experiences, operational data and market knowhow, Scania's solutions feature concrete added value that benefits the customer.

TCO, says Donachie, is a true reflection

of the actual vehicle performance that allows Scania to tailor solutions that meet customers' requirements. The solutions include vehicles and services costing, optimised to each customer's operations to improve fuel efficiency and maximise the vehicle's time in operation. "This calls for continued dialogue with our customers, built on trust and often based on long-term relationships," says Donachie.

The partnership approach, he adds, does not end with the customer. "We must understand our customers' needs, but also their customers' demands. Combining this with our established flow thinking, Scania tailors solutions that eliminate waste

and improve efficiencies in the entire transport operation. We are also part of an ecosystem where we cooperate with stakeholders such as biofuel producers, energy suppliers and governments, thus ensuring a focused approach to sustainable transport," he says.

This business model is driven by Scania's understanding that its customers' profitability translates into its own success. "The success of our own business is directly linked to the quality of service we offer to our customers and how well their businesses perform. Driving customer profitability through sustainable transport solutions and pursuing responsible business are complementary, long-term perspectives to continue being a profitable company," he says.

In conclusion, Donachie sees the Scania Modular system providing the ultimate starting point for vehicles perfectly tailored to each unique application using the three-pillar approach, supported by the TCO model that uses actual customer data that is relevant and adds meaning to their business.

The basis is of course Scania's enormous trucking expertise, its modular system and vehicle data collected from tens of thousands of vehicles in actual operation for many years. To this, the company has added knowledge from industry studies, customer interviews and marketing workshops, in close dialogue with its existing customers.

The result is a Scania-unique toolbox that gives the company's sales staff, regardless of market or customer type, access to expertise that enables them to not only offer a truck but also a customised solution that, based on each customer's unique needs, has full potential to become profitable. 🌱

LIGHTEN THE WORKLOAD WITH OUR HEAVY DUTY TYRES

No matter the conditions, these Dunlop TBR tyres are perfect for on and off-road, mining and construction applications. With enhanced traction and tread life, for tackling rugged terrain with ease.

SP931

The SP931 is suited for construction, refuse and dump trucks. It offers a wide lug pattern for extra-long tread life and enhanced traction under the toughest conditions with a strong casing design for stone damage protection. Only intended for short-haul and off-road applications.

SP925A

The SP925A is designed for drive-axle use and suited for construction, dump truck and mining usage. A special tread compound offers improved cut and chip-resistance and deep tread grooves improve off-road traction. Stone ejectors reduce stone trapping and stone drilling into the casing, improving retreadability. Only intended for short-haul and off-road applications.

SP281

The SP281 is an all-position tyre with a premium tread depth of 19.2mm. Designed for short-haul, on and off-road steer applications. The tyre is also well-suited for short to regional-haul, on and off-road trailer applications. The 4-rib, wide shoulder block pattern, with wide tie-bars, provides excellent resistance to shoulder rib failures in tight turns and scuffing on tri-axle trailers. Stone ejectors prevent stone trapping and stones drilling into the casing for improved retreadability.



MY TYRES



CLICK2FIT

www.dunloptyres.co.za

DUNLOP
COMMERCIAL TYRES

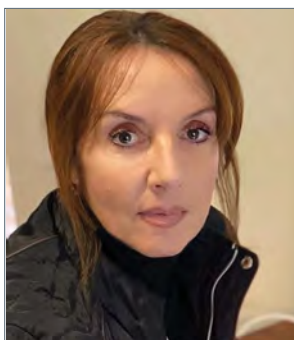
IPD parts for a CAT C15 industrial engine.



QUALITY PARTS VITAL IN BALANCING COST AND AVAILABILITY

For any business whose profitability depends on the availability of its equipment, the mandates given to operations on the one hand and procurement on the other are vital for success. *Capital Equipment News* spoke to Kim Fox at IPD Parts SA about how total cost of ownership can be improved with the right approach to aftermarket sourcing.

TALKING POINT



"Driving down the total cost of ownership is a team effort, and everyone needs to be pulling in the same direction with an eye on the long term – rather than only prioritising daily savings in the here and now. Fortunately, when it comes to sourcing quality parts, there is a solution that suits both the operational demands and the cost pressures that most businesses face."

Kim Fox of IPD Parts SA

have discovered.

"Well-managed businesses are those whose leadership sees the big picture," says Fox. "This approach focuses on the cost of a machine's ownership over its whole life cycle – as a function of what it contributes to the company's bottom line."

She emphasises that productive assets are the lifeblood of project fulfilment, customer satisfaction and long-term brand building – those basic pillars upon which great businesses are built. In this context, unscheduled breakdowns are poison to the enterprise, undermining everything that good strategy tries to achieve.

Living many lives

"Ensuring availability and productivity of these assets means quality maintenance

It is certainly no secret that most equipment-owning companies struggle to balance the needs of efficient operation and cost effective procurement. This may even lead

to the occasional tension between what the operations manager wants and what the procurement manager is prepared to purchase. There is a constructive way through this, however, as many companies



It is certainly no secret that most equipment-owning companies struggle to balance the needs of efficient operation and cost effective procurement



Well-managed businesses are those whose leadership sees the big picture. This approach focuses on the cost of a machine's ownership over its whole life cycle – as a function of what it contributes to the company's bottom line



Ensuring availability and productivity of these assets means quality maintenance and even better quality remanufacture – which includes the integrity of the spare parts fitted



The IPD range of heavy-duty engine parts are engineered from scratch and patented, delivering even added benefits over the OEM wear parts

for instance, then the result may be the inadvertent reduction of machine life – or worse, early failure and unplanned downtime.

“Driving down the total cost of ownership is a team effort, and everyone needs to be pulling in the same direction with an eye on the long term – rather than only prioritising daily savings in the here and now,” says Fox. “Fortunately, when it comes to sourcing quality parts, there is a solution that suits both the operational demands and the cost pressures that most businesses face.”

Value-added designs

Most companies wisely steer away from pirate parts, which are spares that may look like originals but simply do not deliver the longevity required. Their provenance or source is also often unclear, making it impossible for a responsible buyer to make an informed decision.

“By contrast, the IPD range of heavy-duty engine parts are engineered from scratch and patented, delivering even added benefits over the OEM wear parts,” she says. “Based in the USA, IPD produces these parts in its own manufacturing facilities around the world, in accordance with ISO 9001:2015 standards.”

This range of major parts includes pistons, conrods, valves, bearings and gaskets – all designs being thoroughly tested in laboratories and in the field before being released to the market. Fox says this provides customers with the level of confidence they need, to make important equipment maintenance decisions for the future.

“Particularly with the rising cost of equipment replacement, there are many good financial reasons for owners to refurbish,” she says. “The decision needs to be carefully made, however, with an accurate prediction of how many more hours of production can be expected from a refurbished unit.”

The highly competitive pricing of IDP spare parts makes them attractive in comparison to OEM parts, while the integrity of the design and manufacture ensures they will meet or exceed customer expectations and estimates of longevity.

“This uncompromising solution provides the common ground to suit the priorities of both operations and procurement, while giving the company a firm foundation of equipment reliability and availability going forward,” she says. “Quality IPD parts allow costs to be controlled, ensuring that total cost of ownership is kept to a minimum.”



An IPD gasket set for a CAT C13 engine.

and even better quality remanufacture – which includes the integrity of the spare parts fitted,” she says. “Equipment like large diesel engines are built for multiple lifespans, but can only deliver these if remanufactured to OEM specifications and with quality parts.”

Here is where the tensions begin to show if a company has not strategically aligned its management mandates. If the procurement manager is incentivised to keep the cost of parts as low as possible,



IPD water pump for the CAT 3500 engine series.



On June 30, Mercedes-Benz Trucks celebrated the world premiere of its battery-powered eActros for heavy-duty distribution.

eACTROS – SETTING THE BENCHMARK IN CARBON-NEUTRAL GOODS TRANSPORT

With the world premiere of its battery-powered eActros, the first fully-electric series-production truck bearing the three-pointed star, Mercedes-Benz Trucks is ringing in a new era and simultaneously highlighting its clear desire to achieve CO₂-neutral long-distance haulage. *By Munesu Shoko.*



"We have to acknowledge that transport is a part of the problem when it comes to climate change. At the same time, we can and we will be part of the solution. We start with our eActros. We developed this truck together with our customers, and we tested it together – all in all more than half-a-million kilometres on public roads."

Karin Rådström, member of the Board of Management at Daimler Truck AG and responsible for Mercedes-Benz Trucks



"This is certainly a giant step towards an electrically driven future and we are proud to be a part of a brand that is continuously at the forefront of developing cutting-edge solutions for customers. As we wait in great anticipation to officially launch this truck of the future in the South African market, we look forward to possible customer demonstrations and trial opportunities."

Maretha Gerber, vice president: Sales & marketing at Mercedes-Benz Trucks Southern Africa

is thus working hard to achieve its aim to achieve CO₂-neutral goods transport using battery-electric and hydrogen-based fuel-cell technologies. The company identifies with the Paris Agreement's aim to decarbonise the sector and wishes to completely switch its European product portfolio over to electrically powered trucks by 2039.

Speaking at the virtual world premiere of the eActros held on June 30, 2021, Karin Rådström, member of the Board of Management at Daimler Truck AG and responsible for Mercedes-Benz Trucks, said: "We have to acknowledge that transport is a part of the problem when it comes to climate change. At the same time, we can and we will be part of the solution. We start with our eActros. We developed this truck together with our customers, and we tested it together – all in all more than half-a-million kilometres on public roads. The eActros and its dedicated services are a big step for Mercedes-Benz Trucks and for our customers towards CO₂-neutral transport."

After Mercedes-Benz Trucks had presented the concept vehicle for a heavy-duty distribution haulage truck for urban areas at the IAA 2016 for Commercial Vehicles in Hanover, Germany, practical testing of 10 eActros prototypes in cooperation with customers in Germany and other European countries began in 2018. The objective of the "eActros Innovation Fleet" was to launch a series-ready eActros on the market in 2021.

"Development of the eActros focused on the partnership with our customers. Everything that we learned from the Innovation Fleet is now being incorporated in series production. Compared with the prototypes, several features such as range, drive power and safety have been considerably improved in the series-production model," explains Andreas von Wallfeld, head of Marketing, Sales and Services at Mercedes-Benz Trucks.

First fully-electric series-production truck

The eActros from Mercedes-Benz Trucks is now the first fully-electric series-production truck bearing the three-pointed star and thus marks an important step in the direction of CO₂-neutral goods transport. Further steps for long-distance haulage are also in the pipeline: series production of the low-floor Mercedes-Benz eEconic truck is expected to start in 2022. In addition to this, the battery-electric eActros LongHaul is expected to be launched in 2024 and the GenH2 Truck with hydrogen-based fuel cell will come in the second half of this decade.

From Q3 2021, the series production model will be produced at Mercedes-Benz Trucks' largest truck assembly plant


The logistics sector is facing a massive set of challenges: on the one hand, environmental regulations are getting even more demanding, while on the other, the global transport volume is increasing. The increasing volume of goods needs to be transported as sustainably and efficiently as possible.

In view of its social responsibility for climate protection, Mercedes-Benz Trucks

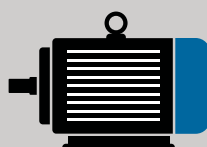


The eActros is perfectly equipped for daily operations in distribution transport with regards to availability and performance.

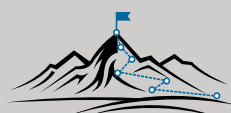
QUICK TAKE




The eActros from Mercedes-Benz Trucks is the first fully-electric series-production truck bearing the three-pointed star and thus marks an important step in the direction of CO₂-neutral goods transport



The truck has a permissible gross vehicle weight with trailer of up to 40 tonnes and two powerful electric motors delivering a top performance of 400 kW



Thanks to a maximum capacity of 420 kWh², a range of up to 400 km is realistic



To assist transport companies along every step of their way into eMobility, Mercedes-Benz Trucks offers a comprehensive eConsulting and intelligent digital solutions for the eActros

in Wörth am Rhein, Germany. In recent months, intensive preparations have been made for the new production processes there. This includes the construction of a new assembly line.

In an initial phase the series-production model of the eActros will be available in selected European markets, including Germany, Austria, Switzerland, Italy, Spain, France, the Netherlands, Belgium, Great Britain, Denmark, Norway and Sweden. Further markets, including South Africa, will follow at a later stage depending on

viability and market demand. Introduction of e-vehicles for the South African market is expected in 2024/2025.

Up to 400 km

When transport companies opt for an electric truck, decisive criteria include range, power delivery, rapid recharging, suitability for daily use and a versatile range of possible applications, not to mention low noise levels and locally CO₂-emission-free driving. The eActros ticks all these boxes.

"With a range of up to 400 km, a

permissible gross vehicle weight with trailer of up to 40 tonnes and two powerful electric motors delivering a top performance of 400 kW, the eActros is perfectly equipped to handle the daily work of our customers," explains Von Wallfeld.

The eActros is available as a two or three-axle truck with 19 or 27 tonnes permissible gross weight. Serving as the basis of the new truck is the frame of the Mercedes-Benz Actros. At the technological heart of the eActros is the drive unit with two integrated electric motors along with a two-speed transmission.

Both motors provide for impressive ride comfort and great vehicle dynamics, while the quiet and emission-free electric drive means the truck can also be used for night deliveries and entry into inner-cities with driving bans for diesel vehicles. Depending on the version, the eActros draws its power from three or four battery packs – each with a capacity of around 105 kWh³.

Thanks to a maximum capacity of 420 kWh², a range of up to 400 km is realistic. The eActros can be charged with up to 160 kW. When connected to a regular 400A DC charging station, the three battery packs need a little longer than 1 hour to charge from 20 to 80%. "Thus the eActros is perfectly equipped for its daily operations in distribution transport with regards to availability and performance," says Von Wallfeld.

A display in the standard Multimedia Cockpit Interactive keeps the driver up-to-date on the charge level of the batteries and the remaining range, as well as the current and average energy consumption in kWh per 100 km.

Besides the drivetrain, the batteries also supply the electricity for the entire vehicle. Thus, for example, auxiliary units such as the air compressor for the brakes, the compressor for the cab's air conditioning and, if fitted, a refrigerated body are also electrically powered. If required, the battery packs can be replaced with ease.

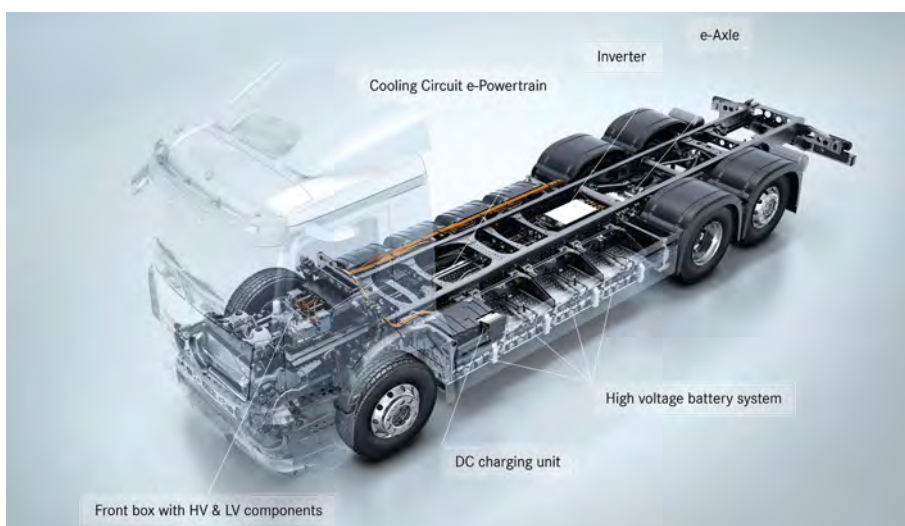
High level of safety

Numerous features and systems in the eActros ensure a high level of road safety for the driver and other road users. For example, special crash elements with an aluminium profile protect the batteries in the event of a side-on crash, while sensors integrated in these can detect a crash scenario. In such a case, the HV battery would be automatically isolated from the rest of the vehicle. What's more, the driver always has the option of actuating the HV shutoff at any time in the cab.

Meanwhile, to ensure the vehicle is easier for road users such as pedestrians and cyclists to hear, the eActros comes



Using the Multimedia Cockpit Interactive which comes as standard in the eActros, the driver remains constantly up-to-date with the charge level of the batteries and the remaining range.



At the technological heart of the eActros is the drive unit with two integrated electric motors along with a two-speed transmission.

standard with an external Acoustic Vehicle Alerting System (AVAS). Also assuring additional safety when turning off to the nearside is the Sideguard Assist, which comes as standard on the eActros.

Another system which is part of the standard scope of equipment is the fifth-generation Active Brake Assist emergency braking system with pedestrian recognition. This can help to reduce the risk of a collision in the longitudinal direction on urban streets, out-of-town roads or motorways.

With all assistance systems, Mercedes-Benz Trucks aims to support the driver as much as possible within the respective limits of each system. However, as the law prescribes, the driver remains fully responsible for driving the vehicle safely at all times.

"The eActros is equipped as standard with some proven core innovations, such

as MirrorCam and Multimedia Cockpit Interactive, not to mention our safety systems such as the emergency braking assistant with pedestrian detection and Sideguard Assist," explains Prof. Uwe Baake, head of Development at Mercedes-Benz Trucks.

Business eco-system

To assist transport companies along every step of their way into eMobility, Mercedes-Benz Trucks has embedded the eActros in an eco-system which also provides advice and services, as well as a range of digital solutions to increase capacity utilisation of the vehicle and to optimise the total cost of ownership.

For example, using a customer's existing route plans, it is possible to establish a highly realistic and meaningful usage profile for electric trucks. The so-called eConsulting

doesn't just include electrification of the depot, but – if the customer desires – also covers questions concerning planning, applying for and implementing everything to do with the charging infrastructure and connection to the electricity network.

To this end, Mercedes-Benz Trucks has established a strategic partnership with Siemens Smart Infrastructure, ENGIE and EVBox Group. Plus, if required, Mercedes-Benz Trucks can additionally provide help with identifying any available public grants for infrastructure and vehicles.

The eActros is also available with Mercedes-Benz Complete – a service contract including the All-round Carefree Package. The extensive service package covers workshop activities for the maintenance and repair of both the entire vehicle and the drivetrain, including wear parts. "It starts with the co-ordination of appointments and covers everything as far as accounting. This ensures customers have comprehensive cover and that their vehicle remains operational as planned," explains Von Wallfeld.

Equally always included in the service contract is intensive customer support through Mercedes-Benz Uptime. This is because fleet operators are keen to have any issues arising during daily operations detected and rectified as quickly as possible. The intelligent system comprises all relevant vehicle data – from tyre pressure to the engine, and now to the battery status too.

"In this context, Mercedes-Benz Uptime has been extended by more than 100 e-specific rules which constantly monitor, for example, charging processes or voltage history associated with the high-voltage battery. In addition, the information is available via the new cloud-based customer portal. Thanks to the networking between Mercedes-Benz Service and the transport companies, trips to the workshop can be planned and unexpected downtime caused by breakdowns can be avoided," concludes Von Wallfeld.

"The global debut of this ground-breaking vehicle was certainly an electrifying and sensational moment for us locally. Hats off to our Mercedes-Benz Truck counterparts for this revolutionary vehicle that sets the brand apart. This is certainly a giant step towards an electrically driven future and we are proud to be a part of a brand that is continuously at the forefront of developing cutting-edge solutions for customers. As we wait in great anticipation to officially launch this truck of the future in the South African market, we look forward to possible customer demonstrations and trial opportunities," concludes Maretha Gerber, vice president: Sales & Marketing at Mercedes-Benz Trucks Southern Africa. 🌟

Strength through diversity





BELL



Partnered with world acclaimed brands, specialists in their fields who are at the forefront of technology and development, we offer customers the widest range of equipment on the market. Don't compromise, get the right tools for the job and rely on our strong, local expertise and support.



Infinite choice. One point of contact.

FOLLOW US ON    

Tel: +27 (0)11 928 9700 • E-mail: sales@bellequipment.com
www.bellequipment.com

**Strong Reliable Machines
Strong Reliable Support**

BELL

Front view of the Sandvik Mining & Rock Solutions workshop facilities – Khomanani.



GIVING MINES QUALITY SUPPORT, THE WAY THEY CHOOSE

The high quality of Sandvik Mining & Rock Solutions' customised aftermarket service offerings is now underpinned by one of the global firm's largest workshop facilities – recently opened in Kempton Park, near Johannesburg.

According to Imraan Amod, business line manager – services at Sandvik Mining & Rock Solutions, the new 62 000 m² site housing its new state-of-the-art Khomanani facility further enhances the OEM's capability to serve customers.

"Our new mega-workshop incorporates both the mechanical soft-rock cutting business and the hard-rock mining business," says Amod. "We are now able to integrate the skills and competencies of each field under one roof. This further strengthens our foundation of expertise available to support our product range."

The facility has even allowed for added



"Our new mega-workshop incorporates both the mechanical soft-rock cutting and the hard-rock mining businesses. We are now able to integrate the skills and competencies of each field under one roof. This further strengthens our foundation of expertise available to support our product range."

Imraan Amod, business line manager – services at Sandvik Mining & Rock Solutions

TALKING POINT

capability, he says, such as the extensive new bead blasting bay, large wash bay with robotic washers, modern spray-painting bay and newly equipped machine shop. The investment in the latest machinery has included vertical and horizontal boring


mills, milling machines and CNC machines – keeping the company abreast of latest technology.

He highlights that the aftermarket support philosophy of Sandvik Mining & Rock Solutions is based on close




Back view of the new Sandvik Mining & Rock Solutions workshop facilities – Khomanani.


QUICK TAKE




Sandvik Mining & Rock Solutions' new Kempton Park mega-workshop incorporates both the mechanical soft-rock cutting and the hard-rock mining businesses



The 62 000 m² site housing the new state-of-the-art Khomanani facility further enhances the OEM's capability to serve customers



The facility has even allowed for added capability, such as the extensive new bead blasting bay, large wash bay with robotic washers, modern spray-painting bay and newly equipped machine shop



Adapting to changing needs, Sandvik Mining & Rock Solutions is in the process of setting up a 'roving team' to provide OEM intervention support on site as and when necessary

collaboration with customers – providing service and maintenance models that complement the mines' strategic objectives.

"We don't force any specific system and process onto customer, but rather work with them to develop a working model that suits the aftermarket priorities on their sites," he says. "This often needs lengthy discussion over a period of time,

but the benefits are definitely worthwhile in terms of finding an optimal level of support and format of delivery."

Global leader

As a global leader in automation, digitalisation and fleet data monitoring (FDM) solutions, Sandvik Mining & Rock Solutions has a growing focus on predictive maintenance strategies

grounded in real-time equipment data. By ensuring that these strategies guarantee a safer, more reliable and productive operation, the total cost of ownership (TCO) of operating equipment can be well controlled.

In terms of parts supply and management, for instance, the company has developed a Vendor Managed Inventory (VMI) option to streamline availability, says Amith Ganasram, business line manager – parts commercial at Sandvik Mining & Rock Solutions.

"This means that our people can be on site with an inventory of stock that we manage. The major advantage is that this makes parts available to the customer at reduced lead times," says Ganasram. "We work with the customer's operational teams on site, as well as our service teams, to ensure that the right parts are available when they are needed – keeping uptime at an optimal level."

Tracking performance

This means tracking of equipment performance and condition – including mean time between failures – and forecasting of service and parts requirements. The company can even work with third-party maintenance companies appointed by the mine. This detailed planning and prompt response time ensures optimal uptime and lowest cost per tonne produced.

An alternative stock model is based on consignment, he says, where the customer manages a parts holding on their own site but they only pay for what they consume. A regular audit, for instance on a bi-weekly basis, can then be conducted to ensure the stock level is balanced with the parts used.

AFTERMARKET SUPPORT

Ganasram emphasises the value of OEM components in safeguarding the lifecycle of machines while avoiding unplanned downtime. He says an important way that Sandvik Mining & Rock Solutions makes it easier for customers to standardise on OEM parts is by creating bundled offerings to customers when they purchase equipment.

"This provides customers with a total offering with their new equipment, where we can supply a bundle of high quality OEM parts at a discount," he says.

Digital data

Digital technology is increasingly important in effective aftermarket support, says Amod, not only to equipment performance, but to the data requirements of predictive maintenance. The company's My Sandvik digital service solutions captures and analyses data on machine health and performance, presenting it in visual formats that improve decision-making.

"This gives valuable insight – to us and the customer – about how machines are being utilised on site," he says. "Where we have a contracts manager on that site, they can also use this data to identify inefficiencies and opportunities for improvement."

Trends

Offering value in the aftermarket space also demands that OEMs keep up with industry trends. Amod highlights the significance of localisation – including local procurement – as a strategic and regulated imperative in sectors like mining.

"We have identified various opportunities to support localisation and we have started engaging with customers on how to refine these concepts before implementation," he says. "A key aim here is to support the goals of the Mining Charter by creating more opportunities for local employment, either through corporate social investment or enterprise development."



Apprentices doing on the job training in the workshop.



The newly equipped machine shop at Sandvik Mining & Rock Solutions' Khomanani facility.

EARTHMOVING EQUIPMENT

PLANT

We refurbish machines to the highest standards. Visit our showrooms with over 600 machines in stock.

PARTS


BLC has the largest stock of parts in the southern hemisphere. We have stripped over 3000 CAT machines for stock!

RENTAL


With a wide variety of high quality equipment, we can assure availability of machines.

AFTER SALE SERVICE

We offer 24/7 customer support and unmatched aftersales service.



**AFRICA'S
LEADING
EARTHMOVING
EQUIPMENT
DEALER**



Call us now **+27 (0)11 555 2000**
or visit **www.blcplant.com**
for our latest stock.

The strategy is to partner with mines to create or support enterprises nearby, so that they can provide certain repair services to the required OEM standard. This involves Sandvik Mining & Rock Solutions sharing its expertise and providing training and mentoring to build the quality of local services as many mines are in remote areas with only a relatively low skills base locally.

Roving

Adapting to changing needs, Sandvik Mining & Rock Solutions is in the process of setting up a 'roving team' to provide OEM intervention support on site as and when necessary. This will fill a valuable role in addressing minor issues on a machine, while limiting downtime and transport costs to a formal workshop.

"This flexible and agile team will be able to conduct its work in accordance with our stringent OEM standards, thereby assuring the customer of a quality result that does not introduce any legal liability," says Amod. "There may be safety and warranty implications when using non-OEM repairers, so the roving team will help mines to remain compliant while maximising uptime."

He emphasises that behind all good aftermarket support are skilled people with the passion to excel. Sandvik Mining & Rock Solutions' ongoing training and coaching of its people makes sure that the company can develop tailor-made service solutions based on market-leading technical knowledge and experience in the field. 🌐



Always
Visible

Transport & Logistics

Keep every aspect of your fleet, **Always Visible**.

With Ctrack's 30 years experience, we can help you unlock better diagnostics, support compliance reporting, as well as provide tailor-made analytics for both short term, and long-term decision making. Ctrack will optimise the right solution for your specific business needs.

Keep your eyes on the road



Iris Camera Solution

Front-Back-Side Facing Camera
Options



In Cab Device

- Job Dispatch
- Navigation
- Messaging
- Driver Behaviour Display



Asset Monitoring



Trailer Tracking



Driver Identification & Driving Behaviour Monitoring



Engine Performance Monitoring (CAN)



Temperature Monitoring



Remote Door Unlocking

Door Open/Close Sensor



Fuel Level & Consumption Monitoring



Vehicle & Fleet Tracking



www.ctrack.co.za | sales@ctrack.co.za | Call Centre: +27 (0)860 333 444

EverStar believes the Right to Repair campaign and the commission's guidelines will eliminate competition in the automotive sector.



IMMINENT TRANSFORMATION FOR SA'S AFTERMARKET SECTOR

Right to Repair South Africa seeks to transform the vehicle aftermarket sector in line with guidelines set by the Competition Commission to promote an open, competitive aftermarket where the choice of service provider is dictated by price and quality, rather than by contract provisions. This feature explores these guidelines, which took effect on July 1 this year, and takes a look at how the transformation will affect OEMs and service providers. By Mark Botha.

Right to Repair South Africa (R2RSA) is a non-profit company founded to champion the worldwide Right to Repair campaign, which conducts lobbying and advocacy work in support of the rights of the end-user and independent service provider in the automotive industry, among several others.

"We are in full support of the Guidelines for Competition in the South African Automotive Aftermarket published by the Competition Commission," says R2RSA CEO Kate Elliott. "We believe that it is not possible to have a productive, open market where monopolies are allowed to continue unabated."

The guidelines in question were drafted in terms of Section 79(1) of the amended Competition Act No. 89 of 1998, which provides that the Competition Commission may prepare guidelines to indicate its approach on any matter falling within its jurisdiction.

Published by the Competition Commission in a December 10, 2020 document, the guidelines aim to "provide guidance for the automotive aftermarket industry, intended to promote inclusion and to encourage

competition through greater participation of small businesses as well as historically disadvantaged groups".

Objective

Elliott says the objective of the Right to Repair campaign is to achieve an "open, competitive automotive aftermarket where vehicle owners' choice of provider is dictated by the price and quality offered, rather than by restrictive contract provisions".

She says such a market will not only benefit the end-user, but will also ensure long-term, broad-based economic growth.

"We hope to turn the automotive aftermarket in South Africa into a leading example of what can be achieved where access to the market is opened to all service providers."

Capital equipment sector

She says that, although the automotive sector is currently the starting point in South Africa, the plan is to expand the Right to Repair campaign to the capital equipment sector, among others.

"The principle of Right to Repair is equally applicable in all industries, particularly

where there are monopolies in place. We hope to expand our work to other sectors in the coming years."

The guidelines

The principles outlined in the Competition Commission's guidelines are said to be based on its experience of "various anti-competitive concerns identified in the automotive aftermarket industry, broader policy objectives of the country, as well as on guidance from other jurisdictions concerning competition between OEMs, insurers, approved dealers and approved motor-body repairers, as well as independent service providers (ISPs)".

These concerns were addressed by adopting various regulations obliging authorised repairers and service providers to not use original parts from approved manufacturers only, but to also include parts of matching quality procured from other suppliers.

Vehicle manufacturers may not hinder original parts or component suppliers from also supplying their own products as spare parts to independent or authorised distributors, and authorised repairers are free to procure original parts or parts



UD Trucks Southern Africa has plans in place to accommodate training requests from ISPs at pricing similar to that paid by its dealers.

of matching quality from authorised or independent parts suppliers.

In addition, independent repairers should have access to the vehicle manufacturers' original parts to allow them to maintain and repair vehicles properly and to compete with the authorised repairer, and vehicle owners have the right to use any repair shop for non-warranty work, during the warranty period.

According to the Competition Commission document, the guidelines' objectives include the lowering of barriers to entry and to ensure that a greater number of firms owned by historically disadvantaged individuals (HDIs) and SMEs have an opportunity to undertake service, maintenance and repair work of vehicles within the period covered by the vehicle's warranty.

The guidelines are also designed to increase transparency and facilitate end-user choice on the service, maintenance and repairs of motor vehicles, and to increase user choice and facilitate competition in the markets for spare parts

and value-added products.

The guidelines are to be achieved by encouraging stakeholders to adopt measures that widen the pool of approved dealers and motor body repairers; by promoting entry to HDIs as approved dealers, and to ensure that independent service providers can undertake in-warranty service, maintenance and repair work, among others.

Customer benefits

Elliott says the end-user now has more choice when it comes to servicing and repairing their vehicles, which in turn will result in cost savings.

"Manufacturers are no longer permitted to sell new vehicles with embedded service plans. They must separate the price of the vehicle from the price of the service plan. This means that the end-user can ascertain what the actual price of the service plan is and assess whether it is worth purchasing.

"They are also able to shop around and either purchase a service plan from another service provider or choose not to

purchase one at all."

Linked to this provision is the fact that manufacturers are no longer permitted to void warranties where users elect to use independent service providers during the warranty period.

"Lastly," says Elliott, "non-original spare parts are permitted to be used in vehicles, even within the warranty period, further adding to the cost saving to the end-user."

Service and repair under warranty

The Competition Commission's guidelines also include "principles" for the service, maintenance and repairs of motor vehicles under warranty.

According to these, OEMs shall "recognise and not obstruct" users' choice to seek service, maintenance and mechanical repair work for their vehicles at service providers of their choice, regardless of whether these service providers are approved dealers or independent service providers.

Where an end-user chooses to use an



The Right to Repair campaign conducts lobbying and advocacy work in support of the rights of the end-user and the ISP



The Competition Commission's guidelines are based on "anti-competitive concerns in the automotive aftermarket industry"



OEMs shall recognise and not obstruct users' choice to seek service, maintenance and mechanical repair work at service providers of their choice



Under-warranty body repairs for end-users with insurance cover shall be undertaken by approved motor-body repairers allocated to them by an insurer

ISP within the warranty period, “there shall be no obligation on the OEM to pay for any service and maintenance work undertaken by the ISP”.

Under-warranty body repairs for end-users with insurance cover shall be undertaken by approved motor-body repairers allocated to them by an insurer. Users without insurance cover, on the other hand, may repair their vehicles at “a service provider of their choice, at any point during the vehicle’s lifespan”.

The guidelines oblige ISPs to record such under-warranty work in their customers’ vehicle service books or equivalent records, to ensure that all the work done on the vehicle is traceable. The ISP shall also disclose to clients, “in clear and explicit terms”, the risk of damage that could arise from the ISP’s work. This includes consequential damage to the vehicle, which may potentially void certain OEM

obligations in terms of the warranty.

Where work done by an ISP results in damage to the vehicle, state the guidelines, “there is a risk that certain provisions of the OEM warranty will be voided. However, other provisions of the warranty may remain severable and enforceable. The OEM may conduct an assessment, at [their] own cost, to ascertain such damage and liability”.

End-users “who suffer harm from a defective product” can bring a claim against any party in the supply chain in terms of section 61 of the Consumer Protection Act No. 68 of 2008.

Latest developments

When asked about new developments on the Right to Repair front in South Africa, Elliott singles out the coming into effect of the guidelines on July 1, 2021.

“We are currently working hard to ensure that the objectives of the guidelines

are achieved. We are engaging with the Competition Commission where aspects of the guidelines are unclear, conducting public awareness campaigns and engaging with OEMs to establish their attitude and approach to the guidelines.”

OEM comments

Capital Equipment News approached Rickie Niddrie, aftersales manager at commercial trucks and construction equipment company, EverStar Industries, and Filip Van den Heede, MD of UD Trucks Southern Africa, for their take on the Competition Commission’s new guidelines.

Niddrie says the Right to Repair campaign and the commission’s guidelines will eliminate competition in this sector: “The entire automotive aftermarket chain is at risk of being driven out of business.”

He says that, in terms of initiatives to deal with the Right to Repair scenario, Everstar Industries is “fortunate” as most of its original equipment parts are available only from the company itself.

“Pricing on these parts is very well aligned, according to a recent survey, and are very competitive when compared with aftermarket parts of the same or similar quality.”

He says the company has also launched an app enabling customers to compare part prices and availability.

Concerns

Niddrie expresses concern over warranty validity: “Where the client opts to service and maintain their vehicle themselves and poor workmanship is the result, this could lead to unnecessary stress and conflict between the customer and the OEM or dealer. It could also cause a loss of faith in the brand.”

On the positive side, he notes that healthy competition “is always a good thing”: “This prevents OEMs from forcing the customer to pay exorbitant amounts where they could get the same parts or service at a much more reasonable price.”

He says a potential benefit to both the supplier and the end-user lies with increased familiarisation with the product and improved training by the OEM or supplier, which will result in greater product competence and fewer failures and accidents.

“As an OEM,” says Van den Heede, “UD Trucks Southern Africa (UDSA) understands that customers’ choices rely on various factors including longstanding relationships and service levels.”

He says UD Trucks Southern Africa does not approve motor body repairers and therefore does not foresee that the



“We believe that it is not possible to have a productive, open market where monopolies are allowed to continue unabated.”

Kate Elliott, CEO of Right to Repair South Africa



“The entire automotive aftermarket chain is at risk of being driven out of business.”

Rickie Niddrie, aftersales manager at EverStar Industries



“As an OEM, we understand that customers’ choices rely on various factors including longstanding relationships and service levels.”

Filip van den Heede, MD of UD Trucks Southern Africa



UD Trucks' minimum investment requirements make provision for ISPs, and include only the most important criteria.



Although the automotive sector is currently the starting point in South Africa, the plan is to expand the Right to Repair campaign to the capital equipment sector.

guidelines will affect the way it does business in this regard.

"We review all dealer investment requirements annually to ensure that they are realistic and rational," he says. "Our investment requirements are focused on the size of the facility and on tools and equipment to ensure good workmanship. Our minimum investment requirements make provision for ISPs, and include only the most important criteria."

He says the company has always supplied ISPs with original spare parts through the dealer network and will continue to do so.

"We provide approved dealer and customer workshops with technical information at a monthly subscription and upon completion of the required training.

"ISPs will be treated similarly, except for sensitive information such as telematics which pertains to the security of the vehicle and design information considered the intellectual property of the OEM or UDSA, which will not be made available to ISPs, in line with the guidelines."

The company has plans in place to accommodate training requests from ISPs at pricing similar to that paid by its dealers.

"Competition creates value for the customer," says Van den Heede. "Historically disadvantaged individuals deserve an opportunity to enter the industry. We support the intention and spirit of the guideline insofar as it promotes and is in line with the transformation goals of UDSA and the industry in general."

However, UD Trucks remains responsible and accountable to its customers and will, for this reason, apply the guidelines with its customers in mind by ensuring adherence to its warranties, among others. 🌟



Bosch Diesel Service specialises in providing advanced diesel injection system components, as well as the repair and servicing of diesel fuel injection systems to keep things on track. Our certified fuel injection **experts are trained to world-class standards** and will make sure the cleaning, servicing, refurbishing and calibration of your diesel injection components are done to the same standards.

All work is done in-house to the **highest standards using quality parts**. To keep your engines running at optimal capacity, book a premium diesel injection component repair today.

boschdiesel.co.za





Trio cone crusher installed at a sand and aggregate plant in South Africa.

THE EVOLUTION OF CRUSHING EQUIPMENT

The evolution of crushing equipment continues apace, with safety, modularity and versatility among the key drivers of change in design. Additionally, experts from Pilot Crushtec International and Weir Minerals Africa tell *Capital Equipment News*' Munesu Shoko that improvements in technology have seen automation finding its way in new crushing equipment, with the latest developments in IoT set to usher in new levels of live and remote monitoring capabilities.

Manufacturers offering crushing equipment have over the years continued to evolve their offerings in response to the ever-changing needs of the market. Mobility, versatility and safety have been some of the key factors in the development of new models, with many original equipment manufacturers (OEMs) also offering new options in the form of electric and hybrid drive systems.

Safety is one of the key parameters influencing the design of new crushing gear. Theodore Hendricks, product manager, Comminution at Weir Minerals Africa, tells *Capital Equipment News* that safety has always been a key focus for Weir Minerals as part of its crushing equipment designs, coupled with the fundamental goal of engineering crushing plants that meet both the production requirements and the need for cost efficiency (CAPEX and OPEX).

"Given the ever increasing energy costs, OEMs are always under pressure to be innovative at reducing power consumption, while remaining cost effective. With safety rules becoming ever more stringent on sites where crushing equipment is operating, OEMs are challenged to balance cost-effectiveness and maximising safety of the equipment and plants," says Hendricks.

Jorge Abelho, director technical support at Pilot Crushtec, says that as an OEM, and having designed both modular and mobile machinery for mining, Pilot Crushtec strongly believes that there should never be a compromise on safety. However, in reality, he says, materials handling and crushing applications are dangerous processes that involve risk. Machines are large, heavy and powerful so there will always be a risk for the people operating, servicing and repairing this type of equipment.

"In our experience, the best safety features are mechanical aspects designed into the machine from the conceptual stage. Doing this tends to be more challenging and requires creativity and technical engineering skills from the equipment designer. Key examples include providing easily accessible lifting points, walkways in hard to reach areas and keeping items that have to be handled by hand lightweight. One of the current trends is to use smart sensors that can control process elements



The most effective new safety and performance features are incorporated during the design phase of equipment.

and increase safety. Using these can significantly increase machine reliability and performance, while improving safety for the operators,” says Abelho.

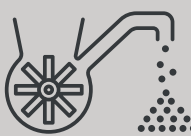
A reputable OEM, adds Abelho, understands that safety needs to be designed into the equipment right from the start. This approach offers the major advantage of safety features that integrate seamlessly with the rest of the machine. While this may add costs to the initial build of the equipment, it is less expensive than trying to add on safety features at a later date.

“Fortunately, experienced and conscientious buyers know this and look for equipment that has the necessary safety features included. Manufacturers whose products are designed to be the most inexpensive usually only incorporate minimal safety features. This can create challenges for the uninformed buyer and for the inexperienced equipment operator. It is also important to understand that safety features that are added to equipment after manufacturing tend to be less reliable, are easier to bypass and can be more expensive,” says Abelho.


Automation

Automation is another big trend in the design of crushing equipment. It is an exciting technology, says Abelho, that Pilot Crushtec is committed to incorporating into its designs, but only where the company sees it providing benefits to the customer. Areas where automation is advantageous include machine operation (leading to improved performance), load control, servicing and fault diagnosis. By incorporating this type of technology, the OEM is able to enhance reliability,


QUICK TAKE




Manufacturers offering crushing equipment have over the years continued to evolve their offerings in response to the ever-changing needs of the market



With safety rules becoming ever more stringent on sites where crushing equipment is operating, OEMs are challenged to balance cost-effectiveness and maximising safety of the equipment and plants



The best safety features are mechanical aspects designed into the machine from the conceptual stage



Areas where automation is advantageous include machine operation (leading to improved performance), load control, servicing and fault diagnosis

which translates into reduced total cost of ownership.

“With the incorporation of automation, design project management becomes even more critical. There needs to be clear understanding and communications between the various specialists in the design team. The hydraulics, electrical and mechanical designers need to communicate the automation requirements to the software specialist effectively,” says Abelho.

It is the norm now, he adds, to see machines operating on proprietary software that is model specific and sometimes even application specific. Sensors can perform multiple functions if employed in an intelligent manner. The challenge with automation is to not make it too complex; keeping it simple and focusing on the key objectives is important, says Abelho.

Ill-considered features can add significant costs and complexity without offering the



"Given the ever increasing energy costs, OEMs are under pressure to be innovative at reducing power consumption, while remaining cost effective. With safety rules becoming ever more stringent on sites where crushing equipment is operating, OEMs are challenged to balance cost-effectiveness and maximising safety of the equipment and plants."

Theodore Hendricks, product manager,
Comminution at Weir Minerals Africa



"In our experience, the best safety features are mechanical aspects designed into the machine from the conceptual stage. Doing this tends to be more challenging and requires creativity and technical engineering skills from the equipment designer."

Jorge Abelho, director technical
support at Pilot Crushtec International

TALKING POINTS

end-user any real benefits. In the recent past, he says, service engineers needed a laptop to connect to equipment for setup and diagnostics, but this is becoming simpler now with the equipment having its own touch screens and configurable programmes that the user can access.

"The sensors and processors themselves have become very compact and reliable. There are ranges specifically designed for mining applications which incorporate sensors capable of withstanding harsh environments and operating conditions while still delivering reliable performance. Designers now need to cater for protection and routing of communication cables that connect all the various sensors. Wireless sensors and Bluetooth communication between the equipment and a user's mobile phone are now starting to feature on some equipment as well," says Abelho.

According to Hendricks, new crushing equipment is built to be compatible with the latest technology in IoT, which allows for live and remote monitoring of equipment. As a result, equipment breakdowns can be pre-empted, thereby increasing uptime and prolonging the life of the equipment.

"Automation also results in easier operation and maintenance of equipment and greatly reduces downtime. Additionally, automation can have a huge impact on product quality, for instance, ensuring crushed product with greater consistency," says Hendricks.

Modularity

Modularity is another key trend influencing the design of crushing equipment. It has gained much traction over the years, says Hendricks, with operations moving away from mobile (wheeled or track-mounted) crushing equipment. Mobile crushing gear is limited to smaller operations as opposed to modular plants that are suitable for medium to large plants. Modular plants are manufactured in large sections or modules and mounted on skid frames. These modules can be easily assembled and disassembled.

"The advantage is that plants can be trial erected, with any modifications required addressed prior to being transported to site, resulting in minimal to no delays during erection on site. Furthermore, modular plants offer end-users the flexibility of a stable plant that can be moved easily when required. Many customers request a mobile plant, but never end up moving the same plant to different locations as initially intended and are still saddled with stability issues associated with mobile plants. Modular plants can also be erected on less civil works when compared to fixed plants, further reducing the time from erection to commissioning," explains Hendricks.

As one of the pioneers of the modular concept and application of crushing and screening equipment, Pilot Crushtec believes that modularity is great both from an OEM perspective and

from a customer standpoint, especially when it comes to service and maintenance.

"The modular concept has allowed us to test, evaluate and refine modular equipment over months and years, and this has enabled us to offer solutions where production capability matches the application requirements. We are constantly trying to optimise the performance and reliability of equipment and partner closely with industry to ensure that we get accurate feedback from multiple users and environments," says Abelho.

Modularity is very significant in today's design and operations environment, adds Abelho. The modular concept is always front of mind when Pilot Crushtec designs any modular component as it realises that it is normally expected to fit into a larger plant and will need to complement and partner with a number of other components such as conveyors, feeder bins and comminution modules, among others.

"With modularity, we sometimes find that customisation to suit a specific site or application becomes very difficult or almost impossible. However, the benefits of standardised products, high availability of spare and wear parts and proven results far outweigh the negatives of not being able to customise extensively," he says, adding that bespoke designs also require significant design time upfront, lead-times tend to be longer and spares inventory costs are higher, with less availability.

More trends

Apart from the drivers mentioned here, Abelho believes that the biggest trend recently is more electronic control and automation. The cost of integrated circuits, Programmable Logic Controllers and sensors, he says, has come down significantly in recent years as the technology becomes more widely adopted.

"The volumes for this type of equipment has increased and there are more sources available to the OEM designers. This allows for more information to be gathered from the machines and processed, allowing for greater automation as well as more on-board self-diagnostics and improved condition monitoring. This trend will continue and means that maintenance teams need to be upskilled to deal with these systems," he says.

Hendricks agrees, saying that improvements in technology have seen automation finding its way in new crushing equipment. A current trend, he adds, is for such automation to be retrofitted on old and existing equipment, particularly to facilitate better monitoring for maintenance and service purposes.



**Reduce CO₂
by tens of
thousands
of tons?**

**ENDURON®
HPGR**

WEIR

Copyright © 2021 Weir Minerals Australia Ltd.
All rights reserved.

The answer is Enduron®

We all know HPGR technology exists. Why have we not moved to a more sustainable approach? The Enduron® HPGR uses up to 40% less energy without grinding media, compared to traditional solutions. Combined this could reduce your CO₂ by tens of thousands of tons annually. Plus, with our exclusive skewing and bearing system, you'll increase your mine's performance, reliability and efficiency. The real question isn't why should you make the switch, it's why not?

Make the switch to Enduron® HPGR.
Visit enduronhpgr.weir to find out more.



The Metso IC Control system allows for performance parameter setting, data storage of machine parameters and other operational features.

"Automation will take centre stage in traditionally manual tasks such as lubrication and, in the case of crushers, in situ gap adjustment. Automation will become the major driver in assisting with tracking or identifying the cause of problems," says Hendricks.

The future

Looking to the future, Hendricks believes that the focus on remote monitoring of


plant equipment will increase even more as it significantly cuts down and, in some instances, eliminates downtime. This would also further enhance the capability of field service technicians to assist customers remotely and reduce the need for physical site presence, thus eliminating safety risks.

"Focus on improved or reduced power consumption will continue, and together with automation, this will set the market leaders apart from the rest. Customers'

growing need for plants that operate more efficiently for maximum beneficiation with minimal problems will be the driving force for OEMs to be at the forefront of innovation," says Hendricks.

According to Abelho, IoT will become more prevalent on crushing equipment. Machines will be uploading digital info to the cloud for analysis and trending. Fault-finding and diagnostics will be done remotely. Machines will have the ability to suggest pre-ordering of spares before a service is due or breakdown occurs. Equipment owners can, at the touch of a screen, access information on the status and performance of equipment from their mobile devices.

"Maintenance teams will also be able to access a variety of online resources such as manuals, video files and training material. The operator terminals on some equipment can already provide technical information for maintenance teams. Fuzzy logic will become more common, which will guide and assist in setup and fault finding. Essentially having access to the web from often remote locations will allow a whole new level of operations as access to technical resources and data becomes more common," concludes Abelho. ☛



ALCO-Safe
(Pty) Ltd

What are
drugged
employees
**costing your
company?**

Alcohol and drug testing specialists

High speed testers capable of testing high volumes of people at site entrance/exit points and portable instruments with digital readouts for use at remote sites providing immediate printed evidence.

JusCheck

An screen device which is simple to use. For the detection of drug abuse in saliva. Test accurately for 6 drugs in 5 minutes.

NEW!

ALCONTROL

Made to be rugged and simple to use, the ALCONTROL can be used in any environment for operator free breathalyser testing. Ideal for controlling entrance at turnstile gates.

AlcoBlow® Rapid Test

Strongest and fastest breath alcohol tester on the market. AlcoBlow® Rapid Test requires the smallest breath sample and ensures accurate results first time, every time. Results are obtained within seconds. Very economical operation, no disposable mouthpieces are required.

Find out why over 5000 businesses trust our products and expert levels support in policy development, legal advice and after sales service.

Ensuring safer working environments for over 40 years

Help is one call away +27 12 343 8114 or visit www.alcosafe.co.za for more information

THE IMPORTANCE OF TRACKING AND FLEET MANAGEMENT

Owning and operating vehicles efficiently, no matter the industry, is reliant on information. Having the correct information in a tangible format is imperative to making the right decisions.

"No matter what industry your business operates in, if you use vehicles, then Ctrack can help.

During Ctrack's 30-year history, we have developed cutting edge tracking and fleet management hardware and software solutions. We can also tailor-make analytics to aid with short and long-term decision making," comments Hein Jordt, MD of Ctrack SA.

A comprehensive fleet management solution ensures that safety and security risks such as dangerous driving, safety, driver fatigue, theft, hijackings and area management can be mitigated.

Improved productivity is guaranteed when business owners know how their vehicles are being used. Efficient fleet management will ensure the avoidance of unnecessary costs incurred by factors such as speeding, accidents, fuel consumption and harsh driving.

"Vehicle control becomes increasingly difficult as the fleet grows and routes change. Ctrack has the right solutions in terms of productivity reports, route deviation details, time adherence insights and more," adds Jordt.

Daily vehicle health checks and odometer or hour readings make it easier to schedule maintenance, remain up to date with vehicle license renewals and keep an eye on their overall condition.

Bespoke solutions

Whether your fleet consists of motorcycles or mining and yellow equipment or whether you operate within airports or the agricultural sector, Ctrack has developed and perfected bespoke tracking and fleet management solutions for a wide variety of industries. Compact, battery-operated tracking devices mean that anything can be tracked, from combine harvesters to small packages.

KEEP YOUR EYES ON THE ROAD



Improved productivity is guaranteed when business owners know how their vehicles are being used.

Ctrack offers a variety of technologies for positive and accurate driver identification. The technologies include Dallas iButton keys and RF ID cards that make it simple to determine which driver was driving what vehicle, in what manner and when. Ctrack also has the ability to link driver's tags to specific classes of vehicles to ensure that drivers only operate the vehicles they are licensed for. A starter lockout can be installed to prevent the vehicle from being started without the correct authorisation via the driver identification system. The recent rollout of AARTO also means that it is now even more important to accurately identify and manage drivers of vehicles within your fleet.

The Iris camera solution records in all directions of the cabin, making it perfect for driver training and incident management. A breathalyser ensures that the vehicle cannot be started if the driver is over a pre-determined alcohol limit. An on-board weighing system prevents vehicles from being overloaded, and a tip sensor aids in the efficient management of loads. On-

board telematics monitor engine parameters such as excessive idling and high rpm, as well as fuel consumption and fuel level.

More solutions

Working in conjunction and with the ability to monitor a large number of parameters across a large fleet is a variety of software solutions. Assets are always visible via devices such as a cell phone, tablet or computer thanks to bespoke software such as the Ctrack Mobi application and an Internet connection.

Driver Mobi allows drivers to manage themselves via their smartphones. Drivers see their own scores and driver behaviour on journeys. They can also submit their business or private mileage declarations and complete vehicle checks.

Managers looking for a more advanced solution will find that Ctrack Maxx ticks all the right boxes. This powerful server-based fleet monitoring and management tool combine advanced vehicle tracking with a sophisticated fleet analysis package. 🌟

GET A LOAD OF THIS DEAL!

2.5-ton diesel Toyota forklift demo model stock clearance *While stocks last*

- 2.5-ton diesel
- Full maintenance rental
- 5-year warranty
- R5900 excl Vat

(Terms and Conditions apply)



As the mining industry looks to rewrite its history in terms of safety and environmental impact, remote-controlled demolition machines are providing effective solutions for a number of applications.

BENEFITS OF REMOTE-CONTROLLED DEMOLITION EQUIPMENT FOR MINING

Precious metals such as gold, platinum and chrome are vital components for everything from cell phones to space shuttles. To secure these resources, miners are digging deeper than ever before. Currently, demand keeps the value of these ores higher than the cost of extracting them. However, long-term profitability of ultra-deep, narrow-vein operations will require a more sustainable approach that increases productivity while minimising the cost of extraction. By *Raymond Ippersiel*, Training & Application Specialist, Brokk Inc.

To this end, some operations are exploring robotic solutions. The potential of compact, highly versatile remote-controlled demolition machines in narrow-vein applications is revolutionary. With 80% of underground mining accidents and fatalities occurring at the face, allowing workers to perform drilling, blasting, bolting and breaking remotely will save lives. Not to mention robots increase efficiency in these applications.

But that's only scratching the surface of what these flexible, hard-hitting machines can provide modern mining operations. As the mining industry looks to rewrite its history in terms of safety and environmental impact, remote-controlled demolition machines are providing effective solutions for a number of applications. From deep-vein operations to support tasks such as shaft revitalisation, here is how demolition robots are helping producers increase efficiency throughout the mine.

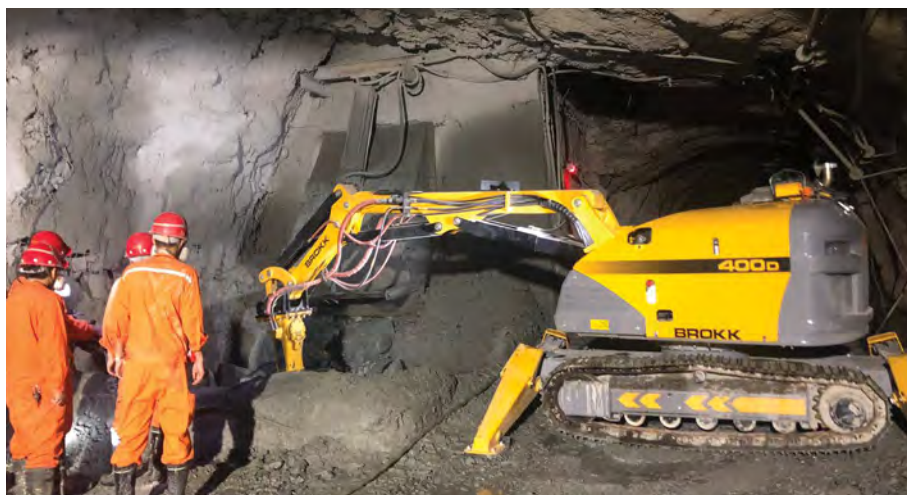
Ultra-deep, narrow-vein applications

Safety risks and logistical needs, such as providing air, electricity and other utilities, increase exponentially the deeper a mine goes. By removing the absolute minimum of rock as they chase after ore-rich veins, producers reduce extraction costs and minimise overburden. However, this leads to tight spaces





and difficult working conditions for miners at the face. In addition to low ceilings, uneven floors and a hot, dry, high-pressure environment, miners are also forced to contend with heavy, handheld equipment that greatly increases the physical toll on their bodies.

Traditional ultra-deep mining methods rely on hours of punishing physical labour in extreme conditions using manual tools such as jacklegs, stopers and ad-hoc bar & arms. These tools can weigh upwards of 32,4 kg. During operation, miners must maintain close contact with the drill since this method requires physically controlling the equipment – even with proper footing. This increases the miners' exposure to falling rock, vibrations, sprained backs, pinched fingers and noise.

So why do operations continue to use



Thanks to advances in technology, demolition robots can also handle much larger attachments than similar sized equipment.

QUICK	TAKE
The potential of compact, highly versatile remote-controlled demolition machines in narrow-vein applications is revolutionary	
With 80% of underground mining accidents and fatalities occurring at the face, allowing workers to perform drilling, blasting, bolting and breaking remotely will save lives	
Demolition robots provide multi-task versatility that can streamline operations and limit emissions in deep down environments	
Opening up shafts or performing shaft maintenance are other areas where remote-controlled demolition equipment can provide more efficiency	

physically demanding equipment that increases the short- and long-term safety risks to their workers? The answer is simple: there hasn't been another viable option. Deep-vein mining requires highly manoeuvrable, durable equipment. While robotic options exist for bulk mining applications, these units are not adapted for ultra-deep narrow-vein operations. A traditional robotic drilling rig is only good for one thing – drilling – which means additional equipment is required at the face for any other operations. Additionally, these jumbo machines need large tunnels and flat surfaces to travel, which means more time and effort developing shafts and roads. Jackleg drills are portable and allow operators to approach the face from an ideal angle, whether that's in front or overhead.

Now, what if there was a system that offered the best of both methods – the safety and productivity of remote operation with the flexibility and precision of a jackleg – and more? Some gold mines have achieved this by adding demolition robots to their deep-vein crew. The compact machines offer exceptional power-to-weight ratios – often on par with machines

three times their size – and significantly outclass even the most advanced jackleg drills.

Designed for demanding demolition applications, the machines easily stand up to the heat and pressure of ultra-deep mining, while heavy-duty caterpillar tracks and outriggers allow them to cover even the roughest terrain. An advanced three-part arm provides unrivalled range of motion for drilling, scaling, breaking and bolting in any direction. The use of hydraulics also eliminates the need for compressed air, which, in turn, minimises the utility requirement at the face, while electric running guarantees zero-emission operation.

Additionally, demolition robots provide multi-task versatility that can streamline operations and limit emissions in deep down environments. With the right attachment, operators can move from drilling to breaking to scaling while never getting within 4 m of the work surface. Thanks to advances in technology, the machines can also handle much larger attachments than similar sized equipment, allowing mines to bring powerful tools to new applications without increasing shaft size. It even opens up the possibility of 100% remote drilling and bolting since there are several compact demolition robots with ample power to operate carousel attachments. While the operator stands a safe distance away, the robot can drill, load a rock bolt, then torque it without any wasted movement for fast, efficient, safe bolting of the back.

One mine employing demolition robots in ultra-deep applications has seen labour costs per linear metre go down by 60% from conventional manual methods.

Stope retrieval operations

The durability and dexterity of demolition robots doesn't just benefit deep-vein mining operations, though. Retrieving equipment and materials from stopes has been delegated to robots for some time. Here again, though, most robots are not designed for optimal efficiency in rescue and retrieval operations. Demolition robots, on the other hand, seem almost purpose built for these tasks.

Take a loader retrieval after a rock fall, for example. Some mines have found that demolition robots traverse the uneven ground more quickly than traditional retrieval equipment, and they can break up oversize and other obstacles to make extraction easier. The highly manoeuvrable arm also makes attaching cables through the scoop's lug more efficient. Additionally, demolition robots offer a wider range of motion and more dexterity, making them an ideal tool for breaking oversize when mucking out a stope. With a grapple attachment, the machines can easily sort



For one operation, using demolition robots to open up older shafts allowed them double monthly linear output while reducing labour requirements by 44%.



With extensive equipment options available from innovative manufacturers, in terms of machine size and attachments, there is an opportunity to use demolition robots in just about every high-risk, heavy-labour situation.

out metallic garbage, such as broken pins or used screening discarded down the stope or in ore cars for more efficient and safer material removal.

Additionally, demolition robots can make stope drilling safer and more efficient. One operation looking to excavate gold from an existing stope found demolition robots provided the necessary manoeuvrability to work on a 35-degree incline in very dangerous conditions. The company was using an inefficient scraping method to retrieve ore from a 300-mm-thick vein 4 000 m below ground. With only 1.2 m of clearance, the mine needed a compact robotic machine capable of standing up to immense pressure and extreme temperatures. A compact demolition robot equipped with a specialised drill attachment provided an ideal solution that allowed the operator to remain out of danger.

Shaft maintenance operations

Opening up shafts or performing shaft maintenance are other areas where remote-controlled demolition equipment can provide more efficiency.

Mining techniques have changed over the years, and for many operations returning to old veins with more modern equipment can supplement production. However, these shafts are usually found in a deteriorated state – with large rubble, collapsed supports and downed utilities – making the process of opening them up slow and dangerous. Additionally, safety requirements have also advanced along with mining techniques, so revitalising old shafts can require substantial work to meet modern regulations.

In these types of situations, the versatility of remote-controlled demolition machines can minimise equipment and personnel

requirements for highly efficient renovation. Armed with a suite of attachments, a demolition robot can perform almost any required task. For example, a breaker can be used for scaling during initial maintenance or refurbishment work. It can also increase efficiency during clearing operations by offering a non-blasting solution for breaking up oversized material.

Operations wouldn't need to stop work and remove employees for blasting. An operator could switch to shears or a multi-cutter attachment next to remove sets and services – such as pulling down utilities or old support beams. Simply attach a bucket for material handling and mucking out. Secondary blasting, support units and suspension can all be managed with drill attachments. Grapples can be used to help erect support ribs and install safety netting or wire mesh as well as setting new services such as rails, pipes, or cables. Finally, shotcrete attachments are also available from leading manufacturers. For one operation, using demolition robots to open up older shafts doubled its monthly linear output while reducing labour requirements by 44%.

The attachments can also make routine shaft maintenance more efficient, allowing mines to maximise productivity for these vital, yet time-consuming and risky operations. One operation was able to eliminate all manual labour in a shotcrete removal application and advance its maintenance schedule by months. It positioned the demolition robot on a platform that rotated around a shaft boring machine. After the shotcrete was removed, they used the robot to pin and bolt new screening.

In addition to making shaft maintenance easier, demolition robots are increasing

safety and efficiency for widening operations, as well. They can be underhung from a Galloway stage, hammer, drill and blast, drill and split and replace old clam buckets for mucking out.

The future of mining

From ultra-deep to applications just below the surface, demolition robots can increase safety and productivity throughout the mine. Position a demolition robot above a stationary grizzly or in a blast chamber to tackle oversize without explosives or any unnecessary material handling. The possibilities are only limited by the imagination.

With extensive equipment options available from innovative manufacturers, in terms of machine size and attachments, there is an opportunity to use demolition robots in just about every high-risk, heavy-labour situation. Compact units are currently available that range in size from a half tonne to 12 t with each offering power-to-weight ratios two or three times that of a conventional excavator.

With full-remote capability and instant data retrieval for maintenance and troubleshooting, demolition robots are ideally positioned to bring the industry into the modern era – and into all-electric production. Modern mining has many exciting challenges in store for the new generation of technologists who will need creative solutions to supply the world's ever-growing demand for metals in support of green technologies and more. Working with demolition robot manufacturers to provide mechanised mining and maintenance solutions promises to improve not only current productivity, but ensure a safer, more sustainable future for mining operations. 🌱

DRIVING PROFITABILITY THROUGH INNOVATIVE SOLUTIONS

Following the financial turmoil of 2020, businesses in the material handling and industrial equipment sectors need equipment solutions that reduce total cost of ownership and allow for maximum productivity and operational efficiency while offering assurance of quality and longevity.

According to Brent Hean, EIE Group acting COO, it is for this reason that EIE Group's 600SA division restructured its business model to include the distribution, rental, maintenance, and the sale of pre-owned quality material handling equipment from renowned global manufacturers.

"As a business of the EIE Group, 600SA aligns itself with best-in-class brands, evidenced by our exclusive product offerings from multiple world-class manufacturers," he adds. "The retail segment is forecast to lead the overall forklift truck market between 2021 and 2026. With China being the fastest-growing region, thanks to a favourable economic environment and a drive for technological advancements, 600SA decided to partner with CT Power, a material handling equipment manufacturer with over 30 years' experience."

Registered as GLOBAL POWER CO. LTD and headquartered in Taiwan, CT Power is one of the largest forklift manufacturers globally, and one of the few forklift manufacturers in China to self-design, obtain patents and manufacture its own forklift transmissions. Focusing on technology and sophisticated craftsmanship, CT Power strives to produce reliable and practical materials handling equipment that provides customers with quality and reliability without putting them out of pocket. In efforts to expand our African footprint, CT Power products are also available throughout the sub-Saharan Africa regions.

CT Power retains all development and manufacturing processes in-house. This allows the company to offer customers assurance of its performance, reliability and technical advantages over competitors.

"CT Power products have proven their worth, so much so that GLOBAL POWER has attained both CE and ISO 9001 certifications, producing more than 25 000 units annually," Sonia Pretorius, sales manager 600SA. "The manufacturer's most recent innovations are its new generation electric counterbalance machines, which are more aesthetically pleasing, thanks to a modern and more



Brent Hean, acting COO at EIE Group.

compact design than its predecessor, making it easier to operate between warehouse racks."

With safety being paramount for all 600SA-associated products, safety parameter lights are a standard feature of all electrical units offered by the business. This greatly enhances safer operating procedures on site, allowing warehouse workers to see the equipment from every angle.

With companies experiencing significant operational efficiencies after implementing sustainable practices, 600SA is committed to going green, and are currently exploring solar charging stations for the electric forklift market amongst other initiatives.

600SA is synonymous with placing the needs of the customer first. It conducts an in-depth analysis of each customer's business needs before suggesting a suitable solution. By considering the fixed, variable and disruptive costs, 600SA can offer cost-saving solutions based on facts to ensure operational efficiency and greater productivity.

"We are not in the market to merely supply customers with equipment solutions that they have implemented in their operations before. We ensure all operating costs and procedures are accounted for before suggesting the right solution to ease their operational burden and increase their profitability," concludes Pretorius. 🌱



Sonia Pretorius, sales manager 600SA.

"The retail segment is forecast to lead the overall forklift truck market between 2021 and 2026. With China being the fastest-growing region, thanks to a favourable economic environment and a drive for technological advancements, 600SA decided to partner with CT Power, a material handling equipment manufacturer with over 30 years' experience."



Good engineering is about understanding each customer's needs and building a trailer optimised for durability, longevity and minimal maintenance.

A HOLISTIC APPROACH TO TRAILER TOTAL COST OF OWNERSHIP

Heavy-haul trailers by their nature represent a significant investment for businesses. The right trailer can provide fast ROI, greater productivity and increased profits. The wrong decision, however, can leave trucking companies with the financial burden of a unit that will cost far more in the long run than the business is prepared to take on. By Troy Geisler, vice president of sales and marketing, Talbert Manufacturing.

Unfortunately, the second scenario is all too common due to an incomplete understanding of total cost of ownership. Purchase price is sometimes the only factor buyers consider when evaluating the cost of a heavy-haul trailer. The initial cost, however, can be misleading when considered alone. A comprehensive approach to calculating total cost of ownership requires an understanding of multiple factors, many of which cannot be found on the price tag.

1. Purchase price

The first and most obvious element of total cost of ownership is purchase

price. To the seasoned equipment buyer, price is evaluated based on what the equipment needs to do and the value it adds to the business. Minimising upfront costs isn't as important to total cost of ownership as purchasing a trailer that efficiently handles the hauls ahead of it. There are a few things fleet owners can look at to help determine the best trailer for their needs and minimise long-term expenses.

Capacity

Fleet owners must be sure the heavy-haul trailer they invest in can stand up to expected load capacities. And as experienced fleet managers know, weight capacity ratings only tell part of the story.

The overall weight a trailer can handle is just that, whether a 35- or 50-t lowbed. However, there is a bit more to consider. Load concentration – or the length of the deck that can handle the weight – varies from one manufacturer to the next. For example, three



"The number on the price tag is important, but it only takes you so far. Heavy-haul trailers travel thousands of kilometres over their lifetimes – and a lot can happen between A and B. To truly understand total cost of ownership, business owners and operators must have a comprehensive understanding of what their trailer will cost in its lifetime."

Troy Geisler, vice president of sales and marketing, Talbert Manufacturing



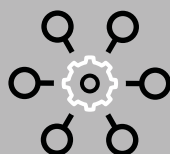
Understanding concentrated load ratings for a particular trailer ensures operators are not overloading the trailer.

QUICK TAKE

Purchase price is sometimes the only factor buyers consider when evaluating the cost of a heavy-haul trailer. The initial cost, however, can be misleading when considered alone



A comprehensive approach to calculating total cost of ownership requires an understanding of multiple factors, many of which cannot be found on the price tag



The first and most obvious element of total cost of ownership is purchase price. To the seasoned equipment buyer, price is evaluated based on what the equipment needs to do and the value it adds to the business



The ease and cost of maintenance contribute greatly to the lifetime cost of ownership of heavy-haul trailers



with a manufacturer that understands this and will provide the best possible weight distribution over the axles. This can include adding a fourth flip axle or spreading two or three additional axles apart to evenly accept the load. Choosing axle configurations that offer more flexibility to handle different types of loads increases earning potential over the lifetime of the trailer.

Furthermore, manufacturers often interpret Gross Vehicle Weight Rating (GVWR) and Gross Axle Weight Rating (GAWR) differently. Misunderstandings could lead to limited ratings and configurations, which could affect all that is needed to get the job done.

Engineering & safety rating

Well-thought-out features and designs are a good indication of experienced engineering at work. This goes beyond steel, welding and bolts. Good engineering is about understanding each customer's needs and building a trailer optimised for durability, longevity and minimal maintenance. Working with a manufacturer that can provide custom-built solutions is ideal. They can design a trailer that can handle the load, which minimises maintenance and ensures owners get the greatest longevity.

The trailer's safety rating is one of the quickest ways to determine if a manufacturer uses high-quality components – such as heavy-duty T-1 steel and Apitong flooring – that will stand up to the jobs you have planned. The safety rating is intended to show operators how well the trailer is equipped to deal with the extra stress that comes from things like bumps, chuckholes and railroad tracks as it travels down the road.

manufacturers each offer an 8 m lowbed that can haul 50 t, but one may need the entire deck length to safely carry the weight, while another is rated for 50 t in a 5-m span, and another the same weight at half the deck length.

Be sure to understand the difference in ratings. Loads are rarely evenly distributed across the entire deck, so understanding concentrated load ratings for a particular

trailer ensures operators are not overloading the trailer – decreasing safety and efficiency and racking up unnecessary maintenance costs.

Axle configurations

Laws and regulations vary from country to country, so it's important to choose a trailer that maximises the load in each state to minimise permit costs. Work



Purchase price is sometimes the only factor buyers consider when evaluating the cost of a heavy-haul trailer, but it can be misleading when considered alone.

These bumps in the road cause the trailer to experience a momentary magnification of payload. In general, trailers can expect an average magnification of payload ratio 1,8 to 1. This means a 50-t-rated trailer with a 50-t load will experience 1,8 times the stress, or 90 t, as it travels over inconsistencies in the road.

Safety ratings tell the end user how much magnification of payload the trailer is designed to withstand. Safety ratings will range from no margin to up to 2,5 to 1, an industry high. A trailer with a high safety rating and built with high-quality materials may cost more up front but will better stand up to the day-to-day stresses of hauling loads. Drivers should keep in mind that though the average magnification of payload is 1,8, in many instances the trailer will experience much more than that. A trailer designed with extra margin in the safety rating will experience less stress, wear and damage, resulting in reduced maintenance costs over time.

Heavy-haul trailers built with lower-quality materials offer a lower safety rating so they simply can't provide that kind of longevity. As a result, the trailers are more prone to premature damage and require more maintenance, resulting in less time working and a lower return over the life of the trailer.

2. Maintenance

The ease and cost of maintenance contribute greatly to the lifetime cost of ownership of heavy-haul trailers. A well-designed trailer will provide long maintenance intervals and be easy to work on when maintenance is necessary. A good manufacturer will also focus on ensuring wear parts are readily available at a reasonable cost.

Some of the most critical elements of a maintenance-friendly trailer are the quality of the removable gooseneck, suspension system and components like steel and paint.

Removable gooseneck

The removable gooseneck revolutionised

heavy haul, increasing safety and productivity on jobsites around the world. Since then, improvements such as hydraulics have further increased overall efficiency. In addition to profile and liftability, ease of use should be considered when selecting a removable gooseneck for optimum ROI.

Industry-leading manufacturers offer hydraulic removable gooseneck systems that operate at 5 to 15 gpm, making them less susceptible to leaks. These low-pressure systems also use hoses that are readily available and more cost efficient than those needed for high-pressure systems. The location of the hydraulic system on the gooseneck can further increase ease of maintenance. Mounting the system within the gooseneck base section limits vibration and damage, increasing the length of maintenance intervals.

Suspension systems

All things being equal, a trailer with a properly spec'd suspension system experiences less wear and tear. A maintenance-friendly suspension system offers features designed specifically to increase its resilience and lifespan, as well as simplify the maintenance process when things do break down. Two easy things to look for are clamp-in bushings and contoured axle seats.

Solid clamp-in bushings offer an extended life over slotted designs and easy replacement that doesn't require an expensive press. The ease of replacement eliminates the need to haul the trailer to a commercial shop and greatly reduces the cost.

Extra-long, contoured axle seats are another indicator of a low-maintenance suspension system. Engineering axle seats with a contour in the middle reduces stress on the weld, reducing the likelihood of costly breaks. The extra length and contour design also provide a strong connection without the need of added U-bolts, reducing the total weight of the system and the added maintenance costs that go with it.

Steel & paint

Fleet owners should keep wear components in mind when deciding which unit will best meet the needs of their operation. High-quality materials and finishes will last longer than traditional paints and lower-cost alternatives, a critical boost in longevity for fleet managers that need their trailers to stand up to challenging conditions.

For must-hold-up situations, choose a trailer built with high-strength steel, such as 12-inch-deep I-beams with a minimum yield strength of 100 000 psi. This, along with premium primer and topcoat finishes, will ensure long-term durability.

Ease of maintenance

Some manufacturers design their trailers with maintenance points that are fast and easy to access, which is important for minimising the time and money spent maintaining the unit. For example, cylinders that are mounted parallel to the ground allow technicians to simply remove four bolts and unpin the cylinder for replacement. This takes a matter of minutes, compared to as many as eight hours replacing vertically mounted cylinders.

Cylinder replacement varies based on road conditions, load distribution and other factors unique to each trailer and operator. In general, replacing parallel cylinders saves a significant amount of time and effort over the life of the trailer. Even if required cylinder replacement is minimal, over the lifetime of a trailer it demonstrates how ease of maintenance proves itself as a vital variable in the total cost of ownership formula.

3. Resale value

The last thing to keep in mind when considering how much a trailer will cost over its lifetime is how much money it will be worth when it comes time to sell. At the time of resale, the decision to buy a trailer with high-quality components really pays off. Often, to know the true quality of a trailer, you can look at the value at auction.

In conjunction with a proactive preventative maintenance programme, a high-quality trailer from a reputable manufacturer may provide over 30 years of useful life. This longevity results in sought-after resale units that fetch a higher price at auction than lower-quality trailers that are showing their age. It should be considered as part of a comprehensive evaluation of total cost of ownership. 🌟



Phone: +27 11 622 4770

CROWN HOUSE

2 Theunis Street
Cnr Sovereign Street
Bedford Gardens, Bedfordview, 2007
P.O. Box 140
Bedfordview 2008

CROWN

PUBLICATIONS

ENGAGE INDUSTRY ACROSS AFRICA



MODERN
QUARRYING



LIGHTING
in
design

CAPITAL
EQUIPMENT NEWS

Construction WORLD

AFRICAN **FUSION** * SAIM

ELECTRICITY + CONTROL



Accessible on multiple platforms

BELAZ presents prototype of an all-electric mining dump truck

BELAZ is one of the first OEMs in the world to present a prototype of an all-electric mining dump truck, the BELAZ-7558E.

This is a completely new type of mining haul truck, featuring batteries instead of a diesel engine. The operation of such type of truck is economically profitable – the cost per ton is much lower compared to the traditional diesel-powered trucks of the same capacity. But, most importantly, this technology allows to completely avoid harmful emissions into the atmosphere and improve the carbon footprint on sites where these trucks will be utilised.

BELAZ has been working on this battery-powered dump truck concept for several years already, and an experimental prototype of this innovative machine was released at the end of last year. It was branded the 7558E Belaz truck.

The electric mining dump truck is based on the BELAZ-7558 family, with a payload capacity of 90 t and

a net weight of 76 t. It can reach a maximum speed of 64 km/h. This is the most compact model of all mining dump trucks of the world's leading brands that are equipped with an AC/AC electromechanical transmission. With the drive train already electric, the challenge was basically to have enough energy storage capacity and controlling the energy.

The chosen battery type is lithium-nickel-manganese-cobalt-oxide batteries. They will be installed (on present production models) in the engine, alternator, fuel tank and cooling pack bay. In total there are 15 batteries with a combined energy capacity of 675 kWh. The rated power of the power plant is 640 kW.

The power reserve on a single charge will be at least two hours with a full load of 90 t and on uphill hauling on slope of no more than 10%. After several cycles "loading – transporting – unloading", it will be necessary to recharge. The operating



The electric mining dump truck is based on the BELAZ-7558 family, with a payload capacity of 90 t and a net weight of 76 t.

time of a dump truck between recharges depends on the operating conditions. With downhill hauling, a charge will last for 8 hours, if uphill hauling, a charge will last for two hours. Charging is quick, about 20 – 30 minutes is required for a full charge from a special recharging station. The manufacturer of the batteries installed on the prototype BELAZ-7558E is a South Korean company.

Prototype testing is expected to be completed during the last quarter of 2022. Production of this electric truck will start in 2023 already. According to marketing experts, BELAZ will be able to sell at least 20 such electric dump trucks annually at first. 🌱

thyssenkrupp sells mining business to FLSmidth

thyssenkrupp has announced the sale of its Mining Technologies business unit to the Danish company FLSmidth, thus reaching a further important milestone in the initiated realignment of the group. The enterprise value is €325-million. The transaction is subject to competition authority approval. The closing of the transaction is expected within the next 12 months.

The Mining business was allocated to the Multi Tracks segment in October 2020 in order to find a new owner. With the sale, thyssenkrupp is successfully divesting the first major portfolio company in this segment. The business unit currently employs some 3 400 people and generated sales of around €0,8-billion in fiscal year 2019/2020.

The sale is an important step in the initiated transformation of the group and the associated focusing of the portfolio. The aim is to transform thyssenkrupp into a high-performing "group of companies" with independent businesses, a lean holding company and a focus on systematic performance improvement across all businesses.

"The successful sale of the Mining business shows that we are pressing ahead at full speed with the transformation of thyssenkrupp and achieving important results

step by step. But we have not yet reached our goal. The principle 'performance first' continues to apply. We need to return to positive cash flow as quickly as possible. The sale of Mining Technologies makes an important contribution to this," says Martina Merz, CEO of thyssenkrupp AG.

"At the same time I am pleased that we have found a very good new owner in FLSmidth. FLSmidth presented a convincing business strategy and a clear vision for the Mining business. It will give our employees attractive prospects. That was extremely important to us when negotiating the sale," says Merz.

The tie-up with FLSmidth, a listed company from Denmark and one of the world's leading suppliers of technologies for the mining and cement industries, will create a strong player with a global presence and leading solutions along the entire mining business value chain. A particular focus is on green technologies that can significantly reduce resource consumption and emissions in the mining industry. FLSmidth also has great expertise in taking over companies and has proven highly successful in integrating these companies.

"Thomas Schulz, CEO of FLSmidth, says: "thyssenkrupp's Mining business is an ideal addition for FLSmidth. We are



The sale is an important step in the initiated transformation of the group and the associated focusing of the portfolio.

particularly impressed by the capabilities, expertise and reputation of the thyssenkrupp employees, especially in projects and products. The large global installed base offers great potential for the service and aftermarket business. We have similar business models, share a strong focus on sustainability and digitalization and our corporate cultures are a good match. As a result, I am very much looking forward to combining our strengths; I am convinced that together we will play a leading role in shaping a zero emission future for the mining industry and in creating sustainable growth for our customers, employees and shareholders." 🌱

Liebherr to present its latest innovations at MINExpo 2021

Liebherr will showcase its latest innovative equipment, technology and services for the mining industry at MINExpo International in Las Vegas, USA, from September 13 – 15, 2021. Covering a total area of more than 2 600 m², Liebherr booth #7627 will present advancements from its Mining, Mobile Cranes and Components product segments.

Liebherr Mining will display the R 9150 Generation 7 (G7) 130 t excavator, the next generation of excavator cab from the recently announced R 9600 G8, the PR 776 70 t mining dozer with LiReCon teleoperation system, the newly introduced T 274 305 t haul truck along with a display from Liebherr Components, and the LRT 1090-2.1 90 t rough terrain crane from Liebherr Mobile Cranes. New developments and exciting announcements will be presented from Liebherr Mining's new technology portfolio, as well as the pathway forward into low and zero emission mining.

Attendees will be able to interact with new technologies through a VR booth, and discover Liebherr's technology at the daily masterclasses held with Liebherr experts. Fans and customers who cannot attend

in person will not miss out; all exhibits, announcements, and showcases from the expo will also be delivered on Liebherr's website and social media channels.

Liebherr will introduce three new excavators at MINExpo: the R 9150 Generation 7 (machine showcased on the booth), the R 9200 Generation 7, and the brand-new R 9600 Generation 8 (cabin showcased on the booth). These three machines establish the new naming strategy based on technology levels for Liebherr machines. This approach aims to achieve a common and long-term logic within the Earthmoving and Mining product ranges in a clear manner.

All three excavators are now equipped with the latest innovations including Liebherr Power Efficiency, Assistance Systems, and Bucket Filling Assistant.

LPE (Liebherr Power Efficiency) is a specific engine and hydraulic management system, which drastically reduces fuel consumption by up to 20%. Assistance Systems are advanced on-board applications designed to support the operator to become more efficient through analytics and actionable insights.

Assistance Systems will be presented



The R 9600 excavator is equipped with Liebherr Power Efficiency, Assistance Systems and Bucket Filling Assistant.

physically in the R 9600's cabin and on tablets displayed on the booth. Visitors can also discover the Assistance Systems through an immersive experience in the VR (virtual reality) area. BFA (Bucket Filling Assistant) is the first automation product of the Liebherr hydraulic excavator portfolio, and allows the operator to realise the bucket filling process automatically. 🌟

Hytec appoints new partner to support growing mine market in Zimbabwe

Hytec Services Africa has appointed a new Zimbabwean sales and distribution partner – Pace International – to offer the entire scope of Bosch Rexroth SA Group products and services to the actively growing mining industry in the country.

This appointment is in line with Bosch Rexroth SA Group's strategy to grow its distributor network across Africa. "Our aim is to increase our footprint to servicing existing customers and to extend our services to add value in the country," explains Petrus Viljoen, Africa Development manager, Hytec Services Africa.

Appointed on October 12, 2020, Pace International is a specialist in procurement, consolidation and export services in South Africa, with branches in Harare and Bulawayo delivering on-site services to strategic customers in Zimbabwe.

As such, Pace International is the distributor of key consumables and products in the mining industry (specifically pumps, motors, hose & fittings, filters and cylinders). Additionally, Pace International is experienced in on-site stock management and delivery coordination. It is therefore well-suited to provide the full scope of Bosch Rexroth SA Group products and aftersales services.



Pace International has been appointed a Hytec Services Africa sales and distribution partner, in Zimbabwe.

"Pace International is a member of the Local Enterprise Development (LED) programme, and this ensures a high level of support from the major mines in the region," explains Viljoen. This programme is similar to South Africa's BEE programmes; to be appointed, candidates must meet specific criteria. "This LED appointment is significant, as it positions Pace International as a preferred supplier for customers who wish to support the programme. It opens doors for business," adds Viljoen.

Additionally, Pace International has extensive experience working with mining

companies, across supply, distribution and aftersales support. "They possess strong technical expertise, particularly in the engineering field, and their team of competent engineers and technicians sets them apart. Furthermore, they have solid relationships with key accounts in the mining industry, and their technical teams have presence across various mines," explains Viljoen.

Currently, Pace International personnel are undergoing virtual training on Bosch Rexroth SA Group products and will have full support from Bosch Rexroth SA to ensure certified excellence accreditation. 🌟

Latest DAF trucks hit the highways

The latest DAF CF and XF trucks hit the South African highways this year to much fanfare from the transport sector in anticipation of even better fuel efficiency for which DAF Trucks are renowned. The new trucks have proved to be so popular that the initial stock has already sold out, with new stock expected to arrive in South Africa by mid July 2021.

Distributed by Babcock, the sleek new XF and CF DAF trucks represent pure excellence in transport efficiency, setting new benchmarks in fuel economy as well as improved productivity and profitability. Among the highlights of the new trucks compared to its predecessors are improved chassis, cabs and gearboxes. Central to the new trucks' transport efficiency is a multi-torque PACCAR MX-13 engine offering more torque at lower revolutions per minute (rpm) for higher fuel efficiency, lower noise levels and reduced CO₂ emissions.

The trucks are optimised for Africa's geological conditions, and driver training is offered as part of the handover process, with courses available through Babcock to help drivers reduce fuel consumption, anticipate hazards better and increase road safety.

Babcock has received overwhelmingly positive feedback from customers who were first in line to get their hands on the new trucks. David Street, MD of Fairfield Longhaul, says that DAF's excellent reliability and fuel efficiency, as well as Fairfield's exceptional relationship with the Babcock sales and after-sales support teams, are some of the motivating factors for its continued support of the DAF brand. Fairfield Longhaul has been steadily increasing its fleet of DAF Trucks over the last six years to transport a range of perishable products to destinations across South Africa, and was first in line for the new trucks.



Babcock's Mark Gavin (left), handing over new DAF trucks to Bertus Kritzinger.

Hot on Fairfield's heels was a leading logistic group operating in the tipper, tautliner and tanker transport sectors, who collectively placed an order for 100 new DAF XF 480 trucks. When you are running truck fleets in the hundreds, optimal fuel consumption, low maintenance costs and minimum breakdowns are the all-important criteria that logistics operators look for in a truck. Bertus Kritzinger, director of the logistics group, said the brand-new DAF XF trucks ticked all these boxes and then some.

The new DAF Trucks are available in a range of models including the DAF XF 480 FTT Premium Plus, which is ideal for transporting hazardous chemicals, owing to the safety features offered by the latest technology. When Skye Logistics, an up-and-coming fuel distributor was in the market for new trucks, the company sought out a vehicle that scored high in terms of safety.

The DAF XF 480 FTT Premium Plus trucks

fit the bill thanks to the liquid transport software that is applicable to all tanker transport applications, in particular for tanks without partitions or partly filled tanks. MD of Skye Logistics, Craig Moralee, says that the company is also expecting significant savings from the new trucks when compared to the previous model.

As part of an expansion process, the Simaz Group, providing road transport and logistics solutions to mines, power stations and processing plants, purchased five new DAF XF Trucks for hauling of coal. Part of its growth strategy was to empower previously disadvantaged females in the mining industry, and the Group has employed female drivers to steer the new DAF trucks. CEO Wiseman Sitole says that Simaz Group partnered with Babcock and DAF Trucks based on experiences shared with them by some of their clients who are familiar with and support the DAF brand. 🌟

Volvo trucks donates R1,68-million to help rebuild SA

Volvo Trucks South Africa, on behalf of the Volvo Group, has responded to the recent unrest and violence in the country by donating R1,68-million (SEK 1-million) to aid those severely affected, and to support the rebuilding of the region.

The funds were made available by the Volvo Group and will be donated to the Gift of the Givers Foundation, the largest African disaster response non-governmental organisation. The organisation already has an extensive network in place, bringing food, medical, business and livelihood support to the communities affected in

KwaZulu-Natal and Gauteng.

"I am proud to represent Volvo Group and to be part of the drive to create prosperity for all through sustainable transport and infrastructure solutions. We believe in creating a better world for the next generation," says Marcus Hörberg, vice president of Volvo Group Southern Africa. "For this reason, the funds will also go towards re-establishing supply chain mechanisms and medical supply logistics, ensuring that people are able to access food and health services safely and easily."

Badr Kazi, director of Gift of the Givers,

says, "We are extremely grateful to partner with Volvo in a time when our country needs us the most in helping to make a difference in the lives of our fellow citizens."

This donation also forms part of a response by Team Sweden in South Africa, a network of organisations coordinated by Business Sweden and the Swedish Embassy.

"We believe in South Africa and its people, and we want to continue being part of the rebuilding of the country and making a positive contribution to the society we operate in," concludes Hörberg. 🌟

Smith Power appointed distributor of Bomag's light compaction range

With high growth expectations for its light compaction equipment range, BOMAG has appointed Smith Power Equipment as the distributor in South Africa and selected cross border markets.

Having taken over the dealership of BOMAG's light compaction range in March last year, Smith Power Equipment has put in place a dedicated structure to take care of this iconic brand. Led by Stephen Peyper and Malcolm Edwards, the Smith Power Equipment compaction team believes it has what it takes to gain a significant share of this seemingly overtraded market where cheaper imports are also posing significant competition.

Peyper believes that the two brands, BOMAG and Smith Power Equipment, will leverage each other's strengths to gain a significant share of the South African light compaction market. BOMAG is regarded as a world leader in the compaction equipment market, while Smith Power Equipment is one of the biggest capital equipment distributors in southern Africa, representing a wide range of premium offerings, supported by an unparalleled support footprint.

Smith Power's distribution jurisdiction is pretty much the whole of South Africa and a few selected cross border markets such as Zimbabwe, Eswatini (previously Swaziland) and Namibia. "Key target customers for this



BOMAG double drum pedestrian rollers.

range of equipment include construction/civils contractors, local municipalities and plant hire companies," explains Peyper.

Available from Smith Power is a range of BOMAG double drum pedestrian rollers, the BW65H and BW75 H. This is complemented by a two-model compacting rammer range – BT60 and BT65, as well as two ride-on roller models – BW 120 and BW 135. The plate compactor range includes three single direction models, the BVP 12/50, BVP 18/45 and BP 25/50, as well as the reversible BPR 35/60 D model.

"Our 'go to' product for future growth of the brand is the compacting rammer. It is

generally a lucrative market here in South Africa, despite the influx of cheaper, low quality imports," he says. The power-packed BOMAG BT60 and BT65 models offer maximum compaction performance and are the most powerful tamers in this class size.

However, he adds, the leading range in the BOMAG light compaction stable is the double drum pedestrian rollers. The proven BOMAG double vibration system produces uniquely quiet and smooth-running characteristics that ensure uniform surface quality. Compaction and surface coverage is outstanding with high centrifugal forces and excellent working speed. ⚙️

Kemach is the new distributor of BULL backhoe loaders

Kemach is the new supplier of the full range of BULL backhoe loaders in South Africa. All models will be supplied complete with air-conditioning, full ROPS and FOPS and an industry-first 3 years/4 000-hour wet drivetrain warranty as standard.

"I am very excited to announce the next chapter in our future. Effective July 1, 2021, Kemach Equipment is the official supplier of the complete BULL range of backhoe loaders," says Les Lothian, CEO of Kemach Equipment.

"Through our national network, we will continue to offer exceptional support on these products, thus ensuring our customers' needs are met with optimal uptime and operating effectiveness," he adds.

The BULL range of backhoe loaders is said to offer productivity and efficiency with higher bucket capacity and breakout forces while also being the tallest dumping backhoe globally.

"The world has changed, and our customer needs have evolved. We believe that



Effective July 1, 2021, Kemach Equipment is the official supplier of the complete BULL range of backhoe loaders.

with the addition of the BULL product to Kemach Equipment's expanding world-class offerings, we have the ultimate earthmoving solution across all industries."

Kemach Equipment has, for the past 18 years, built up significant trust with cus-

tomers in the South African market across various industries by providing exceptional support on its offerings of world-class products. It continues its relentless efforts to delight its customers with best in class solutions/offerings. ⚙️

BUILDING RESILIENCE INTO THE SUPPLY CHAIN

The supply chain sector, and the adjacent global freight and transport spaces, are complex as well as crucial. A reliable supply chain prefigures a nation's overall economic competitiveness and is a key enabler at the macro-economic level, as most other industries rely on the inflow of various goods.

Since last year, the COVID-19 pandemic has caused major hurdles and disruptions for the supply chains around the world. Restrictions on non-essential commodities, additional health and safety checks, and reduced staff levels led to bottlenecks and shortages of certain goods.

In their attempts to adapt to these challenges, businesses are responding with ingenuity and innovation, often facilitated by rapid digitisation.

Given the looming threat of the pandemic's third wave, companies continue to build resilience against any future shocks into the supply chain.

"A seismic shift in economic history, the COVID-19 pandemic accelerated the uptake of the fourth industrial revolution for the supply chain industry," says Sujeet Morar, partner at global management consultancy Kearney.

"Flexibility and fluidity are now more vital than ever and developing an agile supply chain has risen to the top of the agenda for many companies," he explains.

Towards data-driven operation

With that in mind, Kearney developed a new methodology that would provide a roadmap for supply chain businesses. The Sense & Pivot (S&P) model was created to help navigate the transformation towards a more fluid, data-driven operational models.

The methodology represents a sophisticated response to the complex challenges of these times by harnessing the power of data and analytics through sensing platforms like scenario-modelling, correlation analysis and feature extraction. The data is collated from various disparate sources.

Company data such as sales, customer spend and inventory information are combined with external data, like weather, demographics, and economic trends, along with newsfeeds and social media.

The derived insights are then utilized to identify an optimal strategy and automate decision making accordingly, enabling an agile collaborative operating model for supply chain players.

Morar explains that S&P goes beyond mere responsiveness, as it entails constant

monitoring of the market environment. This enables real time granular decision-making, and intelligent adaptation to meet demands in the most cost-effective way.

"Supply chain operators can now combine human and artificial intelligence, mapping out and testing various scenarios, and where necessary, tweaking parameters manually based on business knowledge not captured by the sensing engines to determine an optimal strategy. These tools are encompassed in a dedicated software package that makes the process simple and intuitive," says Morar.

Digitalisation and automation

Many nations like South Africa, however, are still in the early stages of digitising and automating business processes. Thus far there have been no large-scale systemic changes to facilitate this shift, although measures like the opening of 'green lanes' allowing preapproved and supplied data to speedup flow, improvement of regulatory authorities, announcements to invest in 4G, 5G and fibre roll out, and adjustments to subsidisation models have been suggested as possible structural interventions to help further digitise and thus allow players to build resilience into their supply chains.

"Many of S&P's core enablers, such as data and analytics capabilities that allow real-time monitoring of both the market and the company itself, are considered nascent for the majority of SA players," Morar notes.

Localisation may also be a crucial aspect to leveraging the power of strategies like S&P. While this has lent impetus to the push for localized production of goods, we're still heavily reliant on global supply for certain commodities, for example hi-tech items like microchips.

Unfortunately, South Africa's manufacturing sector is still not as advanced as those of Europe, China, and the USA. Realistically, we lack the economies of scale to produce certain goods at prices that are competitive globally. Localising manufacture in SA would incur the added benefit of creating much-needed employment.

"In many instances the challenge now is to develop a credible local supply base, by developing credible local supply



Sujeet Morar, partner at global management consultancy Kearney.

chain partners, through more effective and targeted local content development programs and the enabling ecosystem to enable the transfer of technology and intellectual property," Morar suggests.

Companies are now also considering tiered suppliers for example having international primary suppliers and local secondary ones.

"The ability to pivot operational strategy and switch fluidly between a diverse selection of suppliers is vital. A sensing platform with dependable analytics can help you foresee these needs and be prepared to respond swiftly," Morar says.

Morar also emphasises the importance of a dedicated logistics partner for supply chain players, who could benefit off deeper insight into global trends and quicker reactions to disruptions in the form of creative, cost-effective solutions.

He explains that the Sense and Pivot framework allows market adaptability and seamless orchestration to improve financial and operational outcomes. Large global players have used learning-enabled transportation and autonomous planning analytics to streamline their operations and have achieved significant savings and cost reductions.

"The aim is to cultivate agile supply chain operators in SA who can withstand market shocks and have an array of contingencies to overcome any shortages that may arise," he concludes. 🌐

LOADTECH

ON BOARD WEIGHING

SMART SCALES FOR LOADERS



When the pressure is on and customers are waiting, you need to perform faster without compromising accuracy and precision.

- Monitor performance of a primary or mobile crusher or screener
- Monitor of stock-piles
- Utilization of mobile machines
- Track production output
- Maximize the use of raw materials



Contact us for more info

134 Sarel Baard Crescent Gateway
Industrial Park Centurion
Tel: +27 12 661 0830 Email: sales@loadtech.co.za
Website: www.loadtech.co.za



Scan to watch video

JDLink™

is a telematics system by John Deere that allows owners and managers to remotely connect to their equipment.

Yes this can save you money. Yes it can ensure proper operations
Yes you can monitor on-site operations; off-site remotely



JOHN DEERE

*Terms and conditions apply (available at www.deere.com/sub-saharan)
www.deere.com/sub-saharan | africa@johndeere.com | Client Service: 0800 983 821

JohnDeereAfrica

