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**EARTH MOVING:** Komatsu works with champions

MINING: Scania supplies stemming trucks

TRANSPORT: Isuzu Truck SA improves its market share



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### **Mechanisation** -

### the path to sustainability in Africa

ransportation plays a crucial role in the sustainable development of rural areas and small communities. Whether building and planning pedestrian orientated main roads in small towns to stimulate economic development or improving public transportation infrastructure to enhance the movement of goods or access to jobs, transportation literally binds a community together.

Payloads and kilometres travelled have a significant impact on ownership costs. Tare and allowable mass are the determining factors. Transport efficiency is about optimising payloads, average speed and kilometres travelled.

How we use transport has far more impact than just how much we need to pay for the components of transport and is severely compromised by the impact of many uncontrollable factors.

For many agricultural commodities and low value added manufacturers, the cost of transport represents a substantial proportion of total product costs. One study has indicated that in developing countries, transport costs typically account for between 10 % and 30 % of final product price.

With this in mind it would be correct to assume that, when referring to transport in agriculture, trucks would spring immediately to mind as the obvious method of moving

goods. The capital outlay required to acquire a vehicle would rate as the highest expense element of the purchase with the running and maintenance costs also high on then expenses list.

The transport industry has been fortunate in the past few years with the introduction of Chinese manufactured brands into the market. In so doing, they have filled a niche market for economical and easy to maintain vehicles and construction type equipment. Not all the vehicles are suitable for every application but some brands, with their technical attributes, have proven themselves in certain applications.

Mechanisation, in agriculture today is a key driver to sustainable development in food production. Mechanisation, however, is not only restricted to food production but also to the application of mechanical technology, largely as a means of enhancing the productivity of human labour and often to achieve results well beyond the capacity of human labour.

Farm power in African agriculture relies to an overwhelming extent on human muscle; power based on operations that depend on the hoe and other hand tools which, in a way, places limitations on productivity.

It is a well known fact that China is in the forefront of development on the African continent, having contributed favourably to the economic infrastructure of many an African nation. Large populations in Africa need to be lifted out of poverty and steered towards sustainability. Mechanisation seems the only short term solution for encouraging rural populations to sustain themselves. To a large extent, China is providing the means for countries to reach those objectives and, having already cornered its domestic market with vehicles and construction equipment, is now poised for its assault on the export markets.

There are limitations with Chinese equipment and vehicles in that they are uncompetitive in some markets because they cannot meet the emission standards. This will not be the case in time to come as more and more technology is incorporated into the vehicles and equipment as a result of the JVs, which most Chinese manufacturers have entered into with European and American manufacturers.

Many of the world's major manufacturers have their sights set on Africa as is evident by the support that Bauma Conexpo Africa 2015 has received to date. But is Africa, with its turmoil, prepared to embrace the mechanisation technology available to raise the bar to improve sustainable development?

Pierre Sanson

Editor

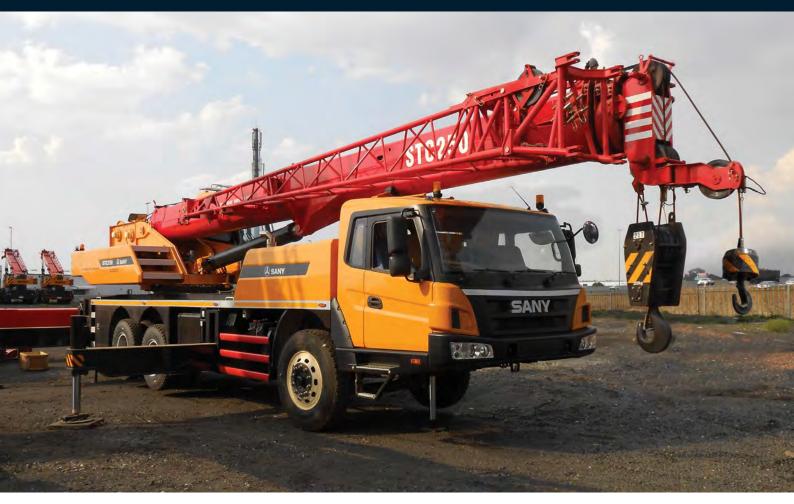


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SANY

### **HAS HIGH ACCEPTANCE LEVELS**

### **IN LOCAL MARKET**

By Pierre Sanson

Ver the past few years Sany (Sany Heavy Industry Co Ltd) has come to dominate the Chinese equipment market, which is perhaps the largest and most competitive market in the world. Despite the conglomeration of powerful state owned companies and the influx of foreign brands into the country, Sany has achieved the number one position in China and is placed number six in the world, in the relatively short period of fifteen years since the company was established in 1989.

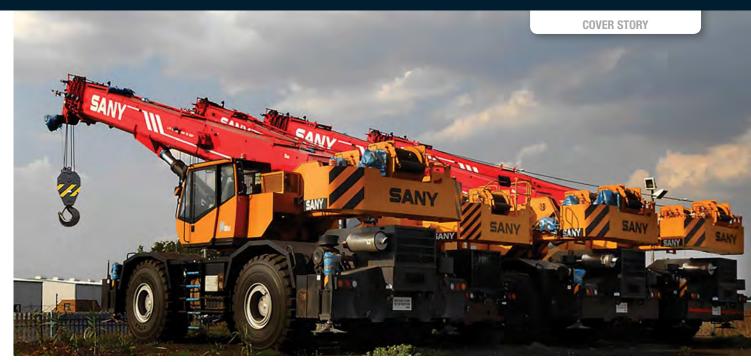
The success of Sany has been based on simple philosophies like understanding local market needs and building products that meet those needs. Sany has also demonstrated its long term commitment to markets outside China by building world-class manufacturing and R&D facilities in USA, Germany, India and Brazil. Its expansion worldwide has resulted in the total employment of some 55 000 employees in the company's various facilities.

In South Africa, Saxeni Equipment (Pty) Ltd was established in 2010, becoming the authorised dealer for Sany mobile and crawler cranes. Driven by passion, integrity and service excellence, Saxeni has earned the respect and confidence of its rapidly growing customer base, which represents over 145 mobile and crawler Sany cranes sold in South Africa already.

The list of customers reads like the who's who of the crane industry with companies such as Allied Crane Hire, Marlboro Crane Hire, Tubular, Ritchie, ELB Construction and Tandem Cranes, having made the successful transition to the Sany brand. "We have successfully grown the Gauteng area support base over the past five years and will now concentrate on the coastal areas, especially CapeTown where two units have already been placed in operation. Port Elizabeth has already received its first unit with more in the pipeline," said Morne Jute, Saxeni Sales Manger.

"At Saxeni Equipment, aftersales is of utmost importance and we offer a 12 month/2000 hour warranty with every unit and with service intervals every 250 hours. We have a team of highly experienced technicians that will respond to a call within 24 hours. Whether it is a breakdown or simply telephonic technical support, the customer can rest assured that the query will be handled with priority and professionalism," added Jute.

Jute went on to explain that the company's truck mounted cranes were a high demand item and, of those, the STC500 was the most popular as it fits into the right category for the crane hire industry. "Having a truck mounted crane in your fleet not only makes it more affordable to acquire but gives returns equal to those of an all-terrain crane if your job application allows it. The simplicity of its design and low maintenance cost make it an ideal unit for any crane or plant hire company", explained Morne Jute





The Sany STC500 has a rugged, fabricated high tensile steel chassis held together by a strong integrated welding structure which forms a solid base on which to manage the full capabilities of the 50 tonner. The additional structure which gives the unit its working foundation are the four-point H-shaped outriggers, independently hydraulically controlled for both vertical and horizontal extension. When fully extended, the outriggers have a maximum span of 6 m x 7.2 m.

The heart of the drivetrain is a Dongfeng Cummins ISLe 340.30 turbocharged, six cylinder diesel engine. With its 6.9 litre capacity, it has a power output of 250 kW @ 2100 rpm and a torque of 1425 Nm @1100 - 1400 rpm. Driving through a 9-speed synchronised transmission, power is transmitted to the rear, twin driving axles. All 12 wheels on the STC 500 have the same 12.00R20 tyres size, an affordable tyre to maintain or replace.

The working end of the Sany STC500 is the superstructure, comprising boom and

operators cab. The boom itself has a maximum length of 42.5 m, comprising five high tensile steel sections which have optimised strength by virtue of their U-shaped design. The design has significant weight reduction with a compensating increase in strength. In addition, the STC500 is fitted with a standard 16 m fold away fly jib with off sets of 0,15 and 30 degrees. This combination gives the unit a total lift height of 58.8 m. Standard equipment on the STC500 is a 2<sup>nd</sup> auxiliary winch and the Sany Safe Load Limiter (SYML) with an external robotic light indicator. The 3.5 ton rear mounted counterweight is fixed therefore eliminating the need for additional transport for the counterweight.

Morne Jute with his years of experience of cranes in the local market, is upbeat about the future of Sany in South Africa and in concluding said, "Buyers of any form of mobile crane, be it All-terrain, Truck mounted or Rough Terrain, should always be aware of the application and be sure of the class of crane they require before purchasing. A Sany truck mounted or a rough terrain crane may be a suitable option in your fleet". ©





Morne Jute, Saxeni Sales Manger.



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## MB PLANT JOHANNESBURG REGIONAL OFFICE

### hosts Demo Day

Recently, the range of New Holland machinery was enthusiastically demonstrated at the Lion Park Quarry by CNH Industrial's product specialists from Italy. The event offered an opportunity for customers to view a selection of the machines, which included a Skidsteer, a TLB, a Wheel Loader and an Excavator.

The event attracted great interest from customers who travelled from all parts of Gauteng, Mpumulanga and as far as Lesotho, to attend.

It gave customers the opportunity to gain first-hand experience of the benefits of New Holland Equipment's range and the opportunity to engage with its product specialists.

MB Plant SA is extremely well geared to provide its customers with the confidence of a comprehensive support for the full life cycle of its equipment, from sales support and qualified product knowledge to after-sales service, technical training and parts supply.

Adding more excitement to this great showcase of New Holland Equipment, MB Plant SA was also proud to launch the Astra Rigid and Articulated Dump Trucks models. The 30 ton Articulated Dump Truck was demonstrated on-site and customers were able to view the machine in action, highlighting its fast cycle times.

The Astra product specialist engaged with customers who were afforded the opportunity of viewing the benefits of the high productivity machines.

Danie Gerber, CEO of MB Plant SA, confirmed that it was a great milestone for the company to exhibit the machinery and to launch the trucks at this event. Gerber said, "As it is our single vision to have great products backed by good people and to provide our clients with exceptional service, our technicians and sales personnel have already received relevant training to ensure our clients receive exceptional service."

With regional offices located in Johannesburg and Durban, a new fully operational office in Cape Town and a growing network of branches and dealers, MB Plant SA is able to provide comprehensive services and technical support to its highly diversified customer base throughout the country.

For any related enquiries, we welcome you to contact our offices at (011) 396-3944 or info@mbplantsa.com or visit our website at www.mbplantsa.com ©



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### **SAMSON SURFACE FEEDERS**

### for Namdeb Diamond Corporation

BLT SA - exclusive distributor in sub-Saharan Africa for Samson bulk materials handling equipment — has recently delivered two 85 T material feeders to Namdeb Diamond Corporation's mine in Orangemund, Namibia.

These mobile surface material feeders, based on Samson's MF 1610W series, were modified especially for Namdeb, to efficiently handle bulk aggregates, including dune sand and rock, as well as desert sand, gravel and tailing.

"Samson's automated handling systems, which require minimal civil works, are de-

signed to join together fixed and mobile equipment, providing a cost efficient and highly productive alternative to fixed bulk handling installations," says Charity Gumede, BLT SA's marketing director. "These surface material feeders, which receive materials directly from 40 T dump trucks, have a buffer holding capacity of up to 66,2 T. The feeders have a regulated output feed rate of 1 000 T per hour, direct to an on-going conveyor system. Material is drawn from the tipping truck in a controlled stream, which means dust generation is significantly reduced, minimising environmental pollution.

"A special design feature of these units

was the incorporation of a reject grille that prevents oversized material passing from the feeder to the on-going conveyor. These grilles, which are fully supported by the feeder, can be manually adjusted for different lump sizes."

Each material feeder is mounted on a chassis with four pneumatic polyurethane filled tyres and has been provided with a heavy duty removable towing frame for repositioning of the feeder around the site.

The units have a deflected chassis design with an inclined discharge section to raise the material to the discharge height, providing simplified transfer to the conveyor system. A horizontal loading section enables the feeder to receive material direct from tipping trucks. This design maximises holding capacity and minimises vehicle access ramp requirements. The flared entry section increases volume entry, providing reduced tipping time and greater flexibility in vehicle alignment.

For optimum performance, the 5 ply conveyor belts are supported by trapezoidal form, load-bearing double apron bars, located on every pitch of the heavy duty conveyor chain.

The electro-mechanical drives comprise a direct coupled electric motor with shaft mounted helical bevel type reductions gears at either side of the shaft. Each drive is controlled by a single ac inverter for soft starting and variable belt speed.

Levelling blade output controllers provide a regulated volumetric discharge to the conveyor proportional to the belt speed.

Instrumentation for enhanced performance and protection of equipment, includes tail shaft rotator sensors and control units, head chute blockage detectors and lockable emergency stop switches.

The material feeders were manufactured in Vredendal, Western Cape, with original Samson components, according to stringent UK engineering specifications. They were transported over 500 km by road to Namibia and are now fully operational on the mine.

Samson fixed and mobile conveying equipment is designed for use in diverse sectors, including mining, agriculture, shipping, transport, power and general industry. The range encompasses link conveyors, grab hoppers, material feeders, radial boom stackers and mobile shiploaders. ©



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### **KOMATSU-**

### doing business with champions

irst impressions count, especially when a company is about to invest some of its hard earned cash in capital equipment. In the case of Tshwane-based Ditshimega Projects, management was delighted with the way Komatsu does business, an excellent manner in which to begin a long and mutually beneficial relationship.

"When we put out enquiries for new excavators and backhoe loaders, Komatsu was the first manufacturer to respond, and we were impressed with the quality of service and friendly attitude of its sales team," says general manager Themba Skhosana.

Ditshimega, which means 'champions' in Setswana, started out in 2012 under the leadership of managing director Sakkie Ranta who has an honours degree in civil engineering and is a registered professional engineer with the following esteemed bodies of authority in Engineering respectively; SAICE, ECSA & SABTACO. The company is living up to its name, having experienced consistent growth over the past three years and is looking to expand further into the Free State and Eastern Cape provinces.

This progress bodes well for the company to meet its clearly stated aspirations, which include becoming a supplier of choice to national and municipal authorities and to pioneer job creation with special concern for women, disabled youth and historically disadvantaged South Africans. Its commercial

goal is to become a wholly self-sufficient business entity by 2020.

Ditshimega has an impressive track record of successfully completed projects, including civils and water reticulation projects, upgrading sewerage networks and school infrastructure for a variety of customers, among them the City of Tshwane and the Free State Department of Education. Ditshimega is active in project management and provides professional consulting services.

Skhosana makes the point that the company is in the construction business for the long haul, which is reflected by its stance on both equipment and personnel.

"We strongly believe in owning our own equipment for two specific reasons. Firstly, it proves to existing and potential customers that we are serious players in the construction business. Secondly, hiring machinery costs money and you don't have the same control over maintenance and reliability that you have with your own products."

It is this philosophy that prompted the purchase of three Komatsu WB93R-5E0 backhoe loaders and a PC200-8M0 excavator with the prospect of the fleet growing to include a further new loader as well as a grader by the end of 2015.

The business has 25 permanent employees and is always on the lookout for hard-working young professionals who want to make

their mark in the industry. "We are developing a reputation for having the capacity to meet deadlines. Sometimes this means having all hands on deck and working into the early hours of the morning but we always deliver jobs on time and within budget," says Skhosana.

This philosophy extends to newly-qualified engineers who have the responsibility of running a site as part of a process to groom them for project management.

"Capable people are our most important asset and giving them this type of experience can only increase their confidence."

A case in point is a young engineer overseeing a pipe laying project in Mamelodi who is delighted to be working with Komatsu equipment and is looking forward to the fleet's expansion.

Tenders are, of course, the lifeblood of the industry and Ditshimega currently holds a Grade 7 Construction Industry Development Board rating, allowing it to tender for projects up to a value of R130 million or more, in the event of a joint venture.

"The seeds have been sown and there is every reason that the association between the champions and Komatsu will grow and flourish especially as we share some deep rooted values, namely commitment to quality and reliability, collaboration with business partners and the development of our most valuable assets, our human resources," concludes Skhosana.

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The Group



### **JOEST KWATANI CUSTOMISES SCREEN**

### and feeder solution

pecialist vibrating equipment manufacturer and supplier Joest Kwatani continues to demonstrate its capacity to provide turnkey screening solutions to the mining sector. A recent contract saw the company providing design, engineering, fabrication and delivery of a range of vibrating screens and feeders to a manganese mine in the Northern Cape.

"Our equipment is designed specifically to perform in heavy duty applications such as the manganese sector, where in this instance the feed rate is 900 tph," Kim Schoepflin, managing director of Joest Kwatani, says.

"In this recent contract we adopted our 'engineered excellence' approach to meet specific customer specifications. None of the equipment we supplied was off-the-shelf, as the requirement was for bespoke, custom designed elements specifically for the project. Our involvement extended to assisting the EPCM contractor with the underpan, feed and discharge chute designs whereby we used their layouts to accommodate our screens and to indicate any interference points, in addition to providing our input into good operating procedure," Schoepflin says.

Joest Kwatani's scope of work necessitated additional infrastructure to support future requirements. The company's scope

of equipment supply comprises a sizing screen, a secondary screen, a large tertiary screen, a tertiary screen counter-balance sub frame and four silo withdrawal feeders.

Schoepflin explains that the tertiary screen is one of the largest of its kind supplied into this type of application. "It will be supplied complete with a counter-balance frame, which isolates the structure from the dynamic and static loading forces imparted by the vibrating screen. This allows us to design vibrating equipment that is more efficient and offers the customer a longer lifespan."

The Joest Kwatani screens were customised to match the exacting metallurgical requirements of the client's processes and the associated mechanical duty. "An interesting fact about this custom designed tertiary screen is that it has a fine cut size of high open area 0.63 mm in panels, and affords the customer the necessary efficiency and capacity requirements," Schoepflin says.

Following delivery, Joest Kwatani would be on hand to assist with installation through to cold and hot commissioning. In addition, Joest Kwatani has a dedicated team comprising a branch manager, project engineer, safety officer and a number of service and maintenance personnel based at its Kathu branch office in the Northern Cape, with

complete office, warehouse and spares stockholding facilities. Joest Kwatani also supplies vibrating equipment to various manganese and iron ore operations in the area, and as a result has established a solid track record in the Northern Cape.

Joest Kwatani is a locally owned and operated OEM that designs and fabricates vibrating screens and feeders in-house. It has a 39-year track record of developing and supplying the African mining bulk materials handling market. Joest Kwatani's technology is characterised by its robustness and longevity, tailored to the customers' specific application and processing needs in the harsh and demanding African mining industry.

With thousands of installations throughout the continent, Joest Kwatani's machines are engineered to lower the total cost of ownership. They are commonly found in mineral sands, coal, gold, diamond, platinum, iron ore and manganese operations, with 24/7 customer service provided by the company's service centres and branch network in all the major mining areas. They are supported by an experienced in-house design and technology team and state-of-the-art manufacturing facilities across Joest Kwatani's 17 000 m² site area in Spartan, providing customers with common points of reference for all their vibratory equipment needs. •



### **LIEBHERR WINS**

### major duty cycle crawler crane contract

iebherr secured a major contract with a Turkish customer comprising 51 HS 825 HD duty cycle crawler cranes at the end of last year. Following a successful acceptance test this Spring, the first 20 machines left the Liebherr factory in Nenzing for delivery.

The major order for the Turkish General Directorate of State Hydraulic Works (DSI - Devlet Su i\$leri) comprises the delivery of 50 duty cycle crawler cranes plus a training unit in the second half of 2015. All HS 825 HD for this order are fitted with 1.9 m<sup>3</sup> dragline buckets. Besides flood protection, their main tasks include dredging works in rivers and lakes. This guarantees the draught that is required by ships operating in shallow waters.

The HS 825 HD is a universal duty cycle crawler crane of the 40-tonne class. Thanks to its robust construction it can be used for dragline buckets, as for DSI, and for a great number of different applications including clamshell, diaphragm-wall grab or casing oscillator as well as straightforward lifting tasks. This wide variety ensures cost effectiveness for the crane owner.

Cost efficiency is also considered in the machine's transport dimensions. With the standard telescopic undercarriage and crawler pads of 700 mm, the HS 825 HD has a transport width of only 3 m. The maximum transport weight of 37 t without counterweight also means that the machine can be economically relocated.

The duty cycle crawler crane with an operating weight of approximately 54 t is equipped with a six cylinder 180 kW / 245 hp diesel engine. For special heavy duty tasks Liebherr offers an even more powerful engine as an option (270 kW / 367 hp). The standard equipment includes two 16-tonne free-fall winches with maintenance free multi-disc brakes.

To train the operators of the duty cycle crawler cranes for their future tasks DSI has also ordered a Liebherr simulator for applications with dragline bucket. This recently presented simulator ensures state-of-the-art operator training in a realistic and secure three-dimensional environment. Both efficiency and safety are thus increased on the jobsite.

DSI is a state agency under the Ministry of Environment and Forestry. It is responsible for the utilisation of the country's water resources. This includes the registration and monitoring of all water resources with the objective of providing irrigation for agricultural areas and water supplies for major cities. In addition, DSI is responsible for building and operating waste water treatment plants and water purification plants as well as for preventive flood control.







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# TORRE LIFTING SOLUTIONS

flying high with aerobatic team sponsorship

The Pitts Special aerobatics team has become a well-loved and recognised name in South Africa. Renowned as best in their class with their Pitt's special aircraft with many collective awards to their names, these daring aviators, Scully Levin, Arnie Meneghelli, Ellis Levin and Sean Thackwray are a common sight at corporate days, shows and events.

This team has been sponsored by Torre Automotive, formerly Control Instruments for 16 years. With the acquisition of Control Instruments by Torre Industries, the team was rebranded as Team Torre and other business units in the Torre Industries stable were offered sponsorship.



Torre Lifting Solutions signed an exclusive contract to sponsor the branding on one of the four-plane fleet. The Team Torre branding extends to the flight suits and other promotional material at events. Quentin van Breda, technical director at Torre Lifting Solutions, points out that the company has a long tradition of identifying and capturing opportunities to increase its market penetration.

"Our cranes and other lifting solutions are highly visible and, in particular, our Potain

tower cranes have become a regular and noticeable feature on major construction sites throughout southern Africa. The sponsorship of the Pitts Special plane and crew was a natural extension of our sustainable brand growth. We have the added advantage of having customer flip days during the year to offer our clients a very different experience in an aerobatic aircraft. As with all of our endeavours, we believe in aligning ourselves with the best in breed," Van Breda explains.

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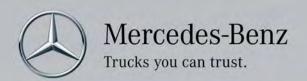


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### Heavyweight deal-making expected

### **AT BAUMA CONEXPO AFRICA 2015**

s the premier trade fair for construction machinery, building material machines, mining machines and construction vehicles in Africa, BAUMA CONEXPO AFRICA's economic impact on the mining and construction sectors is significant.

"Exhibitors will have the opportunity to connect with customers and each other. From this perspective, the opportunity arises to enhance networks, generate business leads and facilitate deal-making among world-class players in the industry," says Elaine Crewe, CEO of BAUMA CONEXPO AFRICA.

The international trade fair also provides a substantial boost to South Africa's business tourism sector. In 2013, bauma Africa welcomed 14 700 visitors from 101 countries, who not only supported the local hotels, but visited restaurants, shopping malls and enjoyed various other sight-seeing activities while utilising public transport. "As organisers, we provide pre- and post-show tour package deals that provide our international visitors the opportunity to enjoy the best that South Africa has to offer," explains Crewe. "In this sense, we extend their stay in the country and create the opportunity for increased revenue for business tourism."

The trade fair provides exhibitors the opportunity to showcase their products and new technologies on an international platform and there is a dedicated demonstration area for exhibitors to demonstrate their latest developments. "At BAUMA CONEXPO AFRICA 2015 we will be showing some firsts, which include a pre-production E-series large articulated dump truck, the latest generation of our large ADT range," says Stephen Jones, Executive General Manager: Group Marketing at Bell Equipment. Amongst other exciting launches at the event, Bell Equipment will also be showcasing its partner products, including a new Recycler, the Bomag MPH 364.

Pan Mixers South Africa (PMSA) will be launching four items, namely: Kraft Curing Solutions for the pre-cast sector, the SPS concrete roof tile plant for start-up roof tile manufacturers, IMER Concrete Batching Plants, and In-Situ concrete flooring grinding and polishing and HTC tooling combinations.

bauma Africa 2013, the first edition of the

trade fair, was a resounding success. "The feedback from our 2013 exhibitors was outstanding and showed numerous cases of deal-initiation and deal-making," says Crewe. "These include the sale of machines and equipment, as well as the establishment of strategic networks that included important contacts for future business."

2015 exhibitor, Putzmeister SA, was also present at the 2013 edition of the show. "All of the machines on the stand were sold and new relationships were started. This year we hope for similar results: To build new relationships with potential clients, and sell all of our units on display," says Ludwig Geyser, Chief Executive Officer at Putzmeister SA.

"As experienced in 2013, we expect to have more decision-makers attending the show in 2015 and as a market leader, PMSA will be able to provide a one-stop-shop concept to prospective clients," comments Quintin Booysen, Sales and Marketing Manager at Pan Mixers South Africa. "The number one objective is to leave visitors with a single memory — If you're thinking about concrete, think PMSA," he adds.

For Bell Equipment, the trade fair is not about generating business so much as building its brand. "We will be looking at BCA 2015 as a vehicle to showcase our extensive product range and reinforce the Bell brand as the continent's home grown, one-stop shop for quality equipment solutions," says Jones.

New exhibitor, Grundfos, is looking forward to the trade show. "At exhibitions we always wish to generate business, as well as make new contacts. At BAUMA CONEXPO AFRICA 2015, we hope to create awareness in the market, as well as network with the relevant people in the industry," comments Lorraine Smart, Marketing Manager at Grundfos.

Visitors, including customers and potential customers, will this year also benefit from the BAUMA CONEXPO AFRICA Forum. "The Forum, which is open to all visitors, is a new introduction to the trade fair and will feature 'Country Specials', focusing on investments and projects in South, East and West Africa," explains Crewe.

Furthermore, IFAT Environmental Technology



Africa will run alongside BAUMA CONEXPO AFRICA, focusing on environmental solutions for the mining and construction industry.

Africa's vast and untapped mineral reserves continue to offer big rewards for investors. Infrastructure development too is on the rise across the continent. According to recently published report, Deloitte on Africa: African Construction Trends 2014, investment by value of mega projects under construction in Africa grew by 46.2% in 2014 (from US\$222 billion in 2013 to US\$326 billion in 2014).

Says Jones: "Doing business successfully in Africa is about forging long term relationships with customers and users, having a good understanding of their businesses and working together to mitigate risks." As a trade fair focused on mining and construction in Africa for Africa by Africa, BAUMA CONEXPO AFRICA is the ideal platform for decision-makers to build on relationships and develop new business.

"BAUMA CONEXPO AFRICA looks forward to bringing together mining and construction industry heavyweights from across the continent in September and providing them with a unique opportunity to meet, connect and expand their contribution to the African development story," concludes Crewe. ©

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### **NEW HOLLAND CONSTRUCTION**

### to present rich selection of units

ew Holland Construction, in collaboration with its South African distributor MB Plant SA, will be present for the second year running at Bauma Conexpo Africa 2015, the International Trade Fair for construction machinery, building material machines, mining machines and construction vehicles that will be held from September 15<sup>th</sup> to 18<sup>th</sup> at the Johannesburg Expo Centre.

"The construction sector holds significant growth potential in the Maghreb and sub-Saharan Africa, where South Africa remains a key market", stated Andy Blandford, Vice President CNH Industrial Construction Equipment for Europe, Africa and the Middle East. "But the entire African continent is extremely important for us. With 34 countries having participated in the first edition and the high expectations for this year's show, we are sure that Bauma Conexpo Africa will serve as a prime opportunity for networking. We will be able to present New Holland Construction's latest innovations and technologies to our African customers and show how we are able to support them with our products and services built around their needs."

The event will offer the opportunity to see a rich selection of units from New Holland Construction's equipment offering. The spotlight will be on its backhoe loaders and skid steer loaders, which are trademark product lines of the company in African markets.

Two entry-level 97hp B90B backhoe loaders will be on display to represent the company's renowned range of backhoe loaders. Combining the power of a wheel loader with the performance of an excavator, the versatility and compact size of these machines make them the ideal solution for a wide variety of appli-

cations. New Holland Construction backhoe loaders have been specifically designed to deliver impressive traction and performance together with exceptional fuel efficiency.

New Holland Construction 200 Series skid steer loaders deliver a huge performance and manoeuvrability in a compact size without compromising comfort or safety. For over 40 years, equipment operators around the world have trusted these machines to tackle even the toughest jobs in many diverse applications, including construction, landscaping and agriculture.

The company will also showcase its heavy-duty C Series of crawler excavators with a 23-ton E215C unit. The E215C crawler excavator is designed to deliver the ultimate reliability and durability that customers expect. The long undercarriage provides dynamic stability and safe performance on all terrains. This exceptional stability and its optimal weight distribution enable the operator to make the most of the E215C's superior breakout force and lifting capacity. Combining highly advanced electronic technology with a sophisticated hydraulic system, the E215C crawler excavator maximises performance and optimises fuel consumption according to the job requirements.

The massive pushing power and high precision of New Holland Construction graders will also be represented on the stand by the top-of-the-range F200B motor grader. With a powerful and fuel efficient engine, heavy-duty axles and its unique design with the cab at the rear, the F200B provides impressive pushing power.

Completing the display will be a W190C wheel loader.

New Holland Construction wheel loaders are designed to give the biggest bucket payload in the industry and to get the job done with fewer loading cycles. Also on the stand will be the company's telehandlers, masters of versatility that stand out for their performance, safety, and cost efficiency.

African customers demand robust construction machinery to get the job done even in the most extreme conditions. New Holland Construction equipment solutions are built around the customers' needs for productivity, reliability, safety, and fuel and cost efficiency. New Holland Construction's wide offering makes it the ideal choice for a variety of operational needs, including specific applications for key industry sectors such as infrastructure, residential building and mining.

In partnership with MB Plant SA, its official distributor in South Africa, Lesotho and Swaziland, New Holland Construction supports customers for the full life cycle of their equipment, from sales support and qualified product knowledge to after-sales services, technical trainings and timely parts supply.

"With regional offices located in Johannesburg and Durban, a new fully operational office in Cape Town and a growing network of branches and dealers, MB Plant SA is able to provide comprehensive services and technical support to its highly diversified customer base throughout the country and Southern Africa," stated Franco Invernizzi, Africa and Middle East Business Director. "In other African markets we provide the same level of support through strong importers — for example, Rex Quip in Namibia, Ivecar in Angola or Achelis in Kenya and Tanzania."

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### **VÖGELE POWER FEEDERS**

### offer cutting-edge technology for road paving



### WIRTGEN SOUTH AFRICA

ith its Power Feeders MT 3000-2 Standard and MT 3000-2 Offset, VÖGELE offers cutting-edge technology that sets the standard in today's road construction industry, both in terms of quality and cost efficiency.

Extremely even and durable road surfaces are the product of clearly definable quality factors. Every interruption to paving, for instance when asphalt runs out, every jolt of a feed lorry docking onto the paver and every instance of material segregation is immediately evident in the quality of the paved road, the use of a material feeder prevents this. It is a crucial link between the feed lorry and paver, continuously supplying the latter with mix without any physical contact whatsoever. It thus comes as no surprise that the use of a material feeder is increasingly becoming mandatory in tender and on job sites.

With the material feeders of its new Power Feeder generation VÖGELE offers a complete machine and paving technology package featuring components that complement each other logically and interact effectively. This fulfils all requirements on quality and cost efficiency.

The high-performance VÖGELE Power Feeders MT 3000-2 Standard and MT 3000-2 Offset can store a total of 40 t of mix in the overall system of feeder and paver, and convey up to 1 200 t of mix per hour. VÖGELE technology allows a 25 t feed lorry to be completely emptied in just 60 seconds – one of the key factors for an uninterrupted paving process.

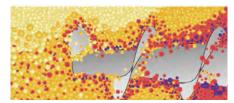
A key technical prerequisite for a non-contacting transfer of material from the feeder to the paver is a robust, sensor-based distance control system. In this context, mechanical or optical sensors ensure that the feeder automatically maintains the correct distance from the paver. In the case of the VÖGELE Power Feeders MT 3000-2 Offset, this is achieved with a redundant system comprising three individual lasers. The control system calculates a mean value from these three sensors. This ensures that the distance remains constant, even if one or more sensors are blocked, e.g. by passing workers.

Material feeders are most commonly used in the construction of motorways. And the new VÖGELE Power Feeder MT 3000-2 Offset is, to all intents and purposes, made-to-measure for paving. However, offset technology also allows quick and economical filling of cavities in safety barriers. And when surfacing footpaths or cycle paths, the feeder brings all of its advantages to bear: thanks to its pivoting conveyor, it can conveniently drive on the road while simultaneously transferring the mix to a small or compact paver on the pathway.



The material feeders in the new VÖGELE Power Feeder generation use conical augers to homogenize the mix. The conical shape prevents the formation of so-called 'tunnels' in the material. Instead, the material is withdrawn evenly from all areas of the feeder's receiving hopper. And because fresh hot mix is constantly being conveyed in from outside, it is also thermally homogenized. The result: significantly better homogenization and, consequently, better pavement quality.

### The conical augers homogenize the mix



When being transported by lorry, it is not unusual for the mix to become segregated, as shown by Thermal Image 1.

The specially developed transverse conical augers of the VÖGELE Power Feeders allow the entire mix, transferred from the lorry to the feeder, to be continuously fed into the

paving process. The conical shape of the augers effectively homogenizes the material so that slightly cooler parts are evenly mixed with warmer parts.

### The trough-shaped conveyor and diesel heating system permit careful conveyance of material

After being homogenized by the conical augers, the mix is carefully transferred to the paver's extra material hopper via a trough-shaped conveyor (see Thermal Image 2). The material is transferred much like a 'package', literally resting on the conveyor.

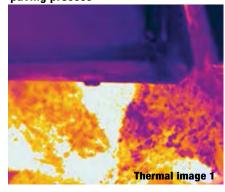
An advanced diesel heating system with non-contacting infra-red heating panels ensures that no mix remains stuck to the conveyor.

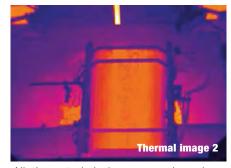
### Extra hopper in the paver optimises the material flow

The mix is transferred from the trough-shaped conveyor to an extra material hopper in the paver that is optimised for a highly efficient material flow (see Thermal Image 3). This specially designed extra hopper effectively prevents the mix from becoming stuck.

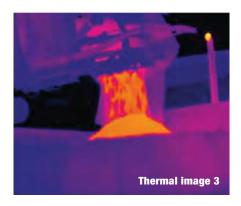
Consequently, all of the asphalt is fed into the paving process without leaving any residues.

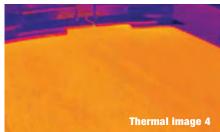
### The result: A homogeneous mix for the paving process





All these technical measures have been finely co-ordinated and ensure that the





material is made available for paving in an optimum condition. However, VÖGELE technology not only counteracts thermal segregation, but also mechanical segregation. Both aspects complement one another ideally. This is because an ideal temperature distribution can only ensure a durable road if the grain size distribution in the mix is also ideal (see Thermal Image 4).

### 50 % lower fuel costs

With fuel prices continuing to soar, the fuel consumption of a material feeder has long been one of the key factors for cost efficiency. VÖGELE Power Feeders boast a highly advanced drive and machine concept. This allows particularly economical and ecofriendly operation. Measurements confirm that low consumption levels of approximately 17 litres of diesel fuel are possible, depending on job site conditions.

### Up to 58 % lower transport costs

Transporting a material feeder is also a cost factor that should not be underestimated. One favourable aspect of VÖGELE feeders is that their design is optimised from the ground up for transportation. The MT 3000-2 Standard in particular is ready for transport in virtually no time at all, saving the owner time, manpower and costs. What's more, with a height of 3 m, VÖGELE Power Feeders do not exceed the permissible transport height of 4 m, even when being transported on a regular trailer. That equates to big savings in logistics costs. A practical example: the costs for transporting a VÖGELE MT 3 000-2 Offset over a distance of roughly 370 km in Germany are approx. 58 % less in comparison with a selected competitor.



VÖGELE material feeders are characterised by their advanced Ergo Plus operating concept, in which the focus is squarely on the operator. This is illustrated by the overview afforded by the operator's platform, as well as by the simply arranged operator's console, which reduces the risk of accidents and operating errors. Instead of a number of different control panels, VÖGELE material feeders have just one central operating console that provides the necessary information at a glance and is intuitive to handle. A joystick is used to pivot the proportionally controlled conveyor with the utmost precision and sensitivity through maximum 55° in both directions and to tilt it by up to 23°. Such high-precision manoeuvrability has many advantages. These include the safe and effortless feeding of pavers from the side, backfilling trenches or the cavities in safety barriers during motorway construction, as well as reconstruction measures on hard shoulders.

The Ergo Plus operating concept of VÖGELE Power Feeders also trumps when it comes to cost efficiency. This is because most applications can be handled with just one machine operator. The feeder operator has a convenient overview of the entire process, from the intake of mix all the way to transfer to the paver's material hopper. VÖGELE offers a number of intelligent functions that facilitate the machine operator's work. For example, the automatic distance control system ensures that the material feeder and paver maintain the optimum distance from one another. This allows the feeder operator to concentrate on the task at hand. A second machine operator is only needed in the event of complex material transfer processes. VÖGELE Power Feeders save money in this way day after day. O



### SEW-EURODRIVE 'MOTORS OF THE FUTURE'

The IEC standard focuses on single-speed, three-phase 50 Hz and 60 Hz ac cage induction motors in the 0,75 kW to 375 kW power range – the most widely used range of motors. According to this standard, motors are produced and categorised as IE1: 'Standard Efficiency', IE2: 'High Efficiency' and IE3: 'Premium Efficiency'.

As of January 1, 2015 the European Economic Area officially prescribed that all asynchronous ac motors with squirrel-cage rotors be classed as IE3. SEW-EURODRIVE has proactively expanded its comprehensive portfolio of ac motors by adding new IE3-accredited units, says the company's general manager for engineering, Conrad Pilger.

"Although the SEW-EURODRIVE DR modular motor system has been available since 2008, it became IE3-compliant in 2014, after being optimised in dimensions, weight and performance. The systems can be integrated easily into existing machines and systems to enable greater energy-efficiency." The DR series is now the only system of its kind worldwide that satisfies the requirements of all efficiency classes, from IE1 to IE3, in a single product range. Despite the recent optimisation, the IE3 motors are compatible with the same components, which simplifies the stocking of spare and wear parts.

"This represents a significant cost benefit for suppliers and end customers. The new DR motors are as compact as an IE2 class motor of the same power rating. The motors are available in the power range between 0,75 kW and 200 kW, and can be combined with SEW-EU-RODRIVE gear units using direct mounting, or as stand-alone motors," Pilger continues.

While IE1 and IE2 motors are still commonplace in South Africa, Pilger indicates that rising electricity costs and continued load-shedding are factors prompting local industries to invest more money upfront in energy-efficient motors, in order to ensure long-term savings.

"The new motors from SEW-EURODRIVE set standards in terms of global innovation and sustainability. Given that efficiency regulations are expected to get stricter worldwide, these new solutions will be recognised as the 'motors of the future' for the next 10 to 15 years," he concludes.

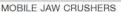
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ROAD AND MINERAL TECHNOLOGIES



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Email: miken@wirtgen.co.za, Web: www.wirtgen.co.za



of emerging contractors

mall to medium sized contractors are not only faced with skills shortages, but also lack the capital to buy expensive automated equipment. PMSA, the largest manufacturer and distributor of brick and block making machines on the African continent, offers a range of machines to meet the specific needs of this

sector.

The emerging contractor market is a critical sector of the South African construction industry, as it promotes the empowerment of local entrepreneurs. "Our machines allow contractors to establish viable small businesses that require little capital injection," Quintin Booysen, sales and marketing manager at PMSA, comments.

To date, Booysen estimates that PMSA equipment has been used to manufacture the bricks for about two million houses in Southern Africa alone. PMSA's small-capacity machines include the PK300 (Cornet) and the UNI (PK100). The standard brick capacity of this range is from 10 000 to 16 000 per nine-hour production shift, depending on the machine option.

These machines are supplied with the appropriate mixing plant. Materials and pallet handling and machine operations are all manual. The range is therefore ideal for smaller contractors without significant experience in manufacturing operations to set up their own plants.

Looking more closely at the UNI plant, Booysen explains that a simple switch panel is used to operate the loader skip and pan mixer. In addition, the discharge gate is operated by means of a simple hand lever.

"The main idea behind this range is to man-



ufacture machines that are easy to operate. They must also be able to withstand rugged operating conditions and be easily maintained," Booysen notes. In this regard, the pan mixer wall and floor are lined with easily replaceable wear segments.

The three-bladed sprung mixing star has an inner-wall scraper for maximum efficiency with block machines all having interchangeable moulds for producing a range of products from a single machine.

PMSA's medium-capacity machines include the VB1X, VB1 and RE-600. Here the standard brick capacity is between 22 000 and 60 000 per nine-hour shift. A choice of materials-handling systems is available, with the option of fully automatic or totally manual operation.

The largest-capacity machines from PMSA are the RE-1400, VB4X and VB4. Standard brick capacity is from 96 000 to 165 000 per nine-hour shift. A selection of materials and pallet handling systems is available. These high-end machines can be fully automated or semi-automated, with a selection of options according to the end products being manufactured.





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Babcock is in the forefront of providing essential lifting expertise to some of the major manufacturing and strategic enterprises in the country. As a leading supplier of engineering support services and plant to the energy process, mining and construction industries in Africa, Babcock's plant hire business has become the largest empowered mobile crane and plant service provider throughout South Africa.

The company's flexibility allows it to offer its clients package deals for specific contracts where long or short term projects are underway and where competitive advantage stems from the transfer of significant experience and knowledge within the Babcock Group in construction related industries in southern Africa.

During the past few months, Babcock has participated in vital projects where its expertise and capabilities have been tested to the full. The project at Majuba power station after the collapse of the coal silo and the replacement of the lime rotary kiln Coopax Cooler at Mondi Paper, offered the company some of the most extreme technical challenges so far.

Majuba Power station is the youngest commercially operated power station in South Africa at the moment. It has three silos, each holding 10 000 tons of coal and built in 1994. It was originally thought that the cracks that had appeared on one unit had subsequently been repaired and would present no problems, but on the 4<sup>th</sup> of November 2014 the structure collapsed.

Senior engineers and members of the power station's management were quickly on site to assess the damage and call for remedial action. A tender was issued and awarded within ten days of the incident. Babcock was successful in its bid and was on site immediately on receiving confirmation. The crane selected for the job was a Liebherr LG 1550 mobile crane belonging to Babcock. "This was normal service to us but also significant in that it gave us exposure on a major project in terms of seeing the capability of a crane that is not well known in the market," explained Mike Hawkins, Heavy Lift Manager of Babcock.

The scope of the work included assembling the crane on site, removing the first gantry, de-establishing the crane, moving it to the second position, re-assemble and take down of the second gantry.



Further, Hawkins added, "In my opinion it was one of the best lifts we have done. It was not the heaviest but the most challenging in that there was no definite confirmation of the weight. The uncertainty of the weight made us lift in 5 m intervals with assessments at each interval. It was also challenging in the sense that it is always more difficult to remove old plant than it is to install new. Nobody is sure how a bulky load like this will behave at 60 m high when it finally comes free (the gantry weighed 56 t was 30 m long, 7 m wide and 3 m high). Once the gantry was free from its supports, it hung 60 m in the air with no means of pulling it back. Things did get a little tense at times, especially when the wind picked up to dangerous levels. The confidence displayed by our personnel to ensure the successful conclusion of the project was indicative of the professionalism that Babcock employs on every job".

At Mondi Paper, Babcock was awarded the craneage contract to remove and replace the lime rotary kiln Compax Cooler. It was a significant project for Babcock as Mondi had traditionally used a competitive company for all its heavy lift work. Mondi decided to give Babcock an opportunity and indicated that it would be considering the company for many more projects in the future.

The scope of the project at Mondi was to lift out the old Cooler and replace it with the new unit and thereafter relocate the crane to a safety area to fit a longer boom in order to lift the three filter units (30 t each) into position and secure. Here once again the Liebherr LG1550 Mobile Crane was utilised with great effect and efficiency.

"During the operation, we were challenged when the old cooler jammed during removal and the lift ended up taking 12 hours to complete. Once the crane was holding the load it wasn't possible to pull it down again so we persevered until the cooler was out," commented Mike Hawkins.

"My team showed absolute calmness and responsibility under those circumstances, which meant a lot to the client. The load was heavier than originally quoted but we had made provision for this as old equipment is always heavier by virtue of a certain amount of product that remains inside,"

With the successful completion of these two projects Babcock has once again enhanced its proven track record of partnerships on large projects throughout southern Africa and across all industry sectors. •



# MORE RELIABILITY. MORE ACTION.

To be launched at BAUMA CONEXPO 2015





### **FOGMAKER FIRE SUPPRESSION SYSTEM**

### to be showcased at bauma Africa

esigned and manufactured in Sweden, FOGMAKER is a market leader within vehicle fire suppression systems for buses and heavy equipment in Europe, USA, the Middle East and Australia. Designed specifically for engine and closed spaces, the patented technology allows for the installation in any orientation, an advantage over traditional low pressure foam and powder based systems. The water mist produced under high pressure has outstanding extinguishing performance as it cools down and chokes fires,

limiting the amount of damage in the engine compartment.

FOGMAKER's main application areas are in buses, mining equipment, forestry machinery, contractor machinery, specialised vehicles and generators. The company, which was established in 2005, already has close to 100 000 system installations in more than 50 countries. Besides dominating the bus market, FOGMAKER systems are gaining popularity with a growing installed base in underground vehicles, forestry machines, marine vessels and other specialised mobile machinery.

John Russell, Business Development Manager for FOGMAKER in South Africa, highlights that the FOGMAKER water mist fire suppression system has suitable application where the protection of lives is critical, and the value of the mobile equipment and impact from down-time is high. Russell adds, "Due to the hydro-pneumatic fire detection, which is totally independent of any electric circuit, both the detection and suppression system work even when the

electricity supply is disconnected. Re-setting a released suppression system is simpler, easier, and can be accomplished within hours. Thus the maintenance and possible costly downtime is reduced."

The patented discharge piston allows for complete discharge, regardless of the orientation of the bottle. This feature, and the use of high-pressure, results in smaller installations compared to conventional low-pressure and foam based systems. A further benefit is that the system can be installed in confined, out-of-the-way spaces, closer to the required area of protection. These factors decrease the both the installed and total life cycle cost of the system.

FOGMAKER manufactures according to ISO 9001 and ISO 14001 accreditation systems, and has obtained approval of Underwriters Laboratories (UL-listed) in USA, Swedish Fire Defence Association's SBF 128 and most recently Australia's AS 5062 standard. FOGMAKER will be showcased at BAUMA Africa. Visit us at stand HO1 in Hall 6. ©

### **NEW STANDARD WARRANTY SCHEME FOR**

### Iveco 'Born in South Africa' range

fter demonstrating its confidence in South Africa by setting up an assembly plant at Rosslyn near Pretoria, global truck maker Iveco is backing its locally-produced products with an industry-leading Standard Warranty scheme.

The new enhanced Standard Warranty has been stepped up dramatically from the previous offering, which was already considered favourably. It has now been perfected to enhance complete customer confidence in the top quality materials and precise engineering which are the hallmarks of the dynamic "Born in South Africa" Iveco products.

The Daily range boasts an unlimited kilometre, 24-month FULL unlimited Standard Warranty.

Eurocargo now offers a 3 year/300 000 km as Standard Warranty, which is up from the previous staggered Warranty of 200 000 km, which had a number of exclusions.

Stralis, Iveco's global leading truck and win-

ner of Truck of the Year accolades, sees its Warranty offer leap from 2 year/400 000 km to an industry-leading 3 year/600 000 km — with additional inclusions.

The warranty for Trakker has been aligned to that of the Stralis, so that now, the Standard Warranty for the On Road application is 3 yr/600 000 km; while the Trakker Off Road has had its Standard Warranty cover increased from 2 yr/250 000 km to 3 yr/400 000 km, setting a new standard for the market sector.

The New 682 comes in with an attractive standard full 1st year Warranty and up to 200 000 km of drive line cover in the second year

The improvements to the Warranty cover demonstrate lveco's total confidence in its product range and underlines its commitment to continue to offer its customers the best service in the industry.

Iveco has always been a trusted partner for

many businesses because it has been there in every step of the vehicle's life thanks to its Elements pack, which provided flexibility and cost-effectiveness. But the new Warranty scheme takes this commitment to a whole new level.

"Leveraging on the World Class Manufacturing principles being applied at our state of the art assembly plant in Rosslyn, we are proud to improve our Standard Warranty offering. Proudly "Born in South Africa" is much more than just a brand exercise. The complete product range has been tailored specifically for the Southern African market and conditions, and we are able to give our loyal customer base a simplified and encompassing warranty as Standard. Naturally, there may be the occasion to offer an Extended Warranty, and with our comprehensive Elements package, we are now able to fully meet the demands of transport operators," said Eamonn Parker, Managing Director of Iveco South Africa. O

# N E W **682**STRENGTH AT WORK







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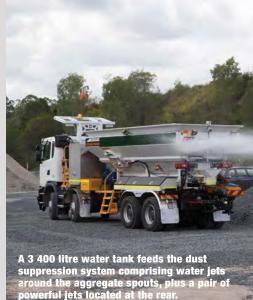






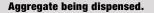






A completed truck ready for delivery.







The trucks are manufactured to stringent standards.

### **BLASTING SOLUTION:**

### a game changer for opencast mining

ertain aspects of running businesses, such as operational efficiency, are universal. And efficiency in one area of expertise that has an exponential effect on the rest of the business is an elusive pot of gold for most. The opencast mining sector — if approached with a solution that guarantees it massive savings in time, money and material volumes — would be swift to implement it.

This has been the case with stemming trucks supplied to the southern African market through a partnership between Scania South Africa and Cobra Petro Projects. An initial truck was manufactured and introduced to the market at last

year's Electra Mining Africa exhibition. One of South Africa's most established mining groups saw it and arranged a demonstration review. The truck impressed the company to the extent that it purchaced the demo model. Within a few months two other units were purchased. Cobra Petro Projects manufactures the units under license of Ausroads making use of Scania trucks.

"The process of stemming in a local opencast mining context is traditionally archaic as the most common practice involves crudely modified front-end loaders to backfill blast holes," explains Chris Swanepoel from Scania South Africa's mining division.

He points out that this method is ineffective, labour intensive and results in inconsistent blasting results. In addition, backfill material either consists of aggregate that needs to be transported to the blast site or of the rock displaced through the drilling of the blast hole.

This means that the material is not graded and specific to the requirements of the blast – which affects efficiency.

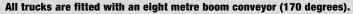
"Use of this new stemming truck technology eliminates all these variables and ensures the correct amount of precisely sized aggregate into blast holes in the most efficient way possible," states Karel Steyn, technical



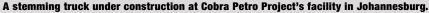


Karel Steyn, technical manager at Cobra Petro Projects.

MINING







manager at Cobra Petro Projects.

"Precise measurements of aggregate can be inserted through the truck's load-cell system and this means no wasted material, no wasted time and the provision of the exact amount of resistance for the blast."

Other benefits of using the stemming truck include operational safety (one truck and operator) versus several smaller vehicles; being able to access hard-to-reach blast areas with an 8 m boom conveyor (170 degrees) and significantly decreasing the time between charge and blast to an almost negligible period.

Aggregate flow control and rear boom manoeuvring can be carried out through a joystick mounted in the cab or via a wireless remote control from outside the vehicle. A neatly integrated control screen fitted into

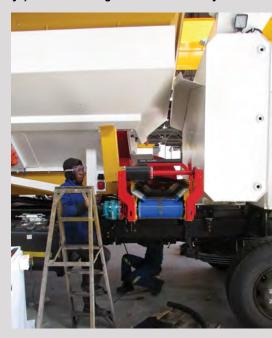
the dash allows the operator to keep a close eye on the amount of aggregate delivered or that remaining in the hopper, and another notes the vehicle's gross vehicle mass.

The trucks are available in two configurations:

- 13 m<sup>3</sup> hopper
- 16 m<sup>3</sup> hopper

Elements of the unit as well as the interior of the cab can be suited to exact client requirements. As the trucks are manufactured locally, clients benefit from local support teams and spare part availability.

Scania and Cobra Petro Projects are proving that the incorporation of such game-changing stemming truck technology guarantees increased blasting efficiencies across the opencast mining sector in southern Africa which can in turn increase production – ulti-



One of the three conveyor belts present on all trucks.

### What is stemming?

Stemming is a key element in the 'drill and blast' mining technique. In stemming, material, such as fine gravel that is called aggregate, is placed on top of explosives in drill holes. When the explosives are detonated, the stemming locks the expanding gases and keeps the forces in the borehole until rock begins to break. A stemming truck's duties are to fill blast holes on a mine site into which the explosive charges have already been inserted. Typically these are located at fivemetre intervals in the area to be broken up. A 16 m³ load can fill up to 60 holes, and stemming truck can easily deliver 500 kg in 15 seconds, allowing excellent productivity on site. Source: Scania

mately resulting in higher profit margins in a repressed commodity down cycle. •

Written by Richard Jansen van Vuuren Photographs:

Jade Photography and Eventco Strategic Marketers: Scania and Richard Jansen van Vuuren

### **ISUZU TRUCK SOUTH AFRICA**

### holds its own in a declining market



he overall truck market in 2015 has lost ground and has resulted in a -5 % growth year to date. In spite of the Heavy Commercial market segment showing a 5.5% growth to date, the Medium and Extra Heavy Commercial segments have declined 7.5 % and 7.3 % respectively.

Of concern, is the rapid decline in the truck market in the last three months. This suggests that the market outlook of 32 000 units at the start of the year which equates to a 2 % growth over the previous year. The current outlook is that a possible 29 000 units only will be achieved which explains the negative 5 % growth forecast.

Isuzu Truck South Africa on the other hand, will during the course of the third quarter, achieve a milestone in the local market by reaching a total of 30 000 units produced at its Port Elizabeth factory since the formation of the Isuzu Truck SA 2007.

Isuzu Truck SA can be justifiably proud of its performance to date this year as it has recorded a 20 % increase in sales over the same period in 2014 despite the overall truck market showing a 5 % decline so far. The company has progressively gained market share as well, from 12.9 % in 2014 to a 17.7 % share at the end of June 2015.

At the Isuzu Truck SA annual press conference held recently, Craig Uren, COO of

Isuzu Truck South Africa outlined some positive growth plans for the company and explained, "2015 has been a really busy time with a huge number of activities in many areas of our business. In the shadow of a truck industry that has shown negative growth year to date, Isuzu Truck SA is expanding the scope of its business. ITSA has gone through changes and achieved many milestones during its eight year growth but none bigger than the 30 000 units produced at our Port Elizabeth plant so far. Our ever improving market share qualifies us as a leading truck brand in South Africa so we have no option but to make strategic plans for the future."

"So today we embark on the next phase of our Southern Africa strategy. These new changes are moving ITSA from a commercial OEM to an entrepreneurial type business entity that has the capacity to initiate and build products according to client specifications. Our scope of work and business is no longer focused only on what leaves the factory gate. Together with our dealers, ITSA will have a more integrated relationship with current and future customers in the life cycle of our trucks," added Uren.

The new strategy announced by Craig Uren included the acquisition of Port Elizabeth based KANU Commercial Body Construction (Pty) Ltd and Automotive Chassis Technologies (Pty) Ltd (ACT) in a 100 % buyout of



**Craig Uren** 

each entity, effective from August 2015.

"This acquisition complements our growth strategy as we believe that KANU and ACT will definitely enhance our business structure. The move to acquire these entities will centralise the process of buying our trucks where everything will be processed from one central point of contact," said Uren.

This acquisition also comes with a new appointment within the business. Current Plant Manager, Sipho Sandla will move into a new role as General Manager leading the KANU/ACT operation in Port Elizabeth, with outgoing owner of KANU, Tony Wright, staying on in an advisory capacity for a minimum of 12 months to ensure a smooth transition. In 1991, Sipho graduated with Higher National Diploma in Mechanical Engineering (B.Tech) and, since 1992, has been employed in the automotive manufacturing sector, a career spanning some 23 years.

"Isuzu Truck South Africa will continue to be one of the major contributors in the Eastern Cape's Gross Domestic Product (GDP). We believe that every truck we sell into the market possesses an economic opportunity with great return on investment. The more we sell, the more economies we create and with that, the creation of new job opportunities. South Africa and the continent at large need greater and stronger growth for our economies to develop," concluded Craig Uren.

### YOU DON'T BUY A TRUCK, YOU JOIN A TEAM.

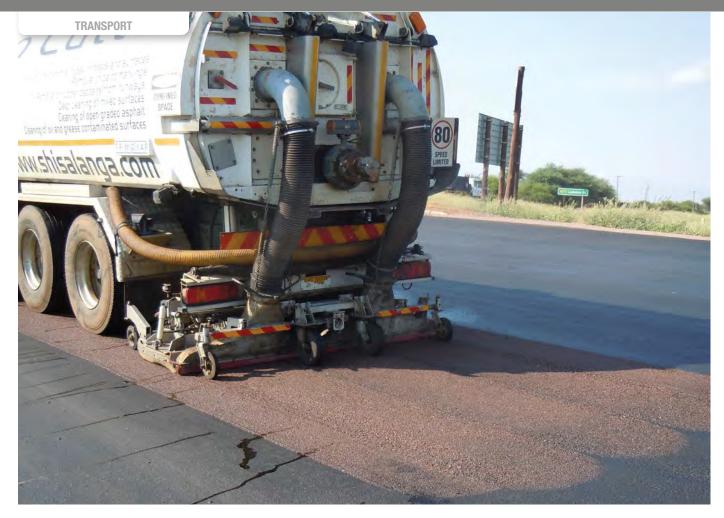


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### **HYDRO CUTTING**

### improves road surfaces

strategic investment in Shishalanga Construction by National Asphalt last year saw the addition of hydro cutting technology to the company's road surfacing solutions.

Sean Pretorius, managing director of National Asphalt, says that this cost effective and environmentally friendly system for the repair and remediation of flushed bituminous pavements offers a number of significant advantages. "Hydro cutting restores the friction and texture of a pavement using high pressure water blasting, and can be used to remove flushed seals including bitumen, asphalt and concrete without reducing the structural life of the surface," he says.

"This innovative technology improves the porosity of the asphalt which significantly reduces the risk of aquaplaning, limits the road spray generated by vehicles by as much as 90 % and reduces the road noise factor by 50 %," Pretorius says. "All of this improves general road safety while extending the life of the road surface as the stone chip matrix remains in place after the bitumen has been removed."

Pretorius says that when it comes to multi-

ple seal layers, seal stability is dramatically improved with a reduction in the overall bitumen content ratio by up to one litre per square metre per single treatment and a substantial improvement of the micro and macro texture of the seal.

The hydro cutter process, which is operable in all weather conditions, can also be used to clean open graded asphalt that has been clogged by debris. By simply changing the spray bar nozzles, spindle speed, cutting speed and pressure to create a 'washing' action, the hydro cutter will revitalise the asphalt by removing all detritus. The water pressure can be adjusted from 85 bar to 850 bar, and significantly no chemicals are used in the process.

The hydro cutter comprises a truck mounted high pressure water pump and vacuum recovery system and offers the flexibility to treat widths from 0.75 to 3.45 metres. The high velocity vacuum system allows the cutting pressure as well as the texture depth to be determined while the machine is in operation. Water energy is focused in fine streams at high speed via five rapidly rotating blasting heads. The water streams physically cut the binder from the stone with

the energy of each 'needle' of water dissipated upon contact. Using only water, this method of remediation is environmentally friendly and safe.

Another significant and environmentally important advantage is that the hydro cutter can capture and secure all spillages and waste material gathered for disposal at designated waste sites. 95 % of all waste is recovered by the system. The unit has a 5 000 litre water tank and a 10 m<sup>3</sup> waste water storage capacity.

Pretorius believes the company's strong focus on innovation and the continued development of new technologies will bring further benefits to all stakeholders including an enhanced road user experience with maximised safety. "By employing one or a number of technology solutions that National Asphalt offers customers will be able to drive down costs in an environmentally friendly and minimally invasive manner," Pretorius concludes.



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### **CHEAP RECREATIONAL DRUGS**

#### AFFECT EMPLOYEES AT WORK AND AT HOME

By Rhys Evans, Director of ALCO-Safe

rug abuse in South Africa, as in many countries all over the world, has been an issue for years. However, the number of different types of drugs available has grown dramatically, at a variety of price points, and cheap recreational drugs are now easier to come by than ever before. Drugs have essentially become more affordable than alcohol, giving rise to increasing levels of abuse and addiction. For employers and businesses, this can have serious negative consequences, as drug abuse does not only affect home lives but work performance as well, not to mention the negative impact on health and safety. Education is a vital component of helping to curb drug abuse; however, it is often not sufficient in isolation. Implementing stringent and fair drug testing policies and leveraging the latest equipment for testing, which is capable of detecting these new, cheaper drugs, is essential. This can help organisations to identify employees with problems and take the necessary action to assist them and ensure compliance with necessary health and safety regulations.

The local drug industry is not new yet it initially revolved mainly around cannabis, as this is easy to grow and accessible. It is only in the 1980s and 1990s that other drugs such as cocaine, methamphetamines and heroin began to emerge. Cocaine usage, however, has always been limited to higher income groups, as it cannot be manufactured locally and must thus be smuggled through customs, which significantly raises the price. Amphetamines such as speed and ecstasy became popular in the 1990s among party-goers. Heroin also became more available in the 90s, however it was almost always used intravenously and therefore never gained widespread use due to a prevalent fear of needles with many people.

While all of these drugs are addictive and cause social problems, addiction and work-related issues such as illness, absen-

teeism, mood swings and more, it is only recently with the emergence of cheap street drugs that drug abuse has become a real challenge for the majority of South Africans. Drugs such as mandrax and tik are commonly used in the Western Cape, and crystal meth is growing in popularity among the party set in Gauteng, who snort it as a cheaper alternative to cocaine.

In addition, a new drug nicknamed nyaope or whoonga, a mixture of low-grade heroin, rat poison, detergents, and sometimes anti-retrovirals (ARVs), is a growing problem in the townships of South Africa. This drug is cheap and easy to make as it is derived from readily available substances, is highly addictive, and the side effects are truly horrendous. This growing problem is affecting more and more South Africans at home and in their places of work. Drugs are often used as a coping mechanism for those who are stressed, unhappy or not dealing with the pressure of their everyday lives. In addition, in industries such as farming and construction, drug usage can result from boredom and workers being away from their families for extended periods of time. Whatever the reason, the availability and low price of recreational drugs presents a challenge for many organisations. As people become increasingly addicted to a substance, they often spend a large portion of their income on it, and cannot support themselves or their families. They also often stop eating and do not sleep, so they lose weight and their health and concentration levels decline. Their work performance usually suffers, absenteeism increases, and ultimately they are unable to perform their jobs effectively.

Ensuring a drug-free workplace helps organisations to improve safety, decrease risk, comply with health and safe regulations, improve productivity and employee performance, and curb a growing problem in South Africa. Education is a large component of dealing with

drug abuse. Many users of drugs are unaware of the implications and effects of drugs, as well as how to go about getting help once they realise they have a problem. However, organisations need to also implement drug policies as well as testing procedures to monitor employees for drug usage. This requires the use of the latest equipment to ensure fast, accurate and minimally invasive testing.

With regard to testing equipment, a number of different solutions are available Urine testing is a cost effective option that comes in a number of different forms, including single and multi-panel dip tests, cassette tests where a pipette is used to drop samples for testing onto the tests and integrated cup tests, which incorporate the test panel into the sample cup. Urine testing, however, requires special consideration, such as the need for private bathrooms, and the requirement for testers to be the same gender as those being tested.

In environments where this is not possible, saliva drug testing may be preferable. Saliva testing uses a swab to produce results in a matter of minutes, and can be used to screen for a panel of five common illegal substances including heroine, cocaine, marijuana and methamphetamines. In addition to urine and saliva testing, test kits are also available that enable the testing of solid substances for the presence of drugs. Using one of these testing options can benefit organisations by assisting them to enforce drug-free workplaces.

Drug abuse is a growing problem in South Africa, and it affects both work and home life for those caught in its vicious cycle. Employers should implement educational practices as well as testing policies and procedures to help curb drug abuse in the workplace. Not only is this a health and safety requirement, it can also benefit them by improving productivity and employee health.





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#### **DEMAG EXPANDS AFRICAN FOOTPRINT**

### with quality equipment and services

erex Material Handling product manager Richard Roughley states that the potential for growth across Africa is excellent for companies willing to provide superior products and back-up service. "It's the last frontier as far as development is concerned and global firms are realising this.

"There's a lot of growth on the continent and a definite need for premium products backed up by local support. Where low-quality products are used in these harsh environments, there's a lot of productivity loss due to down time and issues with repairs."

Roughley says Demag's push into Africa starts with basic training for local personnel on all products, as well as access to technicians who can fly out to sites and keep downtime to a minimum. "We are also currently sourcing partners in African countries that can provide direct support to those customers."

He adds that Demag has established partnerships in Zimbabwe and Namibia, and is currently in negotiations in Zambia and Kenya too. "As part of the Terex Group, there are a number of Terex agents and distributors in various African countries who can potentially overlap with Demag technicians to provide immediate support to customers."

Roughley says that it's vital that Demag trains new partners in every aspect of its equipment and operations, in order for them to deliver the same quality of service Demag does. "There is also potential for partnerships in manufacturing, which gives customers the advantage of rapid transport times."

As with breaking into any new regions, Roughley appreciates possible challenges posed by broadening Demag's scope in Africa. "People discuss issues like corruption but, as an ethically responsible company, Demag isn't willing to entertain the notion and is guided by strict corporate rules and responsibilities. We get the business because of the products and services we provide, or we walk away."

Another challenge is third-party recommendations to a potential Demag customer, he says. "Often there are dealers who act as 'middle-men', where we would prefer to deal directly with customers to ensure that



we understand the very specific technical requirements each customer has."

With many foreign companies working on projects in Africa, Roughley has dealt with both African and overseas clients. "We've found ourselves with orders from Australian or Canadian companies that have operations in Zambia. Importantly for us, these companies are realising the value of quality equipment, as well as compliance with safety laws."

Limited resources and great distances on the continent mean safety issues are even more important to Demag. Roughley continues: "We need to work to our own strict safety standards, regardless of what may be acceptable to other companies. We can't compromise on safety for our people. Safety is priority number one for us. Safety comes before profit."

Current equipment in the market is often dangerous, Roughley asserts, such as cranes that have long passed their lifecycles and pose a safety risk. "Some cranes have been standing for 30 years and the company decides that they want them back in use and asks us what we can do."

According to Roughley, the challenge here is not knowing the full history of the crane and understanding exactly what it's been doing. "This makes it hard to tell whether it

can be fixed properly or not. Demag makes a decision as to whether or not to assist, as we will not be a part of a dangerous piece of equipment being used on a job site."

In some instances, fixing up equipment means finding spares that could be many years old, Roughley notes. "We're quite fortunate in that we have these components that are fairly flexible. Typically, we cut out the old components and replace them with an interface, then put our components in. We often have to get a bit creative to solve the problem."

Demag is currently working on customised equipment for large projects, which require good quality products to meet both safety regulations and deadlines. Roughley indicates that local companies still buy lower-end products, but many are seeing the pitfalls and are looking for higher-spec components.

"Once they realise the extent of our experience in South Africa and other parts of the continent, they know that we understand both the market and the conditions of the terrain. As we expand into new regions and more companies become familiar with Demag's safety, quality and ethics as part of the value we add, we believe we will see more projects using our equipment and technical services."





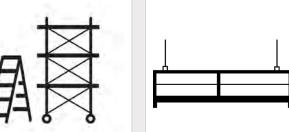














## **INSTITUTE FOR WORK AT HEIGHT**

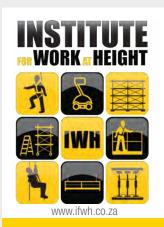
HEIGHTSAFETYLINE

- WORK HEIGHT

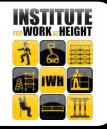
  WORK HEIGHT

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## **WORK @ HEIGHT:**

## INSTITUTE FOR WORK AT HEIGHT: SUMMARY OF PRESIDENT'S REPORT AT AGM

The Institute for Work at Height recently celebrated a great achievement and a momentous occasion when it held its 6<sup>th</sup> AGM. The Institute is well into its 7<sup>th</sup> year of operation and, together with its sister organisation, the Work at Height Professional Body, has become a beacon of professionalism on the South African landscape. Many companies and organisations now require potential contractors to show their membership of the Institute for Work at Height before being allowed to tender for work at height activities. Earlier this year, Brian Tanner retired as Secretariat of the Institute for Work at Height but is not lost to the organisation as both he and Richard Gordon Brown are now undertaking courtesy visits to the members of the association. This will greatly enhance our efforts to serve the needs of our members.

The steady growth of the Professional Body has necessitated the need to split the two bodies into separate centres, each with its own governing structures. This has now been done despite some difficulties in the process. At the moment both organisations have their constitutions and, in order to have one controlling structure to govern both, constitutions have to be consolidated.

George Landsberg stepped down as director of the company to be replaced by Rob Urquhart who has agreed to fill the position until the new constitution is ratified.

The Trade Association is in a healthy position considering the depressed state of the economy with trade membership growing by the month.

Training Providers that are recognised by the PR Body number 21 at present, with a handful of new providers to be confirmed once they do their first uploads.

Skilling Programmes have been introduced by the Professional Body, which recognises short skilling that is not NQF registered.

Brian Randall, President: IWH

#### Heightsafety Group introduces HEIGHTSAFETY LINE product range

The Heightsafety Group of companies specialises in the service and product delivery of all aspects of safe working at height. The group consists of four separate privately owned companies, each specialising in a specific application field of working-at-height with its own stated objectives.

One of the companies specialises in the manufacture, design, development, importation and distribution of a full range of Fall Arrest, Rope Access, and Rescue Equipment. The quality of its products and standards is managed by an accredited ISO 9001:2008 Quality Management system as well as conformity to the South African Bureau of Standards (SABS) guidelines.

With two decades of experience in the working at height industry, the company is able to provide cost effective product support. This will assist the end user with the design, implementation, manufacture, installation and orientation training for the safe working at height anchoring system.

The end user can rest assured that all the components that form part of a prepared and or installed system can be traced back to the serial number on the ID tag through an online data base. The ID tag incorporates all the required information such as the serial number, the safe working load, the standard to which the product conforms and the certification date.

The four key components that make up the HEIGHTSAFETYLINE consist of, SAFEPOINT, SAFE CLIMB, SAFE WALK and SAFE ROOF.

SAFE POINT is a permanent anchor point that can be used for Fall Arrest, Rope Access and Rope Rescue. Manufactured from 316 grade 6 mm stainless steel, it is a robust, weatherproof device that will last under the most severe conditions. The shock absorber incorporated in the design will keep the forces generated during a fall, below 6 kN and once fully deployed the failure point of the material is 50 kN. This patented

anchor system design allows for easy attachment to almost any type of structure.

SAFE CLIMB is a durable, permanent vertical fall arrest life line system designed specifically where climbing is required. The system works on the principle of a vertical line permanently secured line where access is required using a shuttle device. The shuttle has a lock function where the user can stop and, at any point on the system, lock the shuttle, disconnect and move away from the ladder to the working area. The shuttle will remain in the locked position, in the specific area, until it is required for use again.

SAFE WALK life line was designed for open walkways and/or low parapet roof type applications with long travel distances where the possibility of fall exists. The entire Safe Walk system is manufactured from 316 grade stainless steel and the parts and components are not only robust but will withstand the harshest working conditions.

SAFE ROOF is a permanent horizontal life line fall arrest system designed specifically for safe roof access applications on corrugated sheet metal type roofs. The system comprises an anchoring base system that can be connected directly to the roof sheeting and/or to the roof truss system under the sheeting. The permanent life line system is then mounted directly onto the base system to form a fall arrest anchoring line that can cover all the required areas of the roof. All intermediate base brackets are collapsible and will also indicate overloading of the system.

This range of highly specialised equipment falls in line with the HEIGHTSAFETY vision of setting the market standard by manufacturing and supplying the Heightsafety brand globally to the work-at-height industry, including the superior Fall Arrest, Rope Access and Rope Rescue sectors

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# WORK @ HEIGHT: GOOD PRACTICE



#### Shock absorbing lanyards - why you should think twice

By Hein Stapelberg

The shock absorbing lanyard (also known as energy absorber, fall arrestor, scaff hook and a range of other terms) has become the go-to fall protection equipment. It's the single most used fall protection equipment in South Africa – and possibly the world.

Scaffolders, painters, maintenance and construction crews all use it. In fact, it has become so synonymous with safety at height that, nowadays, most manufacturers sell it as a unit that is stitched to and integrated with the full body harness. Many see it as the turning point of height safety - fall protection for the masses and hail it as a lifesaver. Others reel at the sight of it and hiss about its hidden dangers, like its some covert terrorist movement that has managed to infiltrate society at large. So what is the big deal and why is this apparent big leap in the right direction of safety on the work site, frowned upon by some? Here are a few things to think about before buying a set of shock absorbing lanyards.

- 1.It allows for a fall. Think about it - when working at height, the one most important thing that defines your safety is whether you can fall or not. Here is a piece of safety equipment used for working at height, and part of its 'normal operating procedure is that it allows you to fall. That's like having a great malaria cure tablet, but in order for it to work, you first need to make sure you have malaria. Whatever happened to prevention being better than cure. The shock absorbing lanyard's modus operandi has a first assumption that reads: 'The user is falling, uncontrollably and with no holds barred, from an unknown height'. Inherently, this piece of equipment needs you to fall before it can do anything about that.
- 2. Its ability to do its work depends on the environment in which it is used. Fall risk situations varies about as much as the personalities of those working at height. The shock absorbing lanyard is manufactured in such a way that it is activated by a force exceeding 2 kN (that's roughly equatable to a load of 200 kg). The force of a person's fall can vary by how much slack is in the lanyard at the time, the projection of the fall (i.e.

straight down or in a swinging motion), the body posture and orientation at the time, etc. All of these factors influence the ultimate force that is exerted on the shock-absorbing lanyard and, in turn, the relative effectiveness with which it can perform its duties. Moisture content, ambient heat and the exposure of the materials to chemicals (even airborne) can all affect the 'tearability' or performance of the shock-absorbing element.

- 3. It's easy to use incorrectly. The shock absorbing lanyard is an advanced piece of equipment that showcases many years of research and development. It makes use of various elements - connectors, connection rings, webbing, etc. Some of the elements have been shown to be incompatible during normal use, for example, some connectors may unclip from the anchor point during a fall. The lanyard can also easily be used incorrectly in a way that exceeds the ability of the equipment to arrest a fall safely, by overloading or cross-loading it. It is not uncommon to encounter instances where the user inadvertently short-circuits the shock-absorbing element through incorrect tieback practices.
- 4. You need space lots of it. Most shock absorbing lanyards found on construction sites are not adjustable. That means that the user will fall the total length of the lanyard before it is activated - and once it is activated, it lengthens even more. The result of this effect is that the user may require a huge open area beneath him during use - an area that is basically free of any obstacles that may interfere with the fall path or the swing of the user after a fall. In reality, very few sites offer this - they are usually a maze of scaffold, formwork, tools, equipment and structures. In such a case, the person's fall may still be arrested, but the 'safely' part falls away. Many injuries from falling are as a result of the casualties associated with swinging into or striking an obstacle during the fall.
- 5. Fall arrested now what? The shock-absorbing lanyard has managed, single-handedly, to give birth to an entire rescue industry. Being sus-

#### **PASMA: Tried and Trusted for Towers**

The Prefabricated Access Suppliers' and Manufacturers' Association (PASMA) is the world's largest and most influential trade body dedicated exclusively to the mobile access tower industry. Advancing safety and best practice, and providing advice, guidance and support to its many members, it is now the new face of towers in South Africa.

The Association - which sponsored the Work at Height Theatre at the 2015 A-OSH Expo South Africa - fulfils a number of distinct roles: as a knowledge base and resource centre; as an international contributor to tower standards; as a catalyst for research and innovation; and as a provider of formal training and skills.

Significantly, a number of South African candidates have already successfully completed PASMA's Towers for Users training course in preparation of becoming PASMA instructors. We are working with local providers to get the courses aligned, where a Unit Standard exists, with the vocational qualifications. The main aim is to ensure competency, when working with towers, having been trained to best practice standards and the latest guidance.

The PASMA website is also an invaluable source of information and knowledge and provides access to a wide range of resources including the PASMA Code of Practice, Toolbox Talks, Posters, PocketCards and DVD's. Simple, practical and easy to understand, Choosing and using a safe mobile tower is also a useful reference document. www.pasma.co.za

Comments PASMA's regional representative, Dave Bass: "We are using PASMA's knowledge and experience to work with regulators and key influencers such as the Institute for Work at Height (IWH)."

"Our aim is to keep people safe by providing accurate, understandable and proportionate advice and guidance when working at height."

[To contact Dave Bass email: pasma.sa@pasma.co.uk]

pended in a full body harness is extremely uncomfortable – and dangerous. But this, at the end of a 2 m long lanyard, which is usually attached to the user's back – is priceless. It's a very high-risk position to be in and demands immediate response to control the damage that is already in process. With most shock absorbing lanyards, there's no way out using the lanyard. Some have built-in relief straps (straps you can stand on, but which are attached to your harness – a bit like taking hold of your trousers' belt and picking yourself up), but these are temporary measures only.

These are some of the many considerations to be aware of when choosing fall protection equipment. With proper training, reputable manufacturers and good fall protection planning, it is possible to use shock absorbing lanyards safely, but the current trend of grab 'n go is not conducive to favourable statistics and shock absorbing lanyards are often not the best (or even a good) approach to working in a fall risk position.

www.fallprotectionworks.com





## **WORK @ HEIGHT: GOOD PRACTICE**



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#### Fall protection planning, shaping work at height

Gravity Training cc, founding member of Institute for Work at Height (IWH). was established in 2001 and has had an extensive influence on the fall arrest and rope access industry, nationally and internationally. Gravity Training has experience in various industries such as telecommunications, mining, utilities and construction. The beginning of all work at height regulations was mainly due to the basic assessment of the inherent all risk associated with fall arrest and rope access work.

According to the South African Occupational Health and Safety Act 85 of 1993, Construction Regulation Section 9, "All construction work must have a risk assessment done by a competent person and all risks and hazards identified and mitigated."

Construction Regulation Section 10 requires "a competent person to be appointed for the preparation of a fall protection plan and specific steps taken to ensure continued adherence to a fall protection plan."

The purpose here is not to compose manuals or short stories about risk assessments or fall protection planning, but to highlight the importance of safe work procedures and the responsibility involved for all technicians working at height. Everyone has an equal responsibility towards overall safety, both on and off a site.

As experts in this field have stated, South Africa is at the forefront of health and safety and several countries in Africa have already adopted our regula-

In 2014 our local government included the Construction Regulation Section 18, which addresses rope access work. This gives a clear indication of the scope of responsibilities when performing rope access work. A typical question now arising would probably be: What does this have to do with me? Or, where do I even begin to comply with the construction regulations? The solution invariably involves starting with a baseline risk assessment on your work scope, typically asking what the possibilities of injury or death may

Once these questions have been

addressed by competent personnel or through consultation with industry experts, one would note that putting a plan in place is the best solution to mitigating fall risks. Construction Regulation Section 10 provides the minimum criteria to compile and implement a fall protection plan. These include risk assessment, equipment management, medical programme, training programme and rescue procedures, which are all related to work at height.

The list of registered work at height designations set out by the IWH are:

- · Rope Access Designations:
- · Fall Protection Planner
- · Unit Standard (US) 229998 & US 229994
- · Level 1 Rope Access Technician
- US 229998 & US 230000
- Level 2 Rope Access Practitioner
- Level 1 & US 229996
- Level 3 Rope Access Supervisor
- Level 2, US 230000 & US 229997
- Fall Arrest Designations:
- Fall Protection Planner
- US 229998 & US 229994
- Basic Fall Arrest Technician
- · US 229998
- · Fall Arrest Technician
- US 229998 & US 229995
- · Fall Arrest Rescue Technician
- US 229998, US 229995, US 229994 & US 229999

The overall aim for technicians and the work at height industry is to provide a safe working environment for all technicians working from any position with a risk of falling. The only way to achieve this is to ensure that a competent person compiles the correct risk assessment, fall protection plan and procedures for any possible fall risk. These procedures are vital to eliminate the risk of injury or death, and it needs to be ensured that all work at height procedures are practical and fit for the specific purpose.

[Barry Lottering - Gravity Training cc]

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# TEREX TRUCKS FLEET FOR MYANMAR THURA JADE MINE

Myanmar Thura has made its first order of Terex Trucks rigid haulers, purchasing 10 new TR60s to cover expansion at the company's jade mine in Kachin State, Northern Myanmar.

The long-established mining company based in Yangon, Myanmar, has been in the jade trading business for more than 20 years, and 10 years in jade mining. The order for the 55 t capacity TR60s will be supplied by local Terex Trucks dealer, LHM, which has supplied Myanmar Thura with equipment for years.

"Terex Trucks machines had been brought to our attention following the acquisition by Volvo Construction Equipment," said Kyaw Thura, managing director at Myanmar Thura. "LHM has supplied us with many units of excavators over the years so we have a great connection with them. We were in the market for new off-highway trucks that would offer excellent productivity for our jade mine, and with help from LHM it took no time at all to decide on the Terex Trucks TR60s."

Jade mining has limited concessions due to the seasons, and can only operate six months out of the year. The TR60s will be required to work day and night in two shifts, hauling 55 tonne loads of earth, rock and jade from the mine, where the elements will be separated for further processing.

The Terex Trucks TR60 rigid hauler is built on 60 years of hauling heritage and delivers an excellent performance in a wide range of hauling applications.

"We have high expectations of Terex Trucks with backing from Volvo CE, and we may well look into future purchases of the rigid haulers once we have experience with product, support and services offered," continued Thura.

## KUBOTA NARROW-WIDTH TRACTORS AND PRE-PRUNER A HIT IN VINEYARDS



The KMS Rinklin pre-pruner, working in conjunction with the Kubota M series narrow-width tractors, have made a hit in the vineyard industry.

Christian Fersch of German Machine Services (GMS), distributors in South Africa of KMS Rinklin viticultural products, says the pre-pruner's success reflects its brilliant, efficient design. "They are light but, at the same time, extremely sturdy. They are designed for a long life and, to achieve this, every moving part has a greasing point. Also, the cutting disks are made from a special material that will remain sharp for many years, which reduces the load on the motors and, in fact, the entire system," says Fersch.

He adds that the disks are patented and come with a five-year warranty.

One of the most important features is that the special design of the pre-pruner prevents it from cutting the crossed wires that are integral to a vineyard structure and, due to the extremely sharp disks, the pre-pruner easily cuts through the thickest cordon.

Fersch says that safety is a prime feature in the pre-pruner's design. "For example, in case the driver does not open the arms of the pre-pruner in time, which could lead to an impact with a pole, the machine has an accumulator (60 bar nitrogen), which is activated immediately on impact releasing the arms of the pre-pruner and preventing serious damage."

One of the key advantages of the pre-pruner is its simple and light design enabling even the smallest tractor to handle the unit. "The joystick is easy to use and does not include electronic components, which makes it more robust and increases its longevity. Also, maintenance is reduced to a minimum, since all moving parts can be greased," Fersch says.

The M series Kubota tractors are ideal partners for the pre-pruner as they are small and extremely efficient tractors and for this reason the Kubota-KMS Rinklin pre-pruner partnership is becoming a major attraction in the vineyards of southern Africa.



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