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QUARTER 4 – 2021



**MEASURING UP TO THE
TAXING DEMANDS
OF EXTENDED LIFECYCLES**

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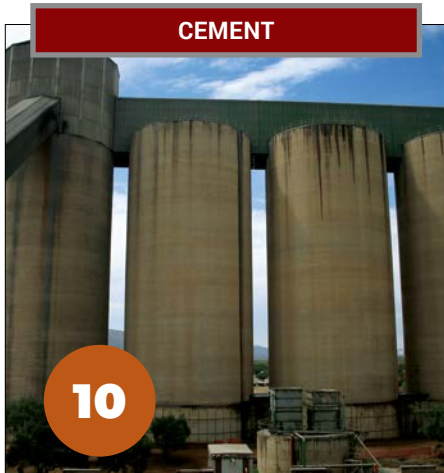
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CONTENTS

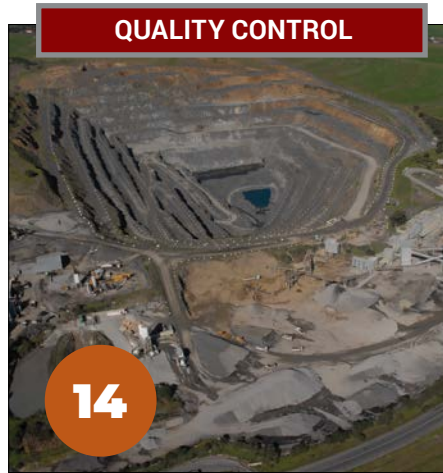
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[QUARTER 4 – 2021]



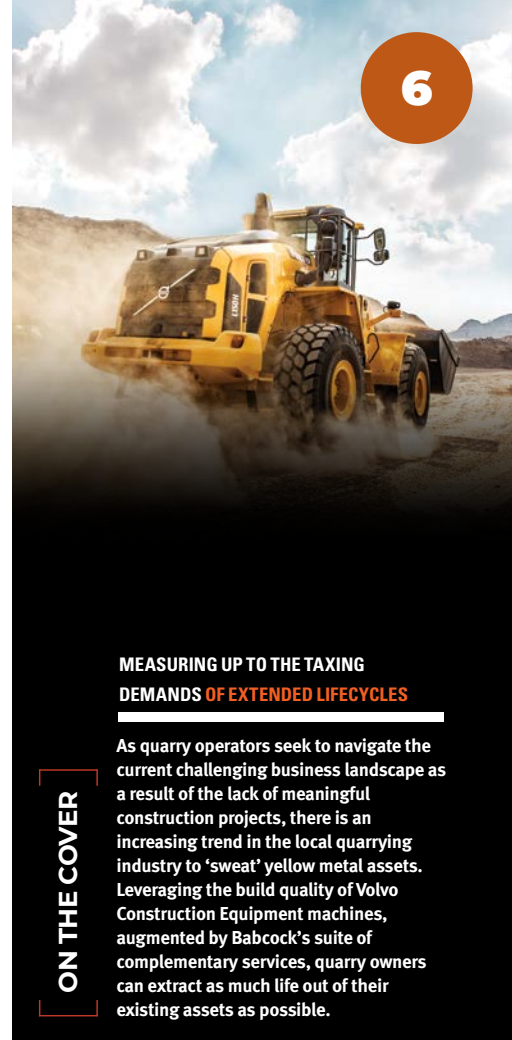
CEMENT

10



QUALITY CONTROL

14



ON THE COVER

MEASURING UP TO THE TAXING DEMANDS OF EXTENDED LIFECYCLES

As quarry operators seek to navigate the current challenging business landscape as a result of the lack of meaningful construction projects, there is an increasing trend in the local quarrying industry to 'sweat' yellow metal assets. Leveraging the build quality of Volvo Construction Equipment machines, augmented by Babcock's suite of complementary services, quarry owners can extract as much life out of their existing assets as possible.

CEMENT IMPORTS – THE MONSTER WE CREATED **PAGE 2** ILLEGAL MINING – THE VICIOUS CIRCLE OF UNFAIR COMPETITION **PAGE 32**



DRIVING BEST PRACTICE IN READYMIX PRODUCTION

Surface mining industry association, ASPASA, has launched an initiative aimed at educating readymix producers on best practices when ordering aggregates to ensure consistency of supply and correct usage of materials.

16

20

PACKING A BIG SCREENING PUNCH

Powerscreen has launched its new Titan range of secondary scalping screens that provides a cost-effective solution in high-volume, smaller-sized secondary or recycling screening applications. The first units of the new range are expected in southern Africa in early 2022.



AROUND THE INDUSTRY

- 04 Global honour for CCSA's Bryan Perrie
- 04 ASPASA welcomes Mining Charter changes

SUPPLY CHAIN

- 28 Metso Outotec expands Lokotrack mobile range for aggregates
- 30 Lemaitre expands into new terrains

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CEMENT IMPORTS – THE MONSTER WE CREATED

I have been following developments in the South African cement industry with both concern and optimism. Of concern is the current state of the industry. Overcapacity, imports and a construction industry that is suffering from a protracted downturn are all worrying. The industry was already in survival mode pre-COVID-19 and the outbreak of the pandemic pretty much served as the final nail in the coffin.

The arrival of new cement players in the SA market during the past decade has however been encouraging for me. While some felt that new players were a thorn in the side of an already overtraded market, capacity building was a necessary development. Current demand may fall far short of justifying additional capacity, but a healthy, steady supply, especially for a country that still has a lot of infrastructure to build, is essential. Let's also consider the time it takes to bring new capacity online.

Enough local capacity is the industry's shield against any future

supply pressures. It's important to remember that imported cement gained a footprint in South Africa for the first time in the country's history when local producers operated at close to 100% capacity in the build up to the 2010 FIFA World Cup. I have always argued that cement imports are a 'monster' that the industry created back in 2008 amid a hastily growing cement demand that outstripped supply. Faced with an acute shortage, some local suppliers advocated for cement imports.

The imposition of tariffs somehow reduced imports from Pakistan, but as we have seen over the years, this seems to have little impact as imports from Vietnam continue unabated, which means that simply adding tariffs is not a sustainable solution. An Industry Insight survey notes that cement imports increased to 79 509 t in July and 75 775 t in August, from just under 60 000 t in June 2021.

The 75 000 t imported from Vietnam in August came at a free on board (FOB) rate of R599/t, on par with rates reported in July,

and was between 5% and 10% higher compared to FOB rates from Pakistan.

This brought the total amount of cement imported during the first eight months of the year to 749 671 t, at an FOB value of R445-million. Compared to the same period last year, imports increased by 51% (considering that lockdown restrictions hampered imports in 2020) but were also 3% higher compared to the same period in 2019 (pre-COVID period), largely driven by the escalation of imports mainly from Vietnam, but also Pakistan during the first half of the year.

As you will see in this edition of *Modern Quarrying*, the industry is in for some reprieve following government's decision to ban the use of imported cement on all government-funded projects. After lobbying for several years by Cement and Concrete SA, the consolidated cement and concrete association, the government has taken seemingly decisive action to protect the local cement industry and local jobs from the threat of cheap imports.

The designation prescribes that all organs of state must, from 4 November, stipulate in tender invitations that only SA-produced cement, produced with locally-sourced raw materials, will be allowed for use on all public sector construction projects. National Treasury has stipulated a 100% threshold for both common and masonry cements.

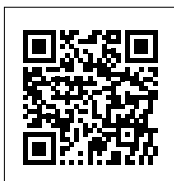
With over 1-million t of cement and 330 000 t of clinker imported each year, the ban will definitely help cement producers increase their sales volumes, capacity utilisation, profitability and, more importantly, protect jobs.

Munesu Shoko – Editor

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Global honour for CCSA's Bryan Perrie

The International Society for Concrete Pavements (ISCP) has bestowed honorary membership on Bryan Perrie, CEO of Cement and Concrete SA (CCSA), at the ISCP's 12th International Conference of Concrete Pavements, held online this year because of COVID-19 travel restrictions.

For several decades now recognised as a global authority on concrete pavements, Perrie was informed by ISCP president, Jacob Hiller, that he was being honoured for his service to the concrete pavement industry and that the accolade would place him in a select group of only 25 concrete pavement innovators worldwide to have received the distinction. The award was bestowed during the September 27 opening session of the ISCP conference, attended by delegates from 30 countries.

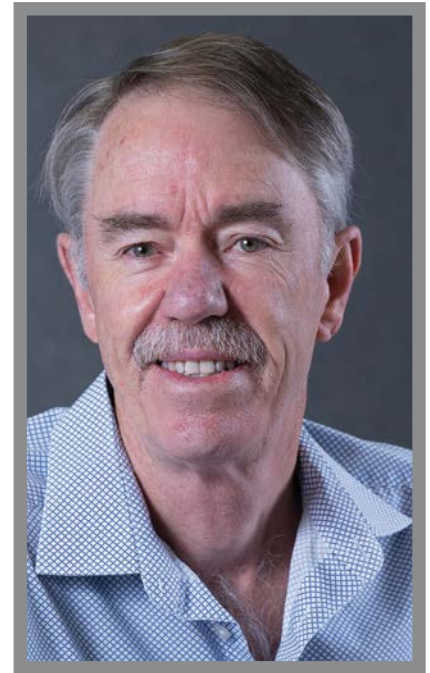
Dr Peter Taylor, director of the National Concrete Pavement Technology Centre at Iowa State University, told the ISCP conference that few people had done as much for the cement and concrete industry than Perrie. "He simply understands cement and concrete, how to make it work in practice, and is skilled in so many aspects of the business world:

manager, technical expert, mentor, innovator, negotiator, and hands-on colleague. Bryan has also worked hard to make ISCP more of an international organisation."

Perrie, in accepting the award, said he was honoured to be included in a group of "legends in concrete paving". His first involvement with ISCP, formally established in the United States in 1998, was at the Society's seventh conference in Orlando in 2001 which was tragically disrupted by the events of 9/11. As ISCP member, he has attended all subsequent conferences and has served as board member and past vice president of ISCP.

"When I first became involved with ISCP, it appeared to be a largely United States society. I tried in a small way to encourage more international involvement and persuaded ISCP to have a Board and 'SA safari strategy meeting' followed by a two-day conference in Johannesburg, in 2007. Since then, ISCP has broadened its reach to include involvement in conferences in China, Australia, Europe and South America," Perrie said.

"I personally have benefited significantly from my involvement with ISCP



Bryan Perrie, CEO of Cement and Concrete SA.

in the promotion of concrete pavements in South Africa and have persuaded a number of local colleagues to attend various ISCP conferences since 2001," he stated, adding that concrete pavements are steadily gaining wider acceptance in South Africa with about 1,5-million m³ of such pavements currently planned for the Durban area. ●

ASPASA welcomes Mining Charter changes

Small scale surface miners have breathed a sigh of relief following a recent High Court ruling that removes clauses from the Mining Charter 2018 that had required topping-up of BEE ownership to 2018 Charter levels and affect existing mining rights.

According to Nico Pienaar of surface mining industry association, ASPASA, two clauses dealing with the continuous consequences of BEE were the sticking point in the endorsement of the policy document and led to fears of disinvestment.

The High Court's decision to remove the clauses will result in far wider acceptance of the Charter and dispel fears of constant watering-down of original shareholders stakes. This would have been particularly troublesome in smaller businesses where

shares are often family-owned or held within the original founders' circles.

"ASPASA remains committed to ongoing transformation in the industry and is concerned with the sustainability and profitability of its member operations. It is however our duty to protect our industry and member's interests and the clauses in the Charter made it almost impossible for smaller operations to comply.

"We align ourselves with the Minerals Council which also welcomed the judgment removing the clauses that deal with renewals of existing mining rights and the transfers of mining rights. It also sets aside requirements around procurement of goods and services and supplier and enterprise development which the Minerals Council argued contained unachievable targets for mining

companies to meet.

"It also sets aside provisions in the 2018 Charter related to the Diamonds Act and Precious Metals Act to impose targets set out in the Charter on licence holders under those Acts. The provisions in the 2018 Charter related to mining companies not complying with ownership and mine community development requirement and thus being in breach of the MPRDA, potentially having their mining rights suspended or cancelled was also removed in the judgment."

Pienaar adds that ASPASA will continue to engage with its members and work closely with Government and The Minerals Council to engage stakeholder and work together towards fairer policies that are more likely to attract investment into the mining sector and the surface mining sector. ●

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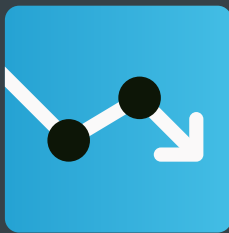
MEASURING UP TO THE TAXING DEMANDS **OF EXTENDED LIFECYCLES**

As quarry operators seek to navigate the current challenging business landscape as a result of the lack of meaningful construction projects, there is an increasing trend in the local quarrying industry to ‘sweat’ yellow metal assets. Leveraging the build quality of Volvo Construction Equipment machines, augmented by Babcock’s suite of complementary services, quarry owners can extract as much life out of their existing assets as possible, writes **Munesu Shoko**.

The Volvo EX750D working on site, alongside the A40 dump truck and the L120GZ wheel loader.



KEY TAKEAWAYS



Amid a depressed construction market, quarry owners and mining contractors are forced to sweat their assets



Babcock has had instances where its Volvo machines are being run for up to 30 000 hours, and are measuring up to the taxing demands of extended lifecycles



Extended machine lifecycles call for a strong maintenance regime to ensure that machines are kept in optimum condition



At a time when commercial banks' appetite for risk is low, quarry owners can benefit from Volvo Financial Services' flexible finance options

The performance of the aggregates industry is generally a true measure of the state of the construction market.

Having reached its peak between 2016 and 2017, the construction materials market was already experiencing a slightly negative trajectory when COVID-19 hit at the start of 2020. However, some industry players have seen a V-shaped recovery in recent months, with volumes even surpassing the pre-COVID levels at some point.

In his recent interactions with some of the quarry operators and their contractor counterparts, David Vaughan, MD of Babcock's Equipment division, has learnt that, despite the marked increase in volumes, the industry has not returned to the 2016/2017 levels, largely due to the lack of large government infrastructure projects. There is, however, some road maintenance projects currently underway across some of the provinces, but on a small scale.

Against this backdrop, Vaughan

Demand for Volvo front-end loaders remains particularly high, especially the L150H, the ideal pick for smaller quarrying operations.



says quarry owners and mining contractors are forced to sweat their assets. Rather than splashing cash on new equipment, they are limiting their capital expenditure and focusing on keeping existing assets humming along – a valuable strategy during difficult economic periods.

To provide context, Vaughan says one of the largest quarrying groups in South Africa used to run its Volvo load and haul machines for up to 10 000 hours before replacement. However, due to capital constraints, the company is stretching its machines' lifecycles well beyond 20 000 hours, with some of them already approaching 25 000 hours, and counting.

Elsewhere, a contractor running a fleet of Volvo A30 articulated dump trucks and some EC480 excavators has also stretched its machines to over 20 000 hours. Despite running beyond double their initial projected first life, the machines, says Vaughan, are still producing well with minimum interventions.

"We are currently seeing Volvo load and haul machines being pushed to

their limits. Many quarry operators are sweating their assets, and the Volvo product is proving to be up to the task. We have had instances where our Volvo machines were being run for up to 30 000 hours, and have measured up to the taxing demands of extended lifecycles," says Vaughan.

Support matters

Extended machine lifecycles, reasons Vaughan, call for a strong maintenance regime to ensure that machines are kept in optimum condition. "Quarries are therefore relying on us to maintain equipment and ensure that it performs optimally," he says. "This calls for closer working relationships between the supplier and the customer."

As companies choose to sweat assets, Babcock has seen an upside to its parts and repair business. Availability of parts, stresses Vaughan, is therefore crucial in ensuring machine uptime for customers. With that in mind, Babcock Africa has established a new national parts distribution centre to enhance efficiency of its supply chain process across

all the company's operations. The streamlined central warehouse will stock spare parts and components for all of Babcock's business units and will facilitate the swift dispatchment of items to all its national and regional branches.

Babcock has also seen increased market penetration for its service contracts. The vast majority of new machines are being sold with service or full repair and maintenance (R&M) contracts. "The beauty of our service contracts is that they are flexible and tailored to meet each customer's unique needs," he says.

Another major advantage of Babcock's R&M contracts is increased machine uptime. The vehicles, says Vaughan, are serviced by experts, and the scheduled downtime related to maintenance is kept to a minimum. Vehicles are also serviced according to OEM specifications all the time, allowing assets to be stretched well beyond their usual lifecycles.

Volvo machines on service and R&M contracts are monitored via CareTrack, Volvo CE's telematics system. CareTrack gives the dealer a

A major advantage of Babcock's R&M contracts is increased machine uptime.



wide range of machine monitoring information designed to save customers time and money.

Second life

To help machine owners extend the useful lifetime of their mission-critical assets, Babcock also offers machine refurbishment and rebuild services. Machines are refurbished/rebuilt according to OEM specifications.

“In such a tough economic climate,” says Vaughan, “quarry owners are looking for ways to cut costs. The popularity of equipment remanufacturing or refurbishment of equipment has shot up. We are able to give machines a second life, helping customers prolong the lifecycles of their Volvo CE equipment. We have the capacity to refurbish or rebuild all the major components locally, or alternatively we can use certified reconditioned components from Sweden,” he says.

With a second life, customers can extend the life of the machine significantly. During the first life, says Vaughan, some customers are pushing their machines to as much as 25 000 hours. With a refurbishment

or rebuild job, the same machines can be pushed to well beyond the 40 000-hour mark.

New machines

Despite the current tough business conditions, Vaughan maintains that the demand for new machines also remains high. Customers can benefit from shorter lead times, with Babcock carrying high levels of stock to sidestep the challenges associated with the current delays in the global supply chain.

Demand for Volvo front-end loaders remains particularly high, especially the L150H, said to be the ideal pick for smaller quarrying operations. The L220H, said to be the most versatile unit for all sizes of operations, is also attracting great interest in the market.

Babcock offers one of the most comprehensive range of ADTs. The Volvo A30 fits the bill for smaller operations where space is at a premium. “We have seen big demand for the Volvo A30, which has over the years proven to be the staple ADT for local quarries,” he says. “At

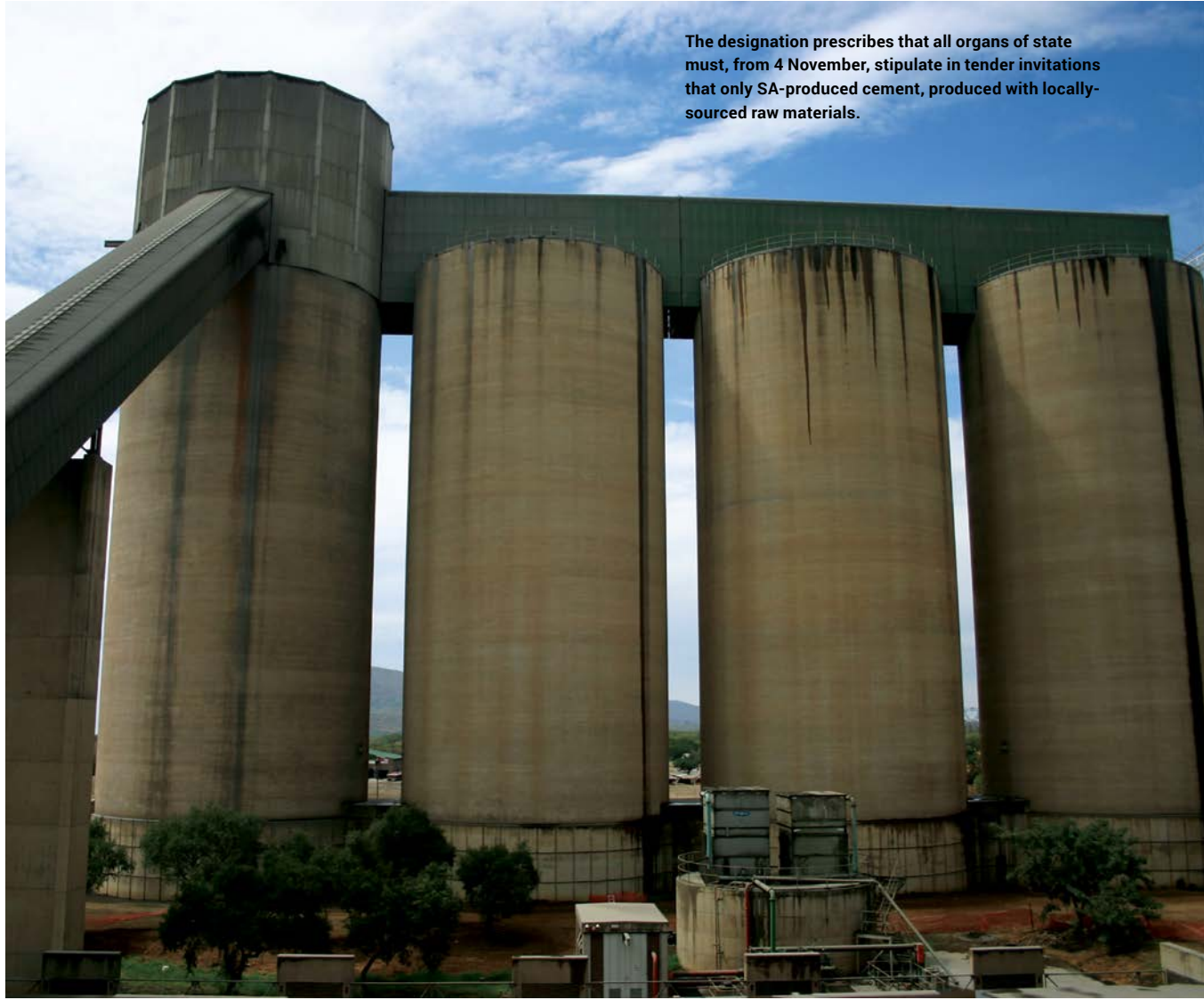
the bigger end of the scale, our A40 and A45 models have also proven to be the ultimate hauling solutions for larger quarries.”

Financing

At a time when commercial banks’ appetite for risk is low, quarry owners can benefit from Volvo Financial Services’ flexible finance options. Volvo Financial Services, the global captive finance company of the Volvo Group, started operating in its own right in South Africa in 2017, and has over the years seen increased growth of its portfolio.

As part of Volvo Group, Volvo Financial Services has in-depth knowledge of the quarrying and mining industries. For this reason, it is able to offer clients a customised solution, from a single unit to an entire fleet, new or used.

“As a global organisation, Volvo Financial Services also leverages local expertise to ensure our local customers’ unique business requirements are addressed through personal attention and tailored, competitive solutions,” concludes Vaughan. ●



The designation prescribes that all organs of state must, from 4 November, stipulate in tender invitations that only SA-produced cement, produced with locally-sourced raw materials.

CEMENT DESIGNATION — VICTORY FOR **LOCAL CEMENT PRODUCERS?**

In what is believed to be a major victory for local cement manufacturers, South Africa's National Treasury has banned the use of imported cement on all government-funded projects. **Modern Quarrying** speaks to Cement and Concrete SA and Industry Insight on the significance and implications of this development.
By **Munesu Shoko**

The influx of imported cement in South Africa has over the years been a thorn in the side of local cement producers. After lobbying for several years by Cement and Concrete SA (CCSA), the consolidated cement and concrete association, to protect the local cement industry and local jobs from the threat of 'cheap' imports, government has finally taken seemingly decisive action. This follows the announcement that, from 4 November this year, National Treasury has designated cement, meaning that the use of imported cement

on all government-funded projects is prohibited.

The action comes as the industry reels from the current economic slump, which has been exacerbated by the lack of meaningful infrastructure projects. Bryan Perrie, CEO of CCSA, tells *Modern*

The designation of cement will assist in protecting the local cement industry from unfair competition.



Quarrying that National Treasury has issued a circular to all relevant state departments of the new ruling in terms of the Preferential Procurement Regulations. The designation of cement will apply to all projects entered into by state entities, including national, provincial and local authorities, as well as state-owned enterprises (SOEs).

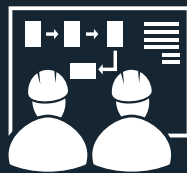
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Elsie Snyman, CEO of Industry Insight, says that with over 1-million t (Mt) of cement and 330 000 t of clinker imported each year, the ban will definitely help cement producers increase their sales volumes, capacity utilisation, profitability and, more importantly, protect jobs.

KEY TAKEAWAYS



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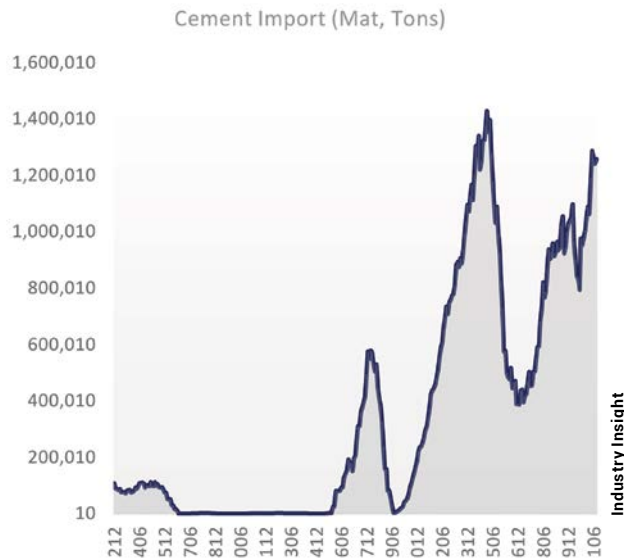
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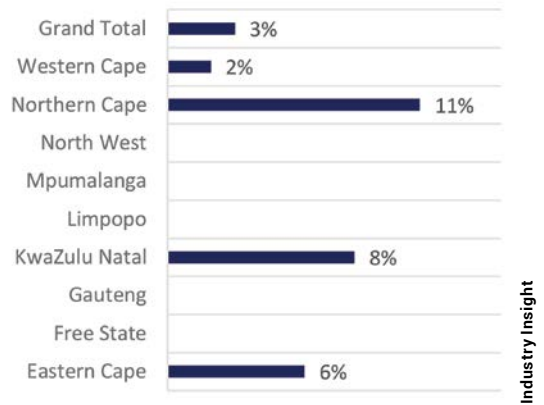
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Cement imports increased to 79 509 t in July and 75 775 t in August, from just under 60 000 t in June 2021



Contribution of imported cement to public sector projects (incl Cemza) Jan 2019 - Sep 2021



Cement imports increased to 79 509 t in July and 75 775 t in August this year, from just under 60 000 t in June 2021.

Contribution of imported cement to public sector projects.

Welcome development

In Perrie's view, this is an important ruling that protects a sector so vital to the national economy. Furthermore, he believes that it has come at the right time in view of the multi-billion rand infrastructure projects planned by the government over the next three years. Last year, the government announced 50 strategic infrastructure projects and 12 special projects as the initial phase of a wide-ranging infrastructure spending programme to aid post-pandemic recovery efforts.

"The designation of cement will assist in protecting the local cement industry from unfair competition. Although imported cements reaching South Africa may conform to regulatory standards, South African cement producers have many other compliance issues to deal with, including the Mining Charter, transformation targets as well as social and labour plans, none of which importers have to comply with. Compliance by its nature costs money, and consequently puts local producers in an unfair position. In addition, local producers are subject to carbon tax, which the importers are also exempt from."

An Industry Insight survey notes that the announcement has already boosted investor sentiment, with both PPC and Sephaku Cement share prices increasing by 20% and 40%, respectively. This has added a total of R2,26-billion to the market cap values of the two cement producers.

Significance of the decision

Commenting on the significance of the designation, Snyman says local producers have been arguing against 'cheap' imported cement for years, and that it is being dumped in South Africa. She notes that imported cement gained a footprint in South Africa – for the first time in the country's history – when local producers operated at close to 100% capacity in the build up to the 2010 FIFA World Cup. While this resulted in the injection of additional capacity by Sephaku, it also gave roots to the cement import market.

"The imposition of tariffs somehow reduced imports from Pakistan, but as we have seen over the years, this seems to have little impact as imports from Vietnam continue unabated, which means that simply adding tariffs is not a sustainable solution. Tariffs are also dealt with on a case by case (country by country) basis, and take considerable time and effort, so the ban is a major win for local producers," she says.

However, Snyman reiterates that the ban relates to public sector work

only. "While this has a major impact on importers, the real impact on local producers, in my opinion, may be minimal. Imported cement is used primarily in the coastal areas (KwaZulu-Natal and Eastern Cape), so the designation might not have a large national impact. However, the decision sets an important precedence, and it could prevent imported materials coming in from other countries," she says.

State of affairs

According to an Industry Insight survey, imports contribute 5% to total production capacity in South Africa (based on 2019 figures that are more realistic as COVID-19 distorted the market in 2020).

"Our estimates suggest production capacity stands at 23 460 000 tpa, including that of Mamba and CEMZA. However, local producers are operating at well below production capacity, estimated to be around 54% in 2019 and 47% in 2020. In this scenario, imports in 2019 (at 1 218 799 t) contributed 10% of total domestic cementitious sales of 12 725 912 t. In 2020, the volumes slowed to roughly 9% due to COVID-19 restrictions," explains Snyman.

The Industry Insight survey also finds that cement imports



Elsie Snyman, CEO of Industry Insight.



Bryan Perrie, CEO of Cement and Concrete SA.

increased to 79 509 t in July and 75 775 t in August, from just under 60 000 t in June 2021. Cement was imported from Pakistan in July, but nothing was reported in August, with the product only coming in from Vietnam. The 75 000 t imported from Vietnam in August came at a free on board (FOB) rate of R599/t, on par with rates reported in July, and was between 5% and 10% higher compared to FOB rates from Pakistan.

This brings the total amount of cement imported during the first eight months of the year to 749 671 t, at an FOB value of R445-million. Compared to the same period last year, imports increased by 51% (considering that lockdown restrictions hampered imports in 2020) but was also 3% higher compared to the same period in 2019 (pre-COVID period), largely driven by the escalation of imports mainly from Vietnam, but also Pakistan during the first half of the year.

Imports have however slowed considerably in the past three months (June – August) compared to the same period in 2019, down 40%, with the majority coming from Vietnam. Over the past 12 months, a total of 1 256 984 t of cement was imported, nearly reaching the peak volumes recorded in early 2015 when over 1,4 Mt of cement was imported over the 12-month period up to February 2015 (with imports then emanating largely from Pakistan). Vietnam has now taken the spotlight, as it is now responsible for most cement imports into the country.

Ban on raw materials

The designation, explains Snyman, also bans the use of cement manufactured using imported raw materials. This, she says, will have a serious impact on CEMZA, a joint venture between South African company OSHO Cement and Germany-based Heidelberg Cement, which manufactures cement using imported clinker.

The company’s exposure to public sector contracts is about 45% of its total production. While the ban on imported cement is justified, says Snyman, the ban on using imported raw materials is perhaps a little more questionable, as this is common practice for many other local manufacturers in other sectors (including steel).

“CEMZA’s capacity (in the form of a grinding facility using imported clinker) was installed in South Africa at a significant cost of about R500-million, and much needed jobs were created in the Eastern Cape area, where government has pleaded for and supported industrial investment over the years. Using imported raw materials in local manufacturing is certainly not unique

to the cement industry, so the repercussions of this could have a much broader negative economic/ investment impact,” argues Snyman.

Lasting solution

Commenting on whether the designation of cement is the lasting solution to cement imports, Snyman says it’s difficult to ascertain, but according to Industry Insight research, it could deal a major blow to imports as the public sector is an important client to cement importers.

However, reasons Snyman, overall general government, excluding state-owned enterprises (SOEs), contributed only 34% to total investment in construction in 2019 (including building and civils), and 50% if SOE investment is included.

“If we then scale this down to just selected areas in the country, such as KwaZulu-Natal and Eastern Cape, one does have to question the impact of the ban at a national scale. It will all depend on whether imported cement will have buy-in within the private sector, and as a highly price-sensitive market, this may not be an impossible scenario. One must also consider whether or not the ban will reduce the need to push for tariffs which, in the long run, could decrease the usage of imported cement. It is therefore important for local producers to not rely solely on the government ban to protect their industries,” says Snyman.

Perrie says the industry will indeed not rest on its laurels, as CCSA has already applied for a Sunset Review of the anti-dumping tariffs imposed on Pakistani cement in 2015. An investigation in this regard has been initiated by the SA International Trade Administration Commission (ITAC).

“The original anti-dumping tariffs were only imposed for a five-year period. The initial tariff period lapsed at the end of 2020, and in line with the rules, we have applied for a Sunset Review to try and prove that the tariffs should remain for longer. ITAC initiated an investigation which is underway and may retain, reduce, increase or remove the tariffs,” concludes Perrie. ●



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With a heritage spanning more than eight decades, AfriSam’s footprint of quarries nationwide is supported by quality systems that ensure customers reliability and consistency of aggregate supply.

“The value of the right aggregate for the task cannot be overstated, as it affects all aspects of project success – from safety and longevity to cost-effectiveness and reputational risk,” says Amit Dawneerangen, GM sales and product technical at AfriSam.

The company’s strong product technical department ensures that all facilities and products comply with the necessary standards and quality specifications. Standard quality control testing is conducted regularly on each aggregate stockpile at every operation, and annual testing is also

conducted by independent SANAS-accredited laboratories.

“This is all vital to assuring the customer that our aggregate helps them to meet the design engineer’s specifications for their contract,” he says. “Without these quality systems and processes, the construction value chain can be compromised and cause various negative impacts for stakeholders down the line.”

Ongoing planning and investment

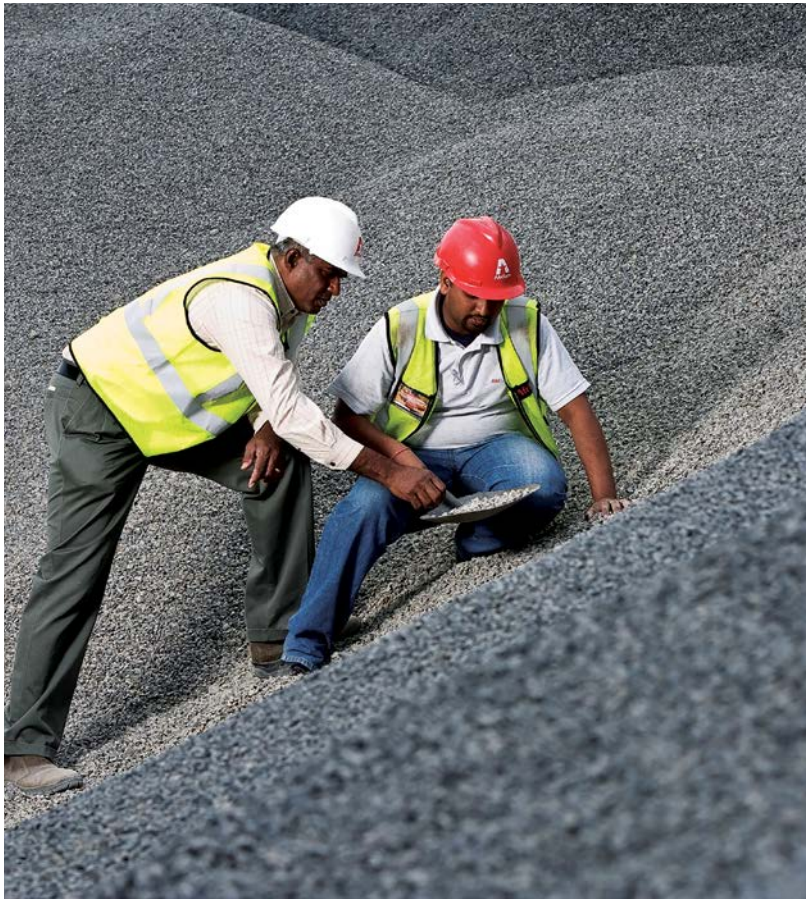
Glenn Johnson, GM construction materials operation aggregates at AfriSam, highlights that ongoing

planning and investment ensures that the company’s quarry reserves are in place for future sustainability.

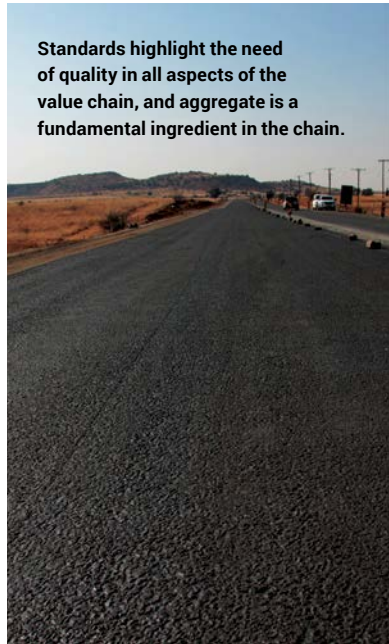
“There can be no quality aggregate supplied if there are not well-planned and compliant quarries to mine,” says Johnson. “We have therefore invested extensively in finding, licencing and establishing quarries with suitable geology and mineralogy; of course, these must also be close to markets – hence our wide national footprint.”

Based on these facilities, AfriSam’s range of offerings ensures that it can provide consulting engineers and contractors with every project requirement. According to AfriSam regional sales manager Shaughn Smit, this also means meeting the stringent demands of Committee of Transport Officials (COTO) and South African National Standards (SANS) specifications.

“By applying the ISO 9001-2015



The foundation of AfriSam's sustainability, reliability and product quality is rooted in decades of good planning and regulatory compliance.



Standards highlight the need of quality in all aspects of the value chain, and aggregate is a fundamental ingredient in the chain.

standards framework internally, and by applying our various quality systems at all our operations, we give customers peace of mind in terms of compliance and best practice," says Smit. "We can provide this regardless of whether the aggregate application is in road building, readymix, concrete product manufacturing or asphalt production."

This avoids the many risks that accompany the use of cheap, sub-standard aggregate, including its impact on the longevity and safety of structures, and the added maintenance and repairs required when structures fail prematurely.

Focus on quality

"Our focus on quality is cost effective as it ensures value for money over time," he says. "It also means that contractors and their clients reduce the considerable reputational risk that project delays or challenges can cause."

Dawneerangen says AfriSam's depth of expertise and experience has made it a valuable partner to the consulting engineering sector, as it shares its knowledge and insights on the application of aggregate.

"Especially with large and complex projects, our specialists are able to provide insights to assist project design at an early stage," he says. "Where aggregates are specified for a project but are not available in the area, we can even step in to produce custom aggregates that suit customer needs." ●

KEY TAKEAWAYS



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Without these quality systems and processes, the construction value chain can be compromised and cause various negative impacts for stakeholders down the line



DRIVING BEST PRACTICE IN READYMIX PRODUCTION

Surface mining industry association, ASPASA, has launched an initiative aimed at educating readymix producers on best practices when ordering aggregates to ensure consistency of supply and correct usage of materials. The association has also advised the construction/building industry to only prioritise legally mined aggregate and sand, given that the Assets Forfeiture unit could seize companies' assets if illegal materials are used.



Quarries and readymix producers have a symbiotic relationship and are often co-located.

The quarries and readymix producers have a uniquely symbiotic relationship and are often co-located or within close proximity to ensure sustainable supply and drive down the cost of concrete production. By sharing best practices with readymix customers, ASPASA members hope to create a more sustainable readymix industry.

According to ASPASA director, Nico Pienaar, it has become abundantly clear that since the demise of the South African Readymix Association (SARMA) two years ago, the industry has been left floundering, with little assistance and ASPASA is getting many calls for advice. New entrants often don't understand the issues that

KEY TAKEAWAYS



As much information as possible should be provided to the readymix concrete company at the enquiry or tender stage



Generally, delivery vehicles are available from 2 m³ to 8 m³, with the standard size being 6 m³



On arrival at site, the readymix concrete is discharged in a controlled manner down a chute that extends approximately 7,7 m from the back of the vehicle



Safe access for the delivery vehicle must also be provided, taking into consideration the size and weight of the truck when loaded with readymix concrete and the ground conditions, as well as access



Some readymix concrete companies can offer specially designed delivery vehicles that incorporate either a concrete pump or conveyor.



Photo courtesy of Afrimat

Most readymix concrete companies have a selection of delivery vehicles, which vary in design and size to suit the type of work undertaken.

affect the production of readymix concrete and how to order it. ASPASA has released a set of guidelines that may be of great significance to the industry.

Enquiries and tenders

As much information as possible should be provided to the readymix concrete company at the enquiry or tender stage. The contract specification

may contain specific information pertaining to constituent material restrictions, minimum cement content, contents and maximum water cement ratios.

It is therefore essential that the readymix concrete supplier has sight of this order to determine if the locally held materials will be suitable or whether alternative materials need to be sourced. “Please note that if you do not supply the full contract specification, this may lead to incorrect concrete being ordered,” advises Pienaar.

Additionally, it is essential that the correct consistency and workability requirements are specified for the job. An estimate of the volume of concrete required is also essential. However, any additional information pertaining to “placement rates” would be useful, as forward planning will allow the readymix concrete producer to plan for the use of additional vehicles or late working, among others.

Placing orders

To avoid confusion, always refer to the quotation and concrete reference number or letter when ordering rather than referring to the concrete description or part of it, as it is highly likely that a number of concretes will have the same compressive strength class but may then differ in terms of the specified maximum water cement ratio and or minimum cement content.

Your order and subsequent delivery of readymix concrete will be based upon the requested consistency and workability. Additional cost may be incurred if the original consistency or workability of the concrete is increased, as additional cementitious material will be required to maintain the strength and maximum water cement ratio requirements.

An important point to remember is to order the correct consistency for the job, rather than adding water on site. This is a bad practice and will adversely affect the quality of the final product. It will also render void any guarantee with regards to the concrete. It is

also important to allow sufficient lead time for delivery when placing orders.

New readymix customers

Readymix concrete companies will usually advise and recommend concrete to be used (based upon relevant SABS 878 Standards) and will also be able to help with regards to calculating the quantities and volume of concrete required. It is important to also ask about the use of “self-compacting concrete” as this may be an ideal option with regard to ease of placement and reducing time and effort and also overall costs.

“However, please be aware that this is only suitable for projects where the top surface is approximately level. Coloured and pattern imprinted concretes are also available and it pays to ask the readymix concrete company for more details,” says Pienaar.

Most readymix concrete companies have a selection of delivery vehicles, which vary in design and size to suit the type of work undertaken. Generally, delivery vehicles are available from 2 m³ to 8 m³, with the standard size being 6 m³. The typical dimensions of a 6 m³ truck are as follows: approximately 9 m long, 2,5 m wide and 3,8 m high. Weight is approximately 10 tonnes when empty and 25 tonnes when fully loaded with normal weight ready mixed concrete.

Correct placement

On arrival at site, the readymix concrete is discharged in a controlled manner down a chute that extends approximately 7,7 m from the back of the vehicle. The chute can be moved from side to side, and to a limited extent vertically to assist in discharging the concrete as close as possible to its final position.

Some readymix concrete companies can offer specially designed delivery vehicles that incorporate either a “concrete pump” or “conveyor”. The readymix concrete company should be consulted with regards to availability of pump and conveyor trucks as well as their placement distance, height, weight, dimensions and

extension capabilities.

Safe access for the delivery vehicle must also be provided, taking into consideration the size and weight of the truck when loaded with readymix concrete and the ground conditions, as well as access. Please note that the truck driver will maintain a safe distance from any excavation or area considered dangerous. Always consider how the concrete is to be moved from the point of discharge to its final position prior to placing an order.

Part loads

“Part load” charges may apply. The cost of this will be built in to the quotation at the enquiry stage. If a user under-orders and requires an additional delivery to complete the job (often quite small in volume terms), this may be relatively expensive due to the application of further part load charges.

Advice should be sought from the readymix concrete company. Also note that readymix concrete companies will need a period of time for adequate discharge, which is free of charge. However, please be aware that charges may be incurred following expiry of this period. Advice should be sought from the readymix concrete company.

Please be aware that if you have over-ordered and wish to return any readymix concrete which has not been discharged from the delivery vehicle, a charge may be incurred. Advice should be sought from the readymix concrete company. The production, ordering, delivering and handling of concrete ordered is not just a simple exercise. The process is complicated and needs to be supervised very carefully. Always ask a reputable readymix supplier.

[Subhead] Health and safety

Where skin is in contact with fresh concrete, skin irritations are likely to occur owing to the alkaline nature of cement. The abrasive effects of sand and aggregate in the concrete can aggravate the condition. Potential effects range from dry skin, irritant contact dermatitis, to severe burns in cases of prolonged exposure.



Nico Pienaar, director of ASPASA.

Users should take precautions to avoid dry cement entering the eyes, mouths and nose when mixing mortar or concrete by wearing suitable protective clothing. Take care to prevent fresh concrete from entering boots and use working methods that do not require personnel to kneel in fresh concrete. If cement or concrete enters the eye, immediately wash it out thoroughly with clean water and seek medical treatment without delay.

Wash wet concrete off the skin immediately. Barrier creams may be used to supplement protective clothing but are not an alternative means of protection. Readymix concrete is heavy, with a standard wheelbarrow load weighing over 100kg, so lifting just a small volume may cause physical injury. It is therefore essential that health and safety regulations be followed.

Use of equipment

Certain types of plant equipment create a significant vibration during use (for example pneumatic hammers, drills grinders and vibrating pokers). Prolonged exposure to vibration can cause hand arm vibration syndrome (HAVS). It is possible to reduce the effects of vibration by selecting plant with vibration dampers, by using anti-vibration gloves, taking regular breaks and keeping hands warm in cold weather. ●



The Titan 1300 comprises an extra-large capacity twin drive feeder at the rear of the machine with a 1 100 mm feeder belt.

PACKING A BIG SCREENING PUNCH

Powerscreen has launched its new Titan range of secondary scalping screens that provides a cost-effective solution in high-volume, smaller-sized secondary or recycling screening applications. The first units of the new range are expected in southern Africa in early 2022, writes **Munesu Shoko**.

The Titan range, which includes three models – the Titan 600, Titan 1300 and Titan 2300 – is a simplification of Powerscreen’s Warrior range, using key features customers love about the Warrior machines and tailoring them to a different section of

the market at an attractive price point.

“As we continue to review the global market, we are seeing a split in the applications in which our Warrior range is being used. While some are screening large sized materials, others are being used as secondary scalpers, such as after a crusher,

The 1300 packs a big punch, while having a compact footprint for ease of transport.



or in the recycling market – screening topsoil, C&D waste and biomass materials,” explains Sean Loughran, business line director of Powerscreen.

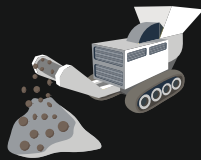
“The Titan range has been specifically designed with the customer, for the customer as a more cost-effective machine to cater for those secondary or recycling screening applications. It has both a range of features and unrivalled performance that will increase the bottom line of any of its owners.”

Titan 1300

The Titan 1300 packs a big punch while having a compact footprint for ease of transport. Comprising an extra-large capacity twin drive feeder at the rear of the machine with an 1 100 mm feeder belt, the feeder comes with hydraulically folding extensions to allow for side loading of the machine, can withstand heavy loads due to having impact bars under the belt in place of impact rollers, and has a folding rear door to allow for maximum versatility.

The highly aggressive screenbox has an impressive total screening area of 10 m². Complete with a variable angle to allow for tailoring

KEY TAKEAWAYS



The Titan range, which includes three models – the Titan 600, Titan 1300 and Titan 2300 – is a simplification of Powerscreen’s Warrior range



The Titan range has been specifically designed to cater for secondary or recycling screening applications



The Titan 2300 is a completely new machine to Powerscreen in terms of concept and design, encompassing the largest belt feeder in any of the Powerscreen range at 1 500 mm



Both the Titan 1300 and Titan 2300 have undergone rigorous testing in various applications to ensure that they excel in every job they are placed in



Hybrid Dual Power is available on the Titan 2300, being powered using standard diesel or connected to an external electricity supply once the machine has been set-up.



The Titan 1300's highly aggressive screenbox has a total screening area of 10 m².

of the machine to various applications, the screen also has a lift-up functionality at discharge to ensure quick and efficient mesh changes, of which there is a huge range available as well as other media including punch plate, 3D punch plate and finger screen.

Side conveyors have wide fines belts and excellent stockpiling height to rival any other comparable machine on the market. A single lever set up results in a very quick set up time, and while the side

conveyors can be configured as either standard or fully reverse from the factory, they can also be fully configured onsite to allow both conveyors out of the same side of the machine. Each conveyor has its own independent speed control, to tailor each conveyor to its loading. Meanwhile, the Titan 1300's tail conveyor has the optimum combination of rollers and impact slips for durability while maximising the power draw of the machine, and has a fold to minimise transport

length, fitting onto the smallest of trailers.

Titan 2300

The Titan 2300 is a completely new machine to Powerscreen in terms of concept and design, encompassing the largest belt feeder in any of the Powerscreen range at 1 500 mm, with twin gear box drive and a combination of impact bars and impact rollers for optimum power usage. It also has the steepest hopper ever designed by Powerscreen to enable

ease of emptying without bridging, with an eye specifically on the recycling market.

The body of the hopper is manufactured with wear resistant steel and a rear folding door to take a crusher feed. A low speed feeder is fitted as standard, with a medium speed option for low density material which, while sacrificing some torque, can run at up to 50% faster than standard.

As with all Powerscreen screens, the heart of the machine is within the screenbox itself. Neil Robinson, product and applications manager, Powerscreen explains, "Using our expertise gained from our last few projects such as the Warrior 2100, the Chieftain 2200 and the Chieftain 1700X, together with a mix of computer based design and analysis and real world testing, we have crafted a screenbox that will match and exceed any similar sized single shaft screen in the market. Using a high specification drive, the machine is able to take on a wide range of applications from smaller direct feeder, secondary feed after a crusher to light weight recycling market."

The machine also has an adjustable screen angle, with media options include mesh (both woven and welded), punch plate, 3D punch plate, finger screens and finger and punch plate combination. Finally, the Titan 2300 has full access walkways down both sides of the screenbox, uniquely designed to be fully regulatory compliant.

Hybrid Dual Power is also available on the Titan 2300, being powered using standard diesel or connected to an external electricity supply once the machine has been set-up.

The side conveyors are standardised at 1 050 mm plain belts, with chevron belts also available if required. With a generous stockpiling height, the plant is fully customisable both in the field and from the factory with conveyors that can be reversed, can be discharged on the same side, or can be converted to a two-way split.

To cater for the recycling market, there is an option for magnetic head drums on all three conveyors to carry the metallic material back down the conveyor and away from the stockpile. The tail conveyor features a 1 600 mm chevron belt, the widest in the Powerscreen range, with a combination of impact slips and rollers as standard to remove the need for full length skirting and reduce the power draw of the conveyor.

Similar to the Titan 1300, the large tracks of the Titan 2300 ensure a stable working platform but has a high tracking speed to allow highest versatility onsite.

Testing

Both the Titan 1300 and Titan 2300 have undergone rigorous testing in various applications to ensure that they excel in every job it is placed in. The Titan 1300 has worked on a sand and gravel application in Germany, while the Titan 2300 has surpassed expectations in various quarries throughout Ireland as well as in a biomass application.

"Overall it's fair to say that our customers have seen the Titan machines enabling them to process higher volume of quality material when compared to their previous units," concludes Sean Keenan, applications training manager. ●



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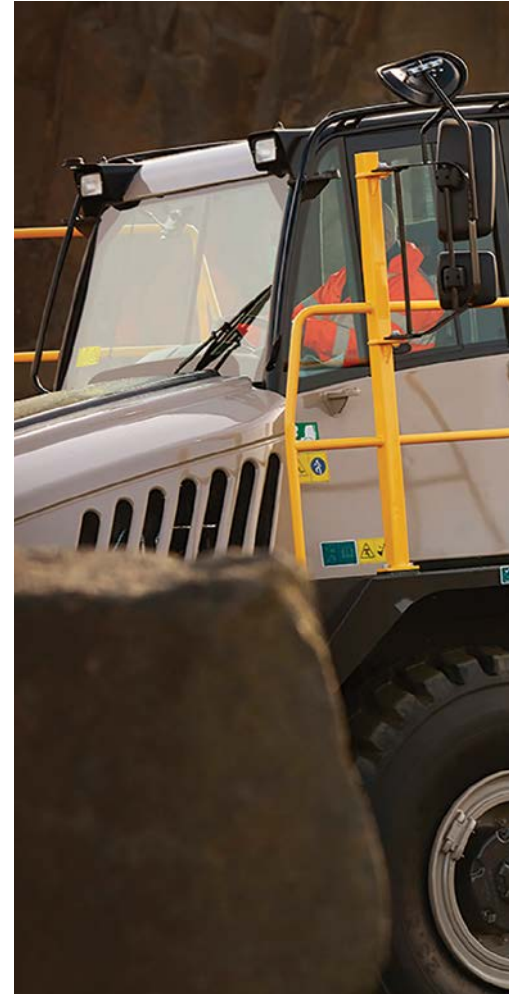
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ROKBAK ROARS ONTO GLOBAL QUARRY SITES

Articulated hauler specialist Terex Trucks has rebranded as Rokbak. With their foundation in the predecessor models from Terex Trucks, the 28 t payload RA30 and 38 t payload RA40 from Rokbak are said to be the most productive and efficient articulated haulers the company has ever made. **By Munesu Shoko.**



Rokbak is the new name for Terex Trucks, with the new brand said to represent the continuation of the company's "strong hauling heritage with a future-focused vision". Throughout the past four decades, says MD Paul Douglas, the company has delivered its promise to deliver powerful and reliable articulated haulers – and that legacy remains front and centre within the new brand.

"At the same time," he says, "the Rokbak name represents an exciting new future and reflects the significant advances the organisation has made in recent years as well as its new strategic priorities."

"Our company has an incredible history and a proud heritage," says Douglas. "Seven years ago, we became a member of the Volvo Group, which allowed us to make major improvements in every part of our business. Millions of pounds have been invested in improving our products, modernising our



facilities, expanding our network and developing our people. It has been a process of continual evolution. That's why we feel it's right to recognise this evolution with a new brand name to launch an exciting new chapter in our

history. And we'll keep investing to further improve our machines for our customers."

Investments and improvements

The significant investments and improvements in the company's

Rokbak stands for power, performance and reliability.

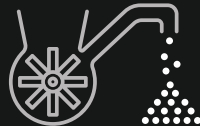


As part of the new brand launch, the machines now come in Rokbak colours and livery.



articulated haulers in recent times have ensured they remain among the most robust and reliable machines around, says Douglas. Now, he adds, with their foundation in the predecessor models from Terex Trucks, the 28-tonne payload

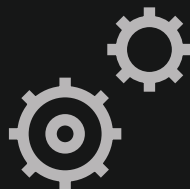
KEY TAKEAWAYS



Rokbak is the new name for Terex Trucks, with the new brand said to represent the continuation of the company's strong hauling heritage with a future-focused vision



Seven years ago, the company became a member of the Volvo Group, which allowed it to make major improvements in every part of its business



In product design, the company has introduced Stage V engines for better fuel efficiency and operation for customers



Other improvements include a new transmission on the 28-tonne machine, the introduction of the Haul Track telematics and a stronger focus on operator wellbeing and safety



The 28-tonne payload RA30 and 38-tonne payload RA40 from Rokbak are said to be the most productive and efficient articulated haulers the company has ever made.



Paul Douglas, MD of Rokbak.

RA30 and 38-tonne payload RA40 from Rokbak “are the most productive and efficient articulated haulers the company has ever made”.

As part of the new brand launch, the machines now come in Rokbak colours and livery. While maintaining the experienced design, craft and precision that are synonymous with the company’s haulers, the RA30 and RA40 are said to deliver better fuel economy, lower emissions, improved safety and greater durability. With a tough design that’s built to last, says Douglas, the haulers power through hard work with ease, boosting customers’ productivity no matter how tough the conditions.

“We are very excited to reveal our new brand, and of course our haulers are the shop window,” continues Douglas. “Rokbak stands for power, performance and reliability. We already have a

very healthy order book for the new brand, and we want to further expand our reputation, dealer network and market share. We are still the same skilled, experienced, and passionate team, committed to making rock-solid haulers every day. But we also have a clear vision for where we want to go and who we want to be.”

Steady evolution

As part of the Volvo Group, Rokbak has experienced steady evolution over the past seven years. While this has taken place across the board, it is particularly prominent in four key areas: product design, sustainability, safety and people.

In product design, the company has introduced Stage V engines for better fuel efficiency and operation for customers. Other improvements include a new transmission on the 28-tonne machine, the introduction of the Haul Track telematics and

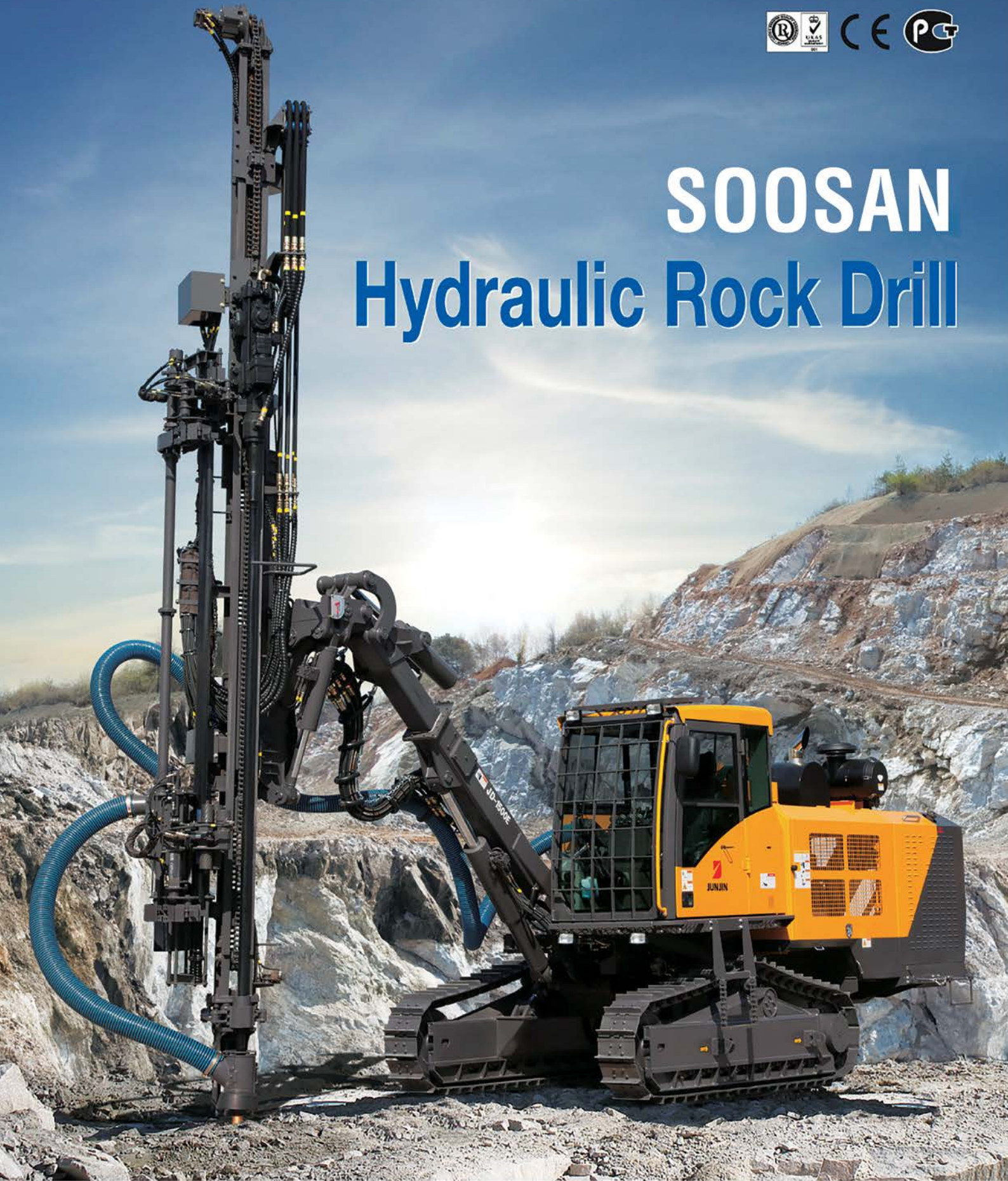
a stronger focus on operator wellbeing and safety. In terms of sustainability, the company’s manufacturing plant has shifted to 100% renewable energy as well as operating within Science-Based Targets and ISO standards, plus targeting CO₂ emission reductions.

The focus on safety has been emphasised in all areas, but particularly on its employees. Changes in processes at the factory have seen a stronger concentration on maintaining employee safety while simultaneously delivering high standards and low downtime. For the company’s people at the heart of Rokbak, there is a continual focus on professional development, keeping the team at the forefront of skill and expertise. Similarly, Dealer Operating Standards and training ensures the expanded dealer network continues to deliver the highest levels of service.

“We are proud and excited to have the modernised Rokbak brand continue as a fundamental part of our organisation,” says Melker Jernberg, president Volvo CE and executive vice president Volvo Group. “We believe in a sustainable future, innovation and the power of our people and we see that all encapsulated in Rokbak. At the same time, the company has its own personality, heritage and loyal customer base and it will be exciting to see the brand evolve further as it sets out on this new stage of its journey.” ●



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SOOSAN

Metso Outotec expands Lokotrack mobile range for aggregates

Metso Outotec has added two new models to the Lokotrack mobile crushing and screening series. The new Lokotrack LT200HPX and Lokotrack LT220GP mobile cone crushers are compact but efficient units ideal for aggregate contractor customers, bringing up to 30% more capacity and added flexibility compared to earlier models.

The new models were premiered during Metso Outotec's virtual studio events on 27 October, and in the new Lokotrack Liveroom 360 online experience together with services and parts offerings for Lokotrack. The new Lokotrack models are available globally as of 27 October.

The launch models have many new features that are designed to improve the efficiency of customer's operations. They are built on the same new chassis, allowing customers to choose between the two cone crusher types and various optional features based on their specific needs.

The Lokotrack LT200HPX is equipped with an efficient two-deck pre-screen providing more capacity. Heavy duty chassis and wide conveyors facilitate high throughput, and a direct v-belt crusher drive ensures high fuel efficiency.

Service and transportation are facilitated with extensive service platforms that fold down for transport. LT200HPX can be combined with Lokotrack LT106 and LT116 jaw crushers and Lokotrack ST3.8 and ST4.8 mobile screens.

The Lokotrack LT220GP provides additional crushing power and can be equipped with a pre-screen or with a belt feeder. LT220GP fits well with Lokotrack LT120/LT120E mobile jaw crushers and ST4.10 mobile screen for high-capacity aggregate production.

"The new models and our



The new models were premiered during Metso Outotec's virtual studio events on 27 October.

end-to-end offering displayed in the Lokotrack Liveroom, demonstrate our focus on improving aggregates customers' operations and bottom line," says Kimmo Anttila, vice president, Lokotrack Solutions at Metso Outotec. "With these new models of 300 tonnes per hour capacity and 40 tonnes transport weight, the customers have even more choice and flexibility to select from our cone crusher range. Lokotrack is a sustainable and future-proof choice for any type of aggregate production." ●

Orica expands digital capability with 3D blast movement technology

Orica has announced the release of its latest OREPro 3D blast movement modelling software for maximum ore recovery, productivity and throughput.

Developed in partnership with major mining companies, OREPro 3D, is a software application that accurately models blast movement, enabling situational awareness and improved grade control for customers globally.

OREPro 3D uses readily available mine data as inputs, including blast designs, in-situ block models, and post-blast muckpile surveys. Sophisticated algorithms then replicate movement dynamics throughout the entire blast volume and calculate SmartVectors that accurately transform the in-situ grade control into a swelled post-blast grade control model.

Orica chief technology officer Angus Melbourne describes how Orica is continually expanding its digital solutions to support the industries rapid digital transformation.

"Orica has a vision of becoming an integrated ore extraction mining services company and we are rapidly building

a portfolio of digital technologies to augment our core explosives technologies and solutions and better serve customers.

"This technology is a critical enabler to us building an open, secure and connected digital ecosystem that will allow our customers to accurately model and continually improve blast outcomes and the impact on their downstream operations."

Understanding where the rock mass has moved post blast is critical to separating ore and waste effectively and creating downstream efficiencies in the mining process, and this has the potential to unlock significant value for customers.

Rajkumar Mathiravedu, Orica's vice president Digital Solutions, says: "We are excited about the OREPro 3D technology as it complements and will soon integrate with our existing suite of market-leading digital blast design, execution and measurement solutions, including SHOTPlus, BlastIQ, FRAGTrack and ORETrack. The integration of these solutions will offer customer's unrivalled

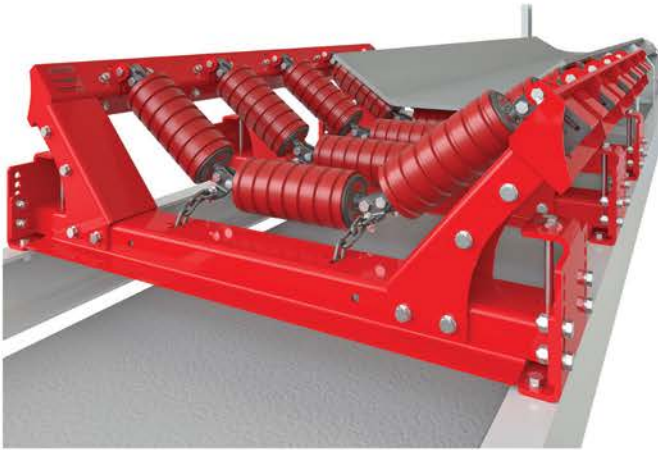


OREPro 3D is said to be the first and only commercial solution that optimises ore control in 3D.

digital workflow solutions from ore-body knowledge through to mineral processing."

Used by many tier-one miners around the world today, OREPro 3D will continue to be offered as a standalone blast movement solution or optionally integrated with other Orica products and services to deliver greater insights and optimisation opportunities to customers. ●

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Lemaitre expands into new terrains

Driven by passion, dedication and a commitment to high-quality products, Lemaitre has always been a brand committed to keeping those who build South Africa safe. For 30 years, the company has helped build a nation with the toughest workforce.

Lemaitre is launching new styles with modern designs and a refreshed look to appeal to a wider audience and targeting new sectors.

“That’s why we are proud to announce the addition of new styles to our range of safety shoes, designed to offer the industry more support, comfort and performance in the toughest environments,” the company says.

The Raptor range is synonymous with torsion control and keeping workers sure-footed in environments where uneven terrain is prevalent, such as construction and agriculture. The company has expanded its offering in this range with the Osprey Hiker and the Falcon shoe and boot.

The Parabolic range comes with a durable polyurethane midsole and is perfect for workers who need extra support when spending a lot of time on their feet. The Concorde shoe and boot are the company’s latest’s offerings in this range, with an S3 rating, provide comfort



New to the Lemaitre range is the Inyati range which offers high heat resistance.

and alleviate fatigue for workers who spend long hours on their feet in industries such as manufacturing. They also come standard with an anti-penetration midsole (APT) to prevent sharp objects from penetrating the boot.

Maxeco range, a legacy of South African safety footwear, has built-in arch support and is designed for all-around safety. The redesigned Maximus gives workers the all-around safety with the addition of a memory foam insole and reflective strip. It has a lightweight sole unit, wider fit and improved ergonomics. The square cleat design of the shoe improves the slip resistance rating and

provides better stability and reduced shock impact.

The Apollo range with SRC slip-resistance rating offers maximum slip-resistance and is suited for environments where slip potential is a high risk. The two new styles added in this range are the Clog and the Ben.

New to the Lemaitre range is the Inyati range which offers high heat resistance, cut and abrasion resistance and SRC rated slip resistance and has an injected PU/Rubber sole which provides all-round safety and protection in hazardous working environments. The two new styles to this range are the Dodge and the Urban. ●

Haver & Boecker Niagara introduces Pulse Impact Test

Haver & Boecker Niagara has added Impact Testing to its Pulse portfolio with experimental modal analysis. The impact test – also known as the hammer test or bump test – is now part of the company’s quality assurance programme during factory testing as well as on-site. This ensures each machine is properly tuned to avoid operating in resonance, ensuring efficient operation.

With the opportunity to integrate impact testing data with other Pulse portfolio reporting and historical tracking, including Pulse Vibration Analysis and Pulse Condition Monitoring, Haver & Boecker Niagara can provide a more holistic view of the individual machine that helps customers maximise uptime through historical tracking. Haver & Boecker Niagara’s suite of Pulse diagnostic tools helps operations to

monitor the health of vibrating screens for optimum screening performance and equipment durability.

“Increasing customer productivity and profits are at the heart of every Haver & Boecker Niagara innovation,” says Wilm Schulz, Haver & Boecker Niagara’s parts and service manager. “With advances in technology, we’re able to provide real-time information that helps customers make well-informed decisions about their machine. Including impact testing gives us one more data point to extend the life and maintain the health of a vibrating screen.”

Operating in resonance can diminish productivity, incur damage to vibrating screens and pose safety risks. Impact testing involves striking the machine at key points with a dead



The impact test – also known as the hammer test or bump test – is now part of the company’s quality assurance programme during factory testing as well as on-site.

Terex Washing Systems launches M1700X mobile washing screen

Terex Washing Systems launched its latest innovation – the enhanced M1700X mobile washing screen – at CQMS, Ireland’s Construction & Quarry Machinery Show, which took place from 10 – 11 September in Tullamore, Co. Offaly.

The M1700X is a redesign of the M1700 and improves the M Range of mobile washing screens manufactured by Terex Washing Systems that can produce up to five products (three aggregates and two sands) in applications including; aggregates, recycling, industrial sands and mining. The M1700X was featured alongside the FM120 C-2G, which allows sand to be recovered when both machines are connected together.

Barry McMienamn, business line director of Terex Washing Systems, says, “The addition of the M1700X will enhance an already significant product range offered by Terex Washing Systems, meeting both market and customers’ needs for mobile washing. Our team of engineers have worked closely with our customers to develop improvements to an already high performing machine, such as the new tracked rinser that features a redesigned high fluidisation wash



The improved M1700X features a new integrated high fluidisation wash box to maximise deck efficiency, increase media wear life and have an adjustable spray system.

box, increased standard features and improved washing efficiency.”

The improved M1700X features a new integrated high fluidisation wash box to maximise deck efficiency, increase media wear life and have an adjustable spray system. It also boasts increased standard features, including a standard hydraulic raise and lower for quicker service access,

standard hydraulic tensioning, and one-piece catchbox for easy machine reconfiguration.

Setting new standards in screen box technology, the M1700X has heavy duty bearing arrangement for long service life, higher levels of screening efficiency and throughput, increased serviceability and maintenance access as well as increased screen angle adjustment that is highly adaptable for feed material variation.

The model has also been redesigned with a focus on wet processing efficiency, with 16% increase in spray capacity across all decks, industry leading levels of catchbox sealing, innovative configurable catchbox outlets and configurable blending to maintain material specification.

Additionally, the M1700X is easily transported, has a quick set up time (typically 15 minutes), and has optional hybrid power available around the world.

Speaking on the CQMS show, McMienamn adds, “It was terrific to be back at a show, welcome customers to our stand and showcase the capability of our equipment and discuss our latest innovations. We were delighted by how well the M1700X was received and we look forward to building on the connections made at CQMS and discussing how our bespoke solutions can meet their specific needs.”

blow hammer while the machine is off. It typically includes the four corners but can be expanded to additional areas. Collected data is analysed to identify the machine’s individual natural frequencies. Based on results, engineers can adjust machine parameters to avoid these frequencies during operation.

Integration into the Pulse software opens up opportunities for easier on-site impact testing. Natural frequency can shift over time as components are repaired or replaced, resulting in irregularities that could translate into diminished performance, decreased efficiency, increased operating costs and imminent breakdown. By incorporating impact testing into Haver & Boecker Niagara’s signature Pulse diagnostics tools, producers can

ensure optimum screening performance and equipment reliability.

The service programme includes a complete vibrating screen inspection by a Haver & Boecker Niagara certified service technician. Following the inspection, customers receive a Pulse Diagnostic Report, which provides an analysis of their vibrating screen and detailed recommendations to extend the lifespan of the machine and ensure its health. All Pulse Diagnostic Reports are stored in an online data management system, giving customers access to a complete record of their vibrating screen’s service and performance histories. This information allows customers to track changes in vibrating behaviour and predict future performance so that they may shift from reactive to predictive maintenance. ●

ILLEGAL MINING – THE VICIOUS CIRCLE OF UNFAIR COMPETITION



By Nico Pienaar, director of ASPASA.

What is of concern is that it is deemed acceptable for construction companies and municipalities to excavate material from illegal borrow pits for the duration of specific projects and pretend as if there is nothing wrong.

As a result, many unregulated excavations continue unabated all over the country. What is often not understood is the disastrous effects these little diggings have on the environment, the surrounding communities as well as the negative effect on legally operating quarries.

Unfair competition

In South Africa we often hear about “unfair competition” and “collusion”. If we look at this in the surface mining industry we see a vicious circle of unfair competition.

Unfair competition jeopardises the future of all companies in this part of the mining industry. We constantly have new legislation – developed for big mines – forced upon smaller legal operations, but this obviously does not apply to illegal operations

There is also a constant increase in the costs of compliance by legal operations. On the other hand, we have poor implementation of legislation. The only ones who get unwarranted attention are the legal quarries while a blind eye is turned to the illegal sites. There is no control over those that just start digging.

It’s not always understood what mining is. So let’s be clear, the Mineral Petroleum Resources Development Act (MRPDA) states that once the material is taken away from its natural state and put in another form – it is or has been mined. **By Nico Pienaar, director of ASPASA.**

The main regulator, the Department of Mineral Resources and Energy (DMRE) has no force, willingness or focus on these operations.

This all leads to unfair competition and the compliant companies lose their competitiveness as they have various unfair competitive “enemies” – illegal operators, government and semi-government departments doing the digging and then also a regulating authority that is obviously turning a blind eye to the offenders.

Consequently, this creates a particularly bad image for the legal operators, yet, the illegal, non-compliant ones get away with it.

The illegal industry should therefore be investigated by the competition authorities and SARS because by its very nature, it doesn’t pay taxes.

Other issues

Much of the aggregates extracted are used for civil works. Companies, especially those registered on the stock exchange, should not purchase material that is illegally obtained. Again the regulators, SARS and others should focus on the purchase of the materials used and if not fully legally compliant then severe penalties should be implemented.

We have witnessed several cases illegal land filling, backfilling and dumping of waste taking place. Legal operations in terms of the mining, environmental and water legislation have to strictly comply with the suitability of such a site to be used for these facts mentioned above.

There is nearly always poor environmental performance and no or bad site rehabilitation. Again the legal operations have to have very well-defined plans on how to rehabilitate sites and legal operators have to secure a special Rehabilitation Fund for rehabilitation. Again, illegal operations do not.

The illegal non-compliant operations have unsafe, unhealthy and dangerous working conditions. The legal operations by comparison have a flood of DMRE inspectors visiting them. But our members are witnesses to the fact that no visits are paid to the illegal operations in their vicinity – clearly an indication that illegal operations are the way to go, it is cheap, no compliance, no payment of fees, among others.

Payment of correct wages and other employment conditions need to be adhered to and we cannot understand why the Department of Labour and the Unions do not focus more of their attention on the informal and illegal operations. Also, they should look at the contracts between the users, often big companies, and the illegal suppliers.

Real problems

What we see when dealing with illegal mining is that there is an underground economy, a shadow economy and illegal markets. All of these result in taxes not being paid. These operations have no accounting standards and would result in breaching the financial rules, something that SARS should check. ●

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