MINING DEVELOPMENTS

November/December 2024 Issue

MAGAZINE

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WFW advises Guinea as Simandou mega-project closes

The US\$15 billion Simandou project, the largest greenfield integrated mine and infrastructure investment in Africa to date, on which Watson Farley & Williams has been advising the Republic of Guinea, has now completed, including the required Guinean and Chinese regulatory approvals.

Closing was followed by both the second anniversary celebration for Compagnie du Transguinéen, the joint venture consortium that will own and manage the Simandou rail and port infrastructure, and the signing of the first locomotive order to service the project. CTG is comprised of Guinea, Baowu Group (leading a consortium of Chinese steel manufacturers and other investors), Simfer Jersey (a joint venture between Rio Tinto and a consortium led by China's state-owned Chalco Iron Ore Holdings) and WCS (a consortium comprising the Winning International Group, China Hongqiao Group, Guinean mining logistics company UMS, as well China's Yantai Port Group).

Whilst Simandou revolves around the exploitation of four iron ore blocks in southern Guinea, the project goes far beyond mining and includes the construction and operation of a 600+ km multi-use railway line

connecting the blocks to a large, newly constructed state-of-the-art mineral port to export up to 120 million t of iron internationally. This new rail and port infrastructure will act as a catalyst for transforming Guinea's economic development, unlocking prosperity well beyond the Simandou corridor as well as empowering local communities and reducing poverty nationwide.

With all the project's core agreements requiring compliance with the highest ESG standards, Simandou also delivers a significant new source of high-grade iron ore that will strengthen the decarbonisation of the steel industry helping combat global climate change.

The multidisciplinary cross-border WFW team that advised Guinea was led by Dubai Projects Partner Alhassane Barry working closely with London Corporate Partner and Global Mining & Commodities Sector Co-Head Jan Mellmann and Paris Regulatory & Public Law Partner Arnaud Troizier, as well as ESG Partners Sarah Ellington and Nick Walker, Corporate Partner Chris Kilburn and Tax Partner Richard Stephens in London; Dispute Resolution Partner Franck

Poindessault, Tax Partner Romain Girtanner and Regulatory, Public Law & Competition Senior Consultant Lucien Rapp in Paris; Tax and Regulatory Partner Daniel Pilarski in New York: and Projects Partner Mhairi Main Garcia in Dubai. They were supported in London by Counsel Valentina Keys (ESG) and Senior Associates Thomas Newlyn (Corporate), David Bath (Corporate) and Rhiannon Elias (Projects) and Associates Sulaiman Hoosen (Corporate), Idil Yusuf (Corporate) and Philippa Beasley (ESG); in Paris by Counsel Hélène Ibos (Tax) and Associates Maximilian Cristescu (Tax) and Mohamed Douib (Corporate); and in Dubai by Associates Amoetsoe Mkwena and Benjamin Ruffet (Projects).

Alhassane and Jan commented: "The strength and depth of our experience in our core sectors and ability to work seamlessly and collaboratively across our international network meant we were able to provide Guinea a truly global legal team to help it complete this historic project which represents a new era for the development of the African mining sector".

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Ultra-reliable SKF Explorer tapered roller bearings keep mining dump trucks rolling

KF designs, develops and manufactures a range of premium quality products to meet the demands of the mining sector, which is notorious for punishing conditions that test machines, equipment and components to their very limit. Irrespective of how severe the conditions, machine reliability is always a prerequisite to ensure sustainable mining operations; even a few minutes of downtime of critical machinery due to the failure of even the smallest of component causes production stoppages that can result in significant monetary losses.

Dump trucks are the transportation lifelines of mining operations and as long as they are on the move, mines are prospering. SKF Explorer tapered roller bearings have been specifically developed for mining dump trucks with reliability top of mind; these bearings are renowned for their dependability in essentially all conditions – extreme temperatures, dust, mud or stones

SKF Explorer tapered roller bearings are typically used as bearing solutions in applications where there is a need to increase performance, reduce friction or increase power density. SKF based the development of these bearings on real-world experience and dialogues with discerning partners. Owing to

their superior reliability and rotational delivery at the right time, these bearings are trusted by some of the most prestigious mines globally and the preferred choice of operators to keep their dump trucks in motion.

SKF tapered roller bearings are manufactured in accordance with the SKF Explorer class and incorporate the organisation's combined areas of expertise in terms of design, tribology, metallurgy and lubrication.

A bearing is essentially a collection of individual components that work together. The construction of a tapered roller bearing features a cup and cone assembly that accommodates loads and provides low friction during operation. The cup is comprised of an outer ring while the cone assembly consists of an inner ring, a cage and rollers, all designed to handle combined loads. The bearings' optimised surface finish further enhances reliability while the separable and interchangeable components facilitate mounting and maintenance. SKF offers a wide range of tapered roller bearing designs including single, double and four-row as well as matched tapered roller bearings. The units are customisable to match specific conditions i.e. speed, load, contamination, temperature or vibration

conditions. SKF Explorer cylindrical and CARB toroidal roller bearings present reliable, compact, efficient and cost-effective solutions for planetary gearboxes. Both bearing types offer high carrying capacity.

Alongside its comprehensive bearing portfolio, SKF also leads industry with condition monitoring and lubrication systems that further optimise customers' asset management. Insight into the health of machines allow for preventative maintenance while automated lubrication systems enhance machine lifecycle, delivering high operational reliability and augmented performance.

In addition to premium quality, reliable product, system and technology solutions, service excellence is equally fundamental to successful operations. As a customer-driven organisation, SKF delivers on both.

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Contributions

The editors welcome news items, press releases, articles and photographs relating to the Mining Industry. These will be considered and, if accepted, published. No responsibility will be accepted should contributions be lost, damaged or incorrectly printed.

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Southern Palladium submits EIA for Bengwenyama project

ual-listed Southern Palladium has submitted the environmental-impact assessment (EIA) report for its 70%-owned Bengwenyama platinum group metal project, located on the eastern limb of the Bushveld Complex in South Africa, to the country's Department of Mineral Resource and Energy (DMRE), which is in the process of being split from the energy portfolio and renamed the Department of Mineral and Petroleum Resources.

Southern Palladium MD Johan Odendaal explains that, in alignment with regulatory requirements and the company's dedication to environmental stewardship, a scoping study was completed on February 14.

Subsequently, an extensive EIA process was carried out in full compliance with the EIA regulations.

"These studies ensure that our project adheres to legal standards and best practices, reflecting our commitment to sustainable and responsible mining," he says. He notes that the EIA studies, along with the consultation process, were finalised and the report submitted on July 10, adding that the company received an acknowledgment letter from the DMRE on July 22.

Southern Palladium says the letter acts as an acknowledgement by the DMRE that the core parameters of the EIA submission have been met correctly by the company and that the detailed review can begin for issuance of environmental authorisation.

In turn, the environmental authorisation permit will form part of Southern Palladium's forthcoming mining right application (MRA), following the completion of a prefeasibility study.

"We remain confident that the MRA process will be successfully concluded by the end of the first quarter of 2025, with the formal granting of the mining right by the DMRE expected shortly thereafter.

"This will position Southern Palladium to advance the Bengwenyama project, delivering significant value to our stakeholders and contributing to the economic development of the region," says Odendaal.

The company says additional permit applications are also in progress. These include a waste management licence (WML) application and a water-use licence (WUL) application, which will be submitted for water uses associated with the Bengwenyama project.

The EIA submission, along with the WML and WUL submissions, form part of the comprehensive review process for Southern Palladium's MRA. The WML and WUL applications are scheduled to be completed and submitted by December



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Private placements, carbon seen by JSE as African growth route



JSE CEO Leila Fourie Photo by Bloomberg

By: Bloomberg

JSE, which operates Africa's biggest stock and bond exchanges, is looking to expand its private placement and carbon offset platforms across the continent.

The JSE Private Placements platform, which allows companies to raise money from select investors through the sale of equity or issuing of debt, has been operational since 2021 with over 70 deals executed so far. The JSE Ventures Voluntary Carbon Market was launched in 2023 and while it's yet to see the issuance of any carbon offsets, it's expected to commence trade by the end of the year, slower than initially expected.

"Where we are seeing potential is in the private market," Leila Fourie, the JSE's chief executive officer, said in an interview last week. "We are looking to create a network across Africa where we provide access to any company seeking capital"

NO LIQUIDITY

The push by the JSE to expand across Africa comes after an attempt by the JSE's Johannesburg Stock Exchange to attract listed companies from other African nations in 2009 failed to gain traction.

The lack of liquidity in many African stocks that might want to list in Johannesburg makes it difficult for institutional investors to buy them, Fourie said.

She said there is a lot of interest in the private placement platform, which currently operates in South Africa.

"We have R30-billion worth of investor capital, which is effectively dry powder and available for investment," Fourie said. "The capital ask is anywhere between R15-billion and R20billion" from interested companies, she said.

While the company is also keen to expand its carbon trading business on the continent there are regulatory hurdles including whether carbon credits are classified as securities, commodities or assets in different countries, said Fourie. South Africa's National Treasury has said it will make proposals on their classification in October.

A credit represents a ton of carbon dioxide or its equivalent either permanently removed from the atmosphere or prevented from reaching it in the first place through projects such as reforestation programs. They are bought by companies to offset their own emissions.





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Waste Material

Pambili produces first gold at Zimbabwe mine

ambili Natural Resources Corporation has produced its first gold from its Golden Valley mine in Zimbabwe's Matabeleland province.

Although formal mining has yet to re-start at Golden Valley, Pambili has completed some underground development in preparation for the drilling programme, which is due to start later this month. Some 630 t of material from this underground development, together with historic sands on surface, were processed through the Golden Valley plant to recover 235 g (7.5 oz) of gold at a recovery of 0.52

The imminent restart of the toll-milling operation, together with further cleanup of historic sands on the site, is expected to yield additional gold before underground mining begins. However, given the nature of the material being processed, the Company is not yet able to predict what this will yield.

Jon Harris, Chief Executive Officer of Pambili Natural Resources, commented: "The first gold production from the Golden Valley Project really is exciting news for

The decision to process material from the offreef underground development was based on the visible mineralisation observed within that material and the experience of the local team.

The fact we were able to produce gold from this off-reef material and the reworking of old sands supports our belief in the upside potential of Golden

As recommended in the recent Technical Report, the Company will endeavour to establish the true extent of this potential

through our planned underground and surface drilling programs, both of which will commence this month. As we continue to learn more about its large-scale potential, Golden Valley stands to become an increasingly valuable asset for Pambili."





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Merafe reports R720m halfyear profit on higher chrome ore prices, weaker currency

OHANNESBURG – Johannesburg Stock Exchange-listed Merafe has reported a profit of R720-million for the six months ended June 30, on higher realised chrome ore prices and a weaker rand:dollar exchange rate. But downward pressure on chrome ore prices has started and is expected to translate to lower ferrochrome prices, Merafe CEO Zanele Matlala outlined in the half-year presentation covered by Mining Weekly.

Ferrochrome prices remain strained and cost increases continue to put pressure on margins and the company is expecting the second half of 2024 to be softer given a weaker market

Nevertheless, the board of Merafe has declared an interim gross cash dividend of 20c, on a par with that for the corresponding period of last year.

Merafe's revenue and operating income are primarily generated from the Glencore-Merafe Chrome Venture, which is one of the global

market leaders in ferrochrome production, with a total installed capacity of 2.3-million tonnes of ferrochrome a year.

Merafe shares 20.5% of the earnings before interest, taxation, depreciation and amortisation from the venture, its reportable segment being the mining and beneficiation of chrome ore into ferrochrome and the extraction of associated minerals.

Operationally, ferrochrome and chrome ore production were lower, with some improvement in electricity supply and

Global stainless-steel production increased and demand for ferrochrome followed a similar trend, with rand weakness against the dollar providing some cushion, Global stainless-steel production increased by 9% to 31.3-million tons. The biggest increase came from China, which grew stainless steel production by 12%.

Ferrochrome demand increased by 10% to 7.9-million tons, in line with standard steel production growth.

China continues to dominate global stainlesssteel production, accounting for more than 63%. Global ferrochrome production increased by 7% to 16.1-million tons. Nearly all this growth came from China, which has been introducing new cost-efficient capacity and which grew by about 29%. South African production decreased by 21% to 3.1-million tons following the growth in ferrochrome production in China, where chrome imports grew by 27% to 8.5-million tons, with the bulk of the chrome coming from South Africa.

Merafe had cash and cash equivalents of R1 717-million as at June 30



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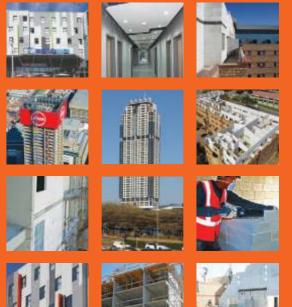




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Since commissioning the AAC plant in 2017, Everite Building Products has enjoyed considerable success in specification of the product to landmark projects in South Africa.











Lotus signs uranium mine development agreement with Malawi Government

otus Resources Limited has announced it has signed a Mine Development Agreement (MDA) with the Government of Malawi (GoM), for its Kayelekera uranium mine, a major milestone in its redevelopment.

This Agreement ensures the mine will operate under a stable fiscal regime and provides the necessary confidence to investors.

Highlight

MDA secures a stable fiscal regime for the operations.

MDA guarantees a Stability Period of 10 years during which the Project will not be subject to any detrimental changes to the fiscal regime. oKey tax terms are aligned with the Restart DFS assumptions, including royalty rate of 5% and corporate tax rate of 30%.

Relief provided on Resource Rental Tax and Withholding Tax, specifically as it applies to

dividends to non-residents.

Exemptions for import and export duties, excise and VAT on capital goods and specified consumables directly related to mine production.

MDA includes internationally recognised principles relating to legal protection on security of tenure, dispute resolution and expropriation

MDA demonstrates the commitment by the GoM to develop the local mining industry, a key pillar of Malawi 2063, their new economic vision.

Rio Tinto's increased shareholding in Sovereign Metals, which holds another key mining project in Malawi, also indicates the increased attractiveness of Malawi as a mining destination. Lotus has a cash balance of US\$34.1 million (unaudited), exclusive of restricted cash of US\$15.0 million, on 30 June 2024.

Lotus Managing Director Keith Bowes commented: "We are extremely pleased to have finalised our MDA with the Malawian Government, I would like to thank all parties involved in these negotiations, especially the Presidential Delivery Unit who were instrumental in finalising the agreement. The relevant ministries including mining, finance, and justice have all been very supportive in our negotiations as we have gone through multiple iterations of the MDA. It has been a timely conclusion to these negotiations as we have seen increased demand for the Kayelekera product from a number of utilities which coincides with the current perceived shortages and strong prices in the market. With the completion of the MDA, we can now move ahead quickly with concluding some of our offtake discussions?



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Atlas Copco proudly introduces B-Air, the world's first batterypowered portable air compressor

tlas Copco built the first piston air compressors in 1904 and 25 years ago, the organisation was first to introduce the revolutionary Variable Speed Drive (VSD) compressor technology. Staying true to this pioneering spirit and forwardthinking philosophy, Atlas Copco now unveils the first battery-operated portable screw compressor that incorporates VSD and PACE (Pressure Adjusted through Cognitive Electronics) technology!

The B-Air 185-12 is not only an innovation that is set to transform the industry, but is also a sustainable game-changer for the environment. It is compact and portable, reliable, clean (no local emissions), energy efficient and quiet. Due to its mobility, the machine has been engineered by Atlas Copco with autonomy top of mind. The compressor gets maximum performance out of its battery to provide a working pressure of 5 to 12 bar (72 to 175 psi) and free air delivery of 5,3 to 3,7 m³ / min. The 55kWh battery can be connected to the grid or to a renewable power source. Once fully charged, the battery will power the machine for at least one full working shift in typical conditions and applications. "Operators will be able to operate their pneumatic equipment during load shedding, ensuring uninterrupted production and high productivity," says Atlas Copco Power Technique's Portable Products Business Line Manager, David Stanford.

The exceptionally energy efficient, ultra-quiet, 37 kW Permanent Magnet (PM) motor, is at the core of the B-Air. "VSD technology works best with rotary screw compressors as their flow rate and power consumption are virtually proportional to speed," explains Stanford. "The rotary screw elements adapt in sync with the motor so that the amount of compressed air delivered matches air demand. Owing to this PM motor - VSD combination, the compressor is 50% more energy efficient than

a fixed speed unit in partial or unloaded conditions. As the compressor operates under these types of conditions for most of its working life, it means that operating costs are significantly reduced over the machine's lifespan."

The incorporation of PACE technology into the B-Air takes efficiency to a whole new level. This intuitive electronic pressure regulation system adjusts its output depending on the requirements, and allows multiple pressure and flow combinations, delivering the widest operating pressure range within a single compressor. Compared to a regular compressor which is limited to a certain pressure and flow rate, a compressor equipped with PACE has the ability to provide extra flow at lower pressure levels. This technology allows the motor speed to be adjusted according to the load, resulting in substantial energy and cost savings.

With only a few clicks of the digital controller,

operators can easily find the perfect combination by selecting a pressure increments of 0.1 bar (2 psi). "This smart technology enables users to accommoda te different applications with one compressor. " notes Stanford

"For example, the operator can, on the same machine, select 6 bar (90 psi) to power a handheld tool, or 10.3 bar (150 psi) and 12 bar (175 psi) respectively for sandblasting and cable blowing applications."

The compressor offers complete flexibility because it can essentially operate anywhere. The IP-66 rated PM motor is uniquely designed by Atlas Copco to withstand stringent outdoor applications and is completely sealed from water and dust ingress. The liquid-cooled battery pack is contained in a triple enclosure that provides excellent protection. The B-Air is able to operate reliably in ambient temperatures ranging from -25°C to +40°C (with a standard heater and a minimum battery cell temperature of -20°C), offering the ideal compressed air solution for harsh applications that have to be addressed in a sustainable way.



Atlas Copco's compressed air solutions for efficient pneumatic conveying

rapidly growing global population is driving the endless need for goods Adriving the chaless need to get hence there is an ever-growing demand for the movement of bulk materials. "Moving goods through pipes from one point to another using air i.e. pneumatic conveying, is an extremely efficient method of transporting a great variety of products, provided that the right system is used and that it's done correctly," states JC Lombard, Atlas Copco Compressor Technique Business Line Manager, Oil-free Air Division.

Air can be used to move materials ranging from powders, sand and grains to pellets, plastics and fly ash. Given the tremendous versatility and efficiency of pneumatic conveying, combined with the process's ability to move vast types of different materials, it's easily one of the most widely used forms of materials handling. Unsurprisingly pneumatic conveying is favoured by a great many diverse industries such as food & beverage, pharmaceuticals, mining, and even waste water treatment. Atlas Copco Compressor Technique offers a broad range of pneumatic conveying solutions that include air compressors, air blowers (screw, lobe, centrifugal and turbo) and ancillary products to meet the bespoke needs of these industries.

"Due to the wide range of materials that can be transported via pneumatic conveying, a onesize-fits-all solution is simply not possible," continues Lombard. "While some materials can be moved more quickly and in greater volumes, other more fragile materials require careful transportation to avoid damage. Conveying of powdery substances for example, can create dust and some substances can potentially be explosive."

To meet the varying requirements of the materials, there are different pneumatic conveying methods i.e. Dilute phase, Dense phase and Transient phase. Lombard says that it's therefore imperative to know the properties and requirements of the material that will be conveyed in order to be able to select the most appropriate conveying system that will guarantee optimum performance and product quality, and mitigate the risk of potential blockages and combustion. Dilute phase uses a blower or low-pressure

compressor to send material through the pipeline in a high-velocity stream, as though the material is floating, without material accumulation at the bottom of the pipe. As this process moves material at high speed, it is ideal for transporting any form of granular materials. Dense phase conveying operates at a slower velocity, ensuring gentle handling over longer distances. This method it suitable for more fragile materials like powdered ceramics. The transient phase, which is the stage inbetween the Dilute and Dense phases, sends some of the material 'flying' through the pipeline while some of it is moved along the

Atlas Copco also offers pressure and vacuum conveying systems. "Pressure conveying is ideal for effectively 'pushing' bulk materials over long distances and is used in cement production for instance to move cement from the silo through a pipeline for processing," explains Lombard. "In contrast, vacuum conveying, also known as negative conveying, uses air suction to draw materials through a pipeline, reducing contamination risks. This method is favoured by pharmaceutical manufacturers for transporting sensitive powders through a sealed system, ensuring product purity and product safety." The versatility of Atlas Copco's low-pressure blowers makes these machines suitable for highly regulated industries like food & beverage and pharmaceutical where product purity is non-negotiable. These machines are also ideal for multi-applications typically found in the cement industry that relies on efficient pneumatic conveying for various stages of production, from conveying materials at the start of the production process, to

bagging the final product.

The mining industry uses low-pressure technologies during heap leaching; low pressure air is blown through the leaching pad to enhance the scientific chemical process of dissolving minerals from the ore, leading to extraction efficiency. Low-pressure systems are also key to effective wastewater treatment, supporting the aeration, sedimentation, and filtration processes necessary for coping with high the volumes of contaminated water produced by mining operations. Lombard points out that the continuous and effective operation of these low-pressure technologies will lead to compliance with environmental regulations and minimise the negative impacts of mining on ecosystems.

Choosing the right pneumatic conveyance system is critical as it will contribute to cutting down costs through reduced energy expenses and unloading durations as well as the prevention of blockages with associated downtime, unproductivity and even potential product damage.

Lombard notes however that calculating the optimal size of the compressor or blower for a particular pneumatic conveying application requires experience, expert skills and specialised software. "We are able to assist our customers in overcoming these challenges. Following a site inspection by Compressor Technique's team of specialists, we are able to recommend the best, most efficient pneumatic conveying solution for each application ensuring uninterrupted, efficient operations and product integrity for ultimate sustainable business success," concludes Lombard.



Atlas Copco's NGPs 2-9 PSA range of Nitrogen Generators sets new quality and efficiency standards in on-site nitrogen generation

tlas Copco Compressor Technique extends its existing and proven NGP nitrogen generator range with the introduction of the NGPs 2-9 PSA (Pressure Swing Adsorption) range of generators. This latest quality air innovation from the global industrial solutions specialist is designed and engineered to meet diverse nitrogen applications across a wide spectrum of industries

Dean Adriaanse, Product Manager at Atlas Copco Compressor Technique, remarks on the significance of the NGPs 2-9 PSA range: "The introduction of this next-generation nitrogen generator, which delivers superior air purities of between 95 – 99.999%, fills the gap below our existing offering. We are now able to offer users nitrogen flows between 2-9 Nm³/hour which was not previously covered by the NGP8-130+ range. This expansion ensures that we continue to meet the transformatory needs of our customers while upholding our commitment to excellence."

With a strong focus on air purity, performance, versatility, reliability, and cost-efficiency, Atlas Copco's new NGPs 2-9 PSA range is packed with advanced features that deliver value adding benefits for users. Before unpacking the machine's capabilities, Adriaanse shares the many advantages of on-site nitrogen generation. "Rated fourth after gas, electricity and water, nitrogen is an integral part of production processes in countless industries who are dependent on reliable supply and consistent high gas purity."

To demonstrate the true added value of on-site nitrogen generation, Adriaanse draws a comparison between investing in a nitrogen generator versus buying or leasing pressurised cylinders of liquid nitrogen. "Bulky nitrogen containers must be transported (CO² emissions), handled (safety risk), stored (space) and administered (resources) with

costs linked to each logistical stage. Moreover, potential challenges such as stock shortages, supply and transport issues can disrupt production with costly outcomes."

"By installing a nitrogen generator on site, users can eliminate all these headaches, hazards and costs and simply reap the benefits of having a constant and seamless supply of nitrogen that will never run out, at guaranteed high purity levels," affirms Adriaanse. "The NGPs 2-9 PSA range has been designed for continuous duty and uninterrupted operation, empowering users to control their nitrogen supply with confidence."

Adriaanse also points out that the unit cost of nitrogen gas is significantly lower compared to gas cylinders and that there is no wasted gas, thus adding even more to the bottom line. "Coupled with best-in-class air/energy consumption and high air purity levels, these generators deliver uncompromising efficiency."

Designed for seamless integration into existing compressed air networks, the user-friendly, plug-and-play NGPs 2-9 PSA range is ready to use without the need for costly installations. Featuring a small environmental footprint and quiet operation, the compact machine can operate on the production floor. An advanced controller with remote monitoring capabilities streamlines operation.

Delivering low operational and ownership costs, reliability, efficiency, unparalleled air purity and safety, on-site nitrogen generation is a sound investment in optimising production processes and future-proofing operations in industries such as oil & gas, chemical, pharmaceutical, electronics, and waste water treatment. The NGPs 2-9 PSA range caters to a wide selection of applications, including microbreweries, 3D printing, laboratories, Modified Atmospheric Packaging (MAP) for

food, chemical blanketing, heat treatment, laser cutting, electronics recycling, battery production/recycling, soldering, as well as wire/cable production.

Atlas Copco is plugged into dynamic and constantly evolving markets and remains resolute in its commitment to providing cutting-edge solutions that sustainably drive efficiencies and cost effective outcomes for customers. The NGPs 2-9 PSA nitrogen generator range represents a milestone in innovation, empowering businesses to unlock new levels of efficiency and sustainable productivity.



1914 – 2024: SKF South Africa celebrates 110 years of optimising customers' rotational assets through its premium value solutions offering

to accommodate future development and

which is also situated in Johannesburg's

growth. With the design of the new building,

prominent Jet Park industrial area, aligns with

SKF's net zero drive; the building's 383 kWp

than the company's average needs with the

solar system delivers approximately 30% more



stablished in 1914 by Swedish Holding Company, SKF AB, SKF South Africa is proudly celebrating its rich 110 year heritage of delivering premium value solutions to customers across South and Southern Africa.

As the first subsidiary on the African continent, SKF South Africa, then known as SKEFKO (South Africa) Ball Bearing Company Limited, based in Pritchard Street, Johannesburg, went on to evolve from a bearings and engineering services supplier to develop innovative products and advanced technologies that seamlessly integrate with the digital era and meet the demands of modern day industry.

Today, SKF South Africa leads the South and Southern African market as an OEM (Original Equipment Manufacturer) supplier of bearings, seals, power transmission and lubrication products, supported by professional mechanical engineering and Remanufacturing services. These state-of-the product and technology solutions are widely used within around 40 market sectors across the region including mining, materials handling, automotive (passenger and commercial vehicles), solar and wind energy, railways, machine tools, medical, food & beverage and paper industries.

A number of important developments and milestones during SKF South Africa's distinguished 110-year history include: The relocation in 2019 of its Jet Park, Johannesburg headquarters to larger, purpose-built premises,

essentially operating completely off-grid from 08h30 to around 16h30. Being a grid-tied system, energy is not stored in batteries onsite. However, SKF ensures that the excess electricity is not going to waste by feeding it back to the Municipality free of charge.

2023 Earmarked the launch of SKF's Circular Economy Centre (previously known as the SKF Solutions Factory) as well as the TBU Bearing Refurbishment Centre. With the deliberate intention of making a meaningful contribution to sustainability, the Circular Economy Centre comprises an organic collection of SKF services.

The Centre houses a combination of quality

circular economy product and service solutions including SKF's Bearing Remanufacturing Centre, Project Engineering, seal manufacturing services, RecondOil and a range of Onsite Services.

Machine efficiency and reliability are sustainability game changers. Through the provision of innovative designs, superior quality products, advanced technologies,



connected lubrication systems, state-of-the-art condition monitoring, data analytics and machine learning, SKF engineers increase mean time between failures (MTBF), extend machine longevity and lower energy consumption for customers.

Reducing, reusing and recycling are key elements of sustainability and here too SKF South Africa leads the market. Pivotal here is SKF's specialist Bearing Remanufacturing Centre, which, established in 2008, gives high-value bearings a second, third and even fourth life. Reusing rather than replacing keeps customers' costs down, reduces lead times and material consumption. Moreover, bearings not eligible for remanufacture can be recycled to produce new bearings, effectively closing the loop. SKF's remanufactured bearings and units conform to the same quality specifications as new SKF bearings and units.

SKF South Africa has a competitive edge when it comes to its comprehensive product portfolio of bearings and bearing units, axle boxes, bearing mounting/dismounting equipment, lubrication and condition monitoring solutions for the rail segment. The establishment of the TBU Centre further elevates SKF's value chain and unlocks the tremendous potential presented by this important transport sector on the African continent.

Along with premium quality product and service solutions, steadfast customers, a dedicated distributor network and a committed SKF team of employees continue to drive the SKF success story. Since the appointment of its first distributor in 1970, SKF South Africa went on to develop a strategic network of authorised independent industrial distributors along with lubrication, commercial vehicle and agricultural distributors in South Africa and neighbouring countries in a bid to deliver engineering, product and service solutions to customers' doorsteps.

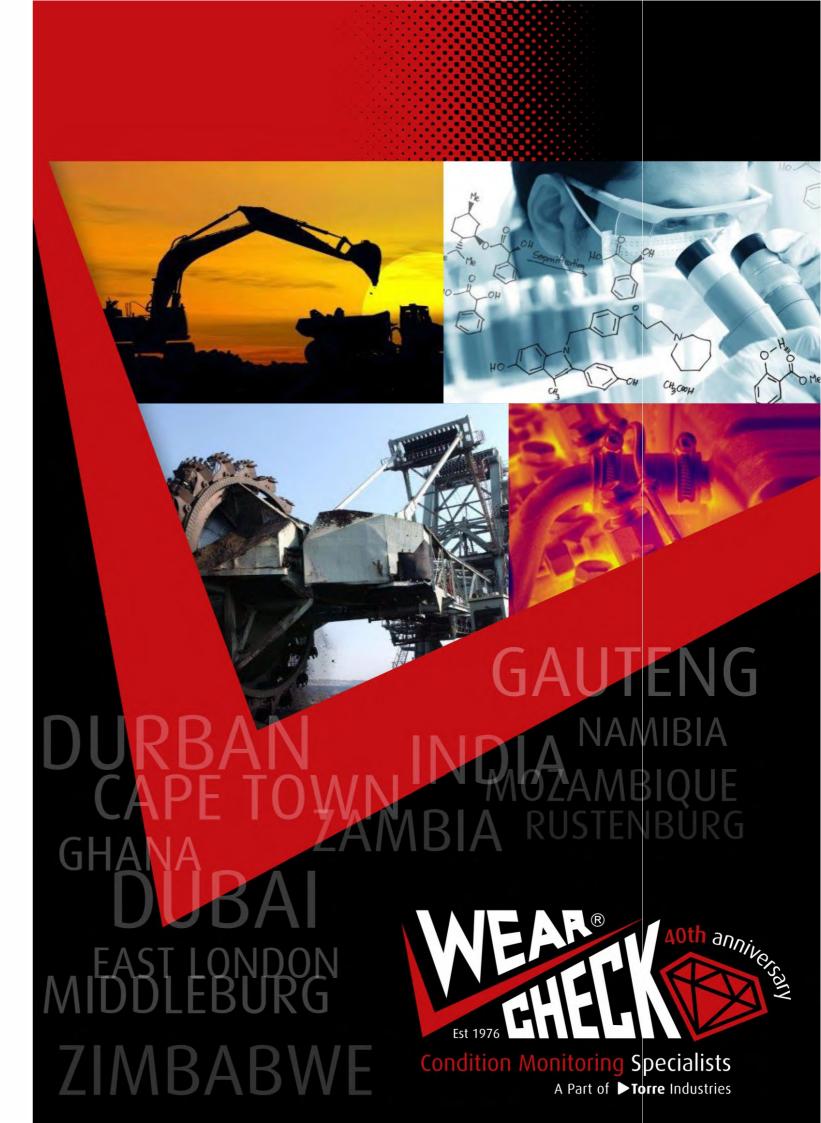
SKF invests in long-term customer partnerships, delivering ever more advanced and energy efficient solutions that support the company's strong narrative of optimising the performance, life, reliability and efficiency of customers' rotating assets.

SKF is defined not only the quality of its products and services but also by the values it embraces - empowerment, high ethics, diversity and inclusion, and teamwork drive SKF employees' decision-making processes and interactions internally as well as with customers and distributors.

With an unblemished reputation for excellence in products and services, SKF South Africa looks to the future, keeping in step with market trends and requirements, ready to unpack the African continent's vast potential. SKF South Africa continues to hone its products, technologies, services, experience, knowledge, capabilities and competencies. In so doing, SKF ensures that it continues its journey of delivering the right solutions that are aligned with a dynamic, rapidly developing industrial and digital landscape to future proof customers' operations for competitive edge and ultimate business sustainability.

SKF is a world-leading provider of innovative solutions that help industries become more competitive and sustainable. By making products lighter, more efficient, longer lasting, and repairable, we help our customers improve their rotating equipment performance and reduce their environmental impact. Our offering around the rotating shaft includes bearings, seals, lubrication management, condition monitoring, and services. Founded in 1907, SKF is represented in approximately 129 countries and has around 17,000 distributor locations worldwide. Annual sales in 2022 were SEK 96,933 million and the number of employees was 42,641. www.skf.com





Enhancing safety on South Africa's roads with SKF TKSU 10 Ultra Sonic Leak Detectors



egardless of where an air pressurised system is being used, be it in commercial vehicle air brake systems, passenger vehicle suspension systems, workshop or production line pneumatic tools, pneumatic lifts or even dentists' drill, an air leak negatively affects the performance of the pneumatic system with a host of costly consequences. In addition to downtime and added work load on air compressor (wear and tear and increased energy consumption), excessive air leaks that go undetected in the brake systems of commercial vehicles can result in brake failures, posing a serious threat to road safety.

SKF, in collaboration with its Authorised Distributor, Supreme Bearings, came to the assistance of a longstanding customer in the



transport sector who was having issues with air leak detection on their heavy vehicles' pneumatic brake systems.

SKF Product Manager, MaPro, Eddie Martens, explains that testing the pressure drop off within a system will indicate a leak but does not necessarily indicate where the leak is. "With a fluid it is readily picked up due to the presence of a drip or wet spot, but with air, the only telltale sign is sound. However, the sound of a micro leak is outside the range of the human ear, essentially making detection impossible. Where there is one micro leak there may be many."

"We decided to conduct a courtesy call at the workshop of the transport company who has been a customer of Supreme Bearings in the Free State for some 20 years. Together with Supreme Bearings, we demonstrated the SKF TKSU 10, putting our Ultra Sonic Leak Detector through its paces."

As the name implies, the SKF TKSU 10, via its ultrasound measurement sensor, rapidly detects ultrasonic leaks in a host of pneumatic and vacuum systems including commercial vehicle brakes, compressed air lines, steam traps and hydraulic cylinders that may have internal bypasses. Benefits include rediced load and maintennace costs and improved equipment operation and reliability.

The customer was extremely impressed with the versatility and user friendliness of the SKF Ultrasonic Leak Detector. "With the added value of safety, which is understandably at the top of our customer's benefit list, the transport company immediately purchased two TKSU 10 units," states Martens. The Ultra Sonic Leak Detectors assist in the final control of the heavy vehicles' pneumatic braking systems after service as well as prior to being put back into full service.

The light weight, easy-to-use TKSU 10 can detect leaks from a distance. Moreover, noise cancelling headphones facilitate leak detection even in noisy industrial environments. The instrument features adjustable sensitivity and the intuitive LED display gives the user guidance on leak detection results. The SKF TKSU 10 is designed for use in all industries

utilising compressed air, and is particularly recommended by SKF for paper and chemical industries, as well as workshops with airdriven power tools and many other pneumatic applications.

According to Martens, the customer reports extreme satisfaction with the performance of the two TKSU 10 units over the past two years. "The staff took to the user-friendly units seamlessly without the need to attend training courses, resulting in quick and efficient service turnaround times that put the heavy vehicles back on the road in no time, secured in the knowledge that their braking systems are airleak free and safe.

Martens confirms that the success of the TKSU 10 units has led to the customer purchasing other SKF products. "We also supplied a record order of wheel bearings for their heavy vehicles," he concludes.





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