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ISSN NO: 1996-9708

ISSUE NO: 124

NOVEMBER / DECEMBER 2024

R17,10 (VAT incl.)

Unchartered waters for SA exporters

HE Department of Trade, Industry and Competition has embarked on a renewed export drive to lower the risk of slow domestic growth and identify high growth opportunities for South African exporters.

At an engagement in October, the deputy minister of Trade, Industry and Competition, Andrew Whitfield, told Exporters Eastern Cape: "It is a burning issue for our country, and all of you play a critical role in ensuring that we work together to achieve rapid, inclusive, and sustainable growth and job creation. We are also committed to collaborating in a far more pragmatic manner with provincial and municipal governance towards addressing the challeng-es faced by Nelson Mandela Bay, which accounts for over 50% of the province's Gross Domestic Product."

"Bolstering our international competitiveness and expanding export markets is key to the Eastern Cape and South Africa's economic recovery," he said, noting the need to streamline export processes, lower trade barriers, and offer financial and technical assistance to local exporters.

Eastern Cape exports

In his Let's Talk Exports column, Quintin Levey, Exporters Eastern Cape chairman says, "General manufacturing is a significant part of the provincial economy, primarily driven by the automotive sector, the largest manufacturing sector in the Eastern Cape. The province hosts four of the seven Original Equipment Manufacturers (OEMs) operating in South Africa and up to 100 major component manufacturers. Nelson Mandela Bay alone accounts for 45% of local vehicle production and provides 51% of South Africa's vehicle exports, with over 100,000 vehicles shipped annually through the Port of Port Elizabeth.

He says the Eastern Cape citrus producers contribute 25% of the province's GDP with 24,508 hectares under production. The Eastern Cape is the fifth-largest exporter of lemons in the world and produces

INSIDE



In January this year, president Cyril Ramaphosa signed off South Africa's first shipment of goods exported under the AfCFTA agreement, destined for Ghana

soft citrus fruits such as mandarins, oranges, and grapefruit. Additionally, the province hosts the largest percentage of the country's livestock, producing 30% of the country's milk, 36% of its wool, and 75% of its mohair, with 70% of the mohair exported to Italy and China.

Trading partners

Levev says South Africa's current export markets are dominated by China, the United States, and Germany followed by Mozambique.

Trade relations between South Africa and the US are due for review and there are concerns that president-elect Donald Trump, who takes office in January 2025, will not be as supportive of the African Growth Opportunities Act (AGOA) as Biden. On the other hand, the African Continental Free Trade Area (AfCFTA) appears to be picking up pace and could present opportunities for local exporters.

The impact of unfavourable US

trade policies could be severe. Allianz Research published a report, What to watch: The return of Donald Trump and the implications of a Republican Sweep scenario. The report includes a table of the value of cumulated 2025-26 direct export losses from increased US import tariffs excluding currency impacts, for the top 30 most impacted countries. It estimates South Africa's losses at US\$ 1,6 billion in a contained trade war scenario and US\$ 3,3 billion in

a fully-fledged trade war scenario. South Africa's exports to the US have increased substantially since AGOA was enacted in 2000. Based on 2022 exports, South Africa was the largest AGOA beneficiary, exporting US\$3.6 billion – mostly vehicles and parts, fruits, precious metais, and chemicais oil imports were US\$5.7 billion in 2022 - a record amount and quadruple that of 2001.

AGOA allows South Africa, as an eligible country, duty-free access to the US market for over 1,800 products, in addition to the more than 5,000 products that are eligible for duty-free access under the Generalized System of Preferences

The Trade Preferences Extension Act (TPEA) of 2015 extended AGOA for 10 years through September 2025. The authorisation of AGOA is within Congress' purview and South Africa will be lobbying for its extension. Ebrahim Rasool has been appointed ambassador to the US. He has said that the US is a trade and investment partner of choice, and he will be addressing the full review of bilateral relations between SA and the US.

Closer to home, the AfCFTA was mandated by the African Union in 2012 and trading under the agreement commenced in 2021. It aims to create a single continental market with a population of about 1.3 billion people and a combined GDP of approximately US\$ 3.4 trillion.

Levey says the opportunity of exporting to Africa is augmented

by the AfCFTA which aims to unite African countries and eliminate trade barriers, fostering intra-Africa trade and encouraging value-added production. This has the potential to accelerate economic growth and attract investments within the con-

He says the significant growth in exports to Mauritius (185% increase between 2017 and 2022) and the substantial goods exported to Rwanda in recent years exemplifies

the positive impact of the AfCFTA.

"The AfCFTA not only opens up new markets for South African exporters within Africa but also unlocks growth opportunities for the economy. The successful implementation of this agreement holds the promise of reciprocal market access, providing a mutually beneficial trade environment for African countries.

The readiness of twelve countries, including South Africa, to commence trade in a diverse range of products is a positive step. From food and beverages to steel products and household goods, the scope of potential trade under the AfCFTA is broad and promising. The eagerness of African countries to engage in trade and implement incentive plans further signals a shift towards fostering economic collaboration within the continent," says Levey.

Business Day (27 November 2024) quotes Volkswagen Group Africa MD Martina Biene as saying the AfCFTA is the key to South Africa's future economic success.

Whitfield said the Eastern Cape is perfectly positioned as a gateway for expanding export markets due to its five ports, providing the province with a unique competitive advantage.

Whitfield assured exporters that urgent interventions were being pursued to address infrastructure constraints, with specific attention on the province's ports and the north south railway corridor.

"Several urgent interventions are being pursued in parallel to sectoral structural reforms aimed at opening rail and port networks to private operators," Whitfield said.

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"The sharp decline in unit

ONFIDENCE levels among local manufacturers increased by a healthy 8 points to reach 36 index points during the fourth quarter - the highest level since the first quar-

According to the Q4 Absa Manufacturing Survey, production, domestic and export sales, as well as new orders have improved - and recorded levels better than initially expected. Whilst both domestic and export selling price inflation eased, the total cost of production per unit also declined significantly. The reduction in the raw material price per unit contributed the most to the overall production cost dropping sharply by 20 points, quarter-on-quarter.

"After a difficult year, characterised by

Manufacturers' confidence hits two-year high in Q4

and lingering logistics headwinds, it is encouraging to see an upward shift in business confidence," says Justin Schmidt, executive for the manufacturing sector at Absa Business Banking.

production cost comes on the back of lower inflation, lower oil prices and rand strength over the past few months. As we head into peak sales season, manufacturers will be well positioned because of lower production costs. The latest reduction in the repo rate is also

expected to result in higher consumer demand over the next few months."

The quarterly survey, which covers approximately 700 businesspeople in the manufacturing sector, was conducted by the Bureau for Economic Research (BER) at Stellenbosch University between 24 October and 11 November 2024. The confidence index ranges between zero and 100, with zero reflecting an extreme lack of confidence and 100 extreme

with current business conditions.

Subsectors that contributed the most to the overall increase in confidence include metals & machinery, chemicals and food & beverages. The latter subsector's confidence reading increased the most, by 28 points to 52. Confidence amongst manufacturers in the transport sector dropped sharply from 28 in the third quarter to 13 this quarter, mainly as a result of subdued demand in the sector.

Overall, manufacturers feel that business conditions have improved quite considerably with this indicator increasing by 29 points, likely driven by the reduced production costs and the improvement in demand with new domestic and export orders increasing by 26 and 13 points, respectively.

In the previous survey, when taking a 12-month forward view, manufacturers expressed an improved likelihood to invest in fixed assets.

"We are starting to see some of that materialise with the indicators measuring realised fixed investment and investment in machinery and equipment improving by 6 and 10 points, respectively," says Schmidt.

When considering the constraints on current activities, most indicators remained stable since the last read, however manufacturers did highlight an increase in the shortage of skilled and semi-skilled workers. Also encouraging was a further decline in the political constraint after a sharp drop was recorded in the third quarter

"Given loadshedding in preceding years, manufacturers have usually focused their efforts on building resilience into operations by investing in backup power and renewable energy solutions - we are now starting to see investment to improve capacity and efficiency in operations as well as consideration for technology and equipment that will enable their journey to green manufacturing," says Schmidt.

Absa says it has a team of sector experts with in-depth knowledge of the manufacturing landscape and remains committed to support this vital sector with a range of future-fit financial and non-financial solutions.

SA's first recycled polyAl-based pallet a 'game-changer' for sustainable logistics

OOD processing and packaging solutions company Tetra Pak and Cycliq, a South African plastics injection moulding company, specialising in high-quality plastic pallet solutions have launched the continent's first locally manufactured E-pallet, a modular and eco-friendly innovation set to redefine pallet usage across industries. According to Tetra Pak, this breakthrough solution is poised to reduce environmental impact while delivering enhanced durability and efficiency across logistics operations.

The E-Pallet, a product of a four-year collaboration between Cycliq and Tetra Pak, is crafted from an advanced blend of highdensity plastic and poly-aluminium (polyAl) material derived from recycled Liquid Board Packaging (LBP). This sustainable design not only enhances the pallet's load-bearing capacity but also underscores Tetra Pak and Cycliq's

commitment to supporting a circular economy.

"This partnership with Cycliq is a significant stride towards sustainable industrial innovation in South Africa. By reusing materials from recycled beverage cartons (LBP), we're delivering a product that is not only highly durable but also plays a role in reducing waste. It's an example of how collaboration and innovation can drive meaningful progress in environmental stewardship," says Klaus Plenge, managing director at Tetra Pak South Africa

The launch of the E-pallet will ensure the continued growth and demand of polyAl in the Southern African market, translating to a higher collection of cartons. Tetra Pak has



From left: Klaus Plenge MD Tetra Pak Southern Africa, Graham Colman MD Cycliq and Masale Manoko sustainability manager Tetra Pak

been working towards significantly increasing the recycling rate of LBP and achieved over 20% by mid-2024.

"The E-Pallet is a testament to how we can push the boundaries of sustainable manufac-

turing. By introducing Africa's first E-pallet, we're demonstrating the immense potential for locally-produced solutions that cater to the highest environmental responsibility and logistics performance standards," says Cycliq's managing director, Graham Colman.

Cycliq has also worked closely with Gayatri Paper Mills to process the recycled polymers used in the E-Pallet. The design incorporates six PET straps - produced from recycled beverage bottles secured with a winch system inspired by yacht technology, ensuring optimal strength and performance for static, dynamic, and racking applica-

In addition to its unique use of recycled materials, the E-Pallet boasts various practical features:

Standard size: 1 m x 1.2 m, with additional sizes available 4-Way fork entry: Simplifies handling across logistics environments

- · Stackable design: Maintains structural integrity even when fully loaded
- Skid-resistant: Equipped with non-slip grommets to prevent load slippage

- · Versatile configurations: Adaptable for use as a "three runners" pallet
- Sustainable lifecycle: Fully recyclable, durable and easy to clean
- Smart Integration: Can be embedded with RFID or Wi-Fi tracking devices for advanced logistics monitoring

The E-Pallet, marketed by Regenerated Polymers, a Level 2 BEE company, is available in a virgin option for cold-chain applications, capable of withstanding temperatures from -30°C to +30°C, ideal for industries with strict temperature requirements.

This collaborative innovation underscores both Tetra Pak and Cycliq's dedication to advancing sustainable logistics solutions that are not only efficient but also aligned with environmental goals.

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Wind energy to play a significant role in the anticipated IRP2024

'HE South African Wind Energy Association (Sawea) commends the government's multidisciplinary stakeholder engagement process of the IRP2024 in addition to the public participation process, under the leadership of the Ministry of Electricity and Energy and supported by Eskom, the National Transmission Company of South Africa (NTCSA) and the South African National Energy Development Institute (Sanedi).

The wind industry welcomes the significant reconsideration of wind energy as the government aligns its energy planning with broader national policies and objectives. Sawea actively contributed to the targeted workshops by making substantive submissions, and is pleased to see that the input assumptions have been remodelled to reflect these contributions.

The Draft IRP2024 considers all ongoing new generation capacity initiatives, including solar rooftop, public and private wind and solar PV procurement, Eskom's own build in line with demand, and the TDP providing a more holistic view of the system needs.

Sawea says it is anticipated that wind energy

will contribute between 69 GW and 76 GW across all of the planned scenarios. This shows the value and benefit of wind energy contributing to energy security, cost, environmental and social impact.

"We are excited to see that wind energy will feature as the prevalent technology in South Africa's future energy mix. This allows the industry to respond with plans to build capacity in the long term to accelerate wind energy as part of the energy mix," says Niveshen Govender, chief executive officer of Sawea.

"While it looks like the plan has been developed with transmission considerations, the only question that remains is how Eskom and NTCSA will effectively integrate these ambitious new generation capacity plans. This is particularly critical given the severe impact of grid constraints on wind energy in wind-rich areas over the past three years."

Looking ahead, Sawea says it eagerly awaits the issuance of IRP2024 in 2025. We remain committed to supporting its implementation and advancing South Africa's climate and energy objectives through the continued growth of wind energy.

First keystone cast for EC wind farm as manufacturing set to ramp up

stones required for the construction of a wind farm cluster near the Impofu Dam in the Eastern Cape has successfully commenced at a custom-built concrete tower manufacturing facility, marking a key milestone in the project's development. Production is expected to ramp up significantly in the coming months to meet the demands of this large-scale renewable energy initiative, with additional keystones scheduled for delivery to the site in December.

"This custom-built factory, located 52 kilometres from the wind farm site, is a key investment in the region's renewable energy infrastructure and we are pleased to be able to announce that the facility is ready to ramp up in line with the construction milestones," explained David Moncasi Hortet, head of sales for Africa at Nordex Energy South Africa.

Each of the wind turbine concrete towers comprises 25 individual keystones, with the heaviest keystone cast to date weighing over 57 tonnes, measuring 20 metres in length and over 5 metres in width. In addition to concrete, rebar is a crucial structural component, ensuring the strength of the keystones by absorbing tensile forces that concrete cannot withstand on its own. Rebar installation is completed in one day, followed by a 4-5 hour casting process, and the keystones are cured for 7-10 days to achieve the necessary strength for

"Considering the local content contribution, including steel rebar, concrete and aggregate - each sourced locally – the production of the towers also provides an additional boost to the South African economy," added Moncasi Hortet.

Given the size and weight of the keystones, 13 of the 25 required for each turbine tower will need police escorts for transportation. With the factory's proximity to the wind farm site, the logistical process is streamlined, ensuring smooth delivery of these essential components.

Developed as part of a broader strategy to stimulate the local economy, the facility is creating approximately 350 ongoing jobs and spans nearly 10 hectares. Its strategic location near the Port of Ngqura supports efficient logistics for both the manufacturing and transport of the keystones, further cementing the Eastern Cape as a renewable energy hub.



This cluster of wind farms is a significant milestone in South Africa's renewable energy efforts, with the casting of the first keystone marking a crucial step in the project's con-

struction progress. As manufacturing accelerates, the project will continue to contribute to the country's clean energy goals and bolster the local

A new era for the South African agricultural sector in 2025

HE current year has been a year of mixed fortunes for the agricultural sector, according to John Hudson, head of agriculture at Nedbank Commercial Banking, and Wandile Sihlobo, chief economist at the Agricultural Business Chamber of South Africa (Agbiz).

They say the mid-summer El Niñoinduced drought that negatively impacted summer crops, while events like the ongoing animal disease woes, the seemingly endless logistical crisis, high interest rates and uncertainty about the national government, all weighed heavily on the sector. The resulting despondency was reflected in the Agbiz/IDC Agribusiness Confidence Index (ACI) for Q2 2024, which slumped to its lowest level in 15 years.

These challenges - and an expected contraction in the sector for the year, which followed a contraction in the previous year - have played out in subdued bank performance, according to data from the Banking Association of SA (BASA) for June 2023 to June 2024. A period of consolidation was evident with exposure to the sector drifting sideways. Demand for credit was down but deposits were at an all-time high, which suggests that farmers were cautious and delayed capital expenditure over the period.

Agricultural sector back on track

Hudson and Sihlobo add that more recently, sentiment began improving. The ACI for Q3 2024, released after the peaceful general election that resulted in the government of national unity (GNU), rose by 10 points to 48. While this is below the neutral 50-point mark, it indicates a growing sense of optimism, even though many of the challenges experienced in the year naven't changed. The GNU has brought new energy to the sector and, importantly, there is a commitment to the implementation of the Agriculture and Agro-processing Master Plan (AAMP).

The weather outlook for 2025 is positive, with a La Niña system predicted, and - while tractor sales are down following record sales over the past 2 years – seed sales are encouraging, indicating confidence in fortunes ahead.

Importantly, the government continues to prioritise the diversification of export markets for South African agricultural produce. The South African agricultural sector is heavily reliant on exports, with half (by value) of agriproduce being exported. Our biggest export markets are Africa (40%), the Middle East and Asia (23%), the EU (19%) and the UK (7%). While our export markets are already diverse, agricultural produce will likely expand in the coming years, mainly due to previously underused land. That's why it's vital that the expanded BRICS member nations be pursued as added agricultural export markets - particularly China, India, Saudi Arabia and Egypt, according to Hudson and Sihlobo

South African exports must grow traditional markets and tap into new export markets

The export drive is particularly urgent amid increasing geopolitical tensions. Take, for example, the uncertainty around the stance of the new US administration on US import tariffs, and the African Growth and Opportunity Act (AGOA) - and the changes to environmental regulations, particularly in the EU and UK. Fortunately, a memorandum of understanding with China has recently been signed, which is a significant step towards strengthening agricultural trade relations. Talks are also underway in key regions, including don't view sustainability as a compli-



the US, India and Africa to enhance South Africa's agricultural export opportunities.

Despite the consistent increase in volumes of agricultural goods (which may taper this year due to decreased production caused by the summer drought), there are 2 factors that present a challenge for South African goods: logistics and an increasing focus on sustainability. Despite our world-class production, logistics remain our Achilles heel. It is making our products less competitive during a time when an increasing global focus on sustainability has the potential to trip us up. For example, the EU's Carbon Border Adjustment Mechanism, which is likely to come into effect for agricultural products by 2030, could result in a carbon tax being imposed on produce from South Africa. This would have a disastrous effect on something like citrus, which receives the majority of its income from exports, primarily to the EU and UK.

Neither of these challenges can be addressed overnight, so producers must plan and prepare while the government seeks new export markets. It is important, though, that producers

ance issue. They should rather see it as a competitive advantage and a way to mitigate climate risk (and business risk, given the emphasis on sustainability in many export markets). The installation of renewable energy, for example, results not only in a reliable supply of energy, but also pegs the cost, which addresses the risk while fixing - or even reducing – a key input cost.

A new plan for land reform

A further exciting development in the agricultural sector is the equitable distribution of land to previously marginalised communities. It has taken some time for the puzzle pieces to fall into place, but we are now at the point where the blended finance scheme is being rolled out and key partnerships – such as Nedbank's collaboration with PALS are bearing fruit say Hudson and

But more importantly, is that there are now - after the lack of clarity caused by the land expropriation without compensation debate, which negatively impacted

investment perceptions in the sector - a push from the government to strengthen property rights, eliminating the issue of title deeds as a threat. Going forward, the focus will rather be on where land will come from - and selecting the right beneficiaries for that land.

The government owns about 2.4 million hectares that are due to be released to appropriately selected beneficiaries for commercial production. This will be a major step towards eliminating the divide that has burdened South African agriculture historically. It is important that the commercial production of these hectares of land must help boost production and create muchneeded job creation in rural South Africa.

Overall, while expectations for 2025 are favourable, agriculture remains a cyclical game that is vulnerable to numerous external forces. With limited government support, South African producers and the entire agricultural value chain - need stakeholders like banks to get involved.

EC municipalities' water projects face SIU probe

*HE Special Investigation Unit (SIU) has been authorised to investigate tenders in four municipalities, including the Alfred Nzo District Municipality and the Chris Hani District Municipality in the Eastern Cape.

In the Alfred Nzo District Municipality, the SIU will investigate:

- · The implementation of water services infrastructure grant projects in Ntabankulu Local Municipality. This includes the appointment of a panel of service providers, consulting engineers and contractors for the planning, design and construction of the projects;
- Mount Ayliff bulk peri-urban water supply which includes the implementation of a pump station and a reservoir:
- Servicing Mbizana town area with a 2 ML wastewater treatment works

and outfall sewer. This includes the construction the wastewater treatment works and outfall sewer pipeline;

- Kwabhaca regional bulk water supply scheme at Mount Frere. This includes the construction of water treatment works and other water schemes at Mount Frere:
- Greater Mbizana water supply project phase 1A contract 1B which includes village reticulation to Ward 27: Qobo and Mfundeni (Tender No: ANDM/IDMS-PMU/131/13/06/18);
- Greater Mbizana water supply project phase 33: which includes the implementation of Ward 4 & 27: Zone 0 main pipeline Contract (Tender No: ANDM/IDMS-PMU/41/23/09/19); and
- Matatiele Ward 5 water supply project phase 3 Contract 3 including

Matolweni secondary mains and reticulation (Tender No: ANDM/ IDMS-PMU/133/31/01/20).

The SIU said the probe will look at unauthorised, irregular, or wasteful expenditure incurred by the Municipality. Additionally, if there was irregular, unlawful, or improper conduct by officials or employees of the Municipality, contractors, suppliers, or service providers associated with the Municipality, or any other involved person or entity.

The proclamation covers allegations of unlawful and improper conduct that occurred between 1 January 2015 and 8 November 2024, as well as any related activities before 1 January 2015 and after the date of the Proclamation that are pertinent to the matters under investigation or involves the same persons, entities, or contracts.



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Back to the future: Reviving sorghum in SA

S summer grain farmers start preparing to plant, a national initiative involving government and industry organisations is working to ensure that more hectares will be set aside for grain sorghum this year, writes Christin Hunter from Pannar.

Sorghum is an ancient grain. Originally domesticated in Africa, it has been a staple in diets across Asia, Africa, and India for thousands of years. Market dynamics relative to maize and wheat, however, have pushed sorghum into the back fields, so to speak.

Why sorghum?

If maize, wheat and rice are serving the population, why should sorghum get special attention? One of the main reasons is food security, which is a burning topic in many parts of the world. According to the Food and Agriculture Organisation (FAO), 282 million people in Africa remain undernourished and over a billion lack access to healthy diets.

South Africa is regarded as food secure at a national level, but food insecurity persists on a household level.

Food security is not only about having a full stomach, however; it is also about ingesting sufficient nutrients to flourish physically, socially, emotionally and cognitively. Local statistics are tragic: 58.1% of households survive on nutrient-poor food, due to fresh food often being too expensive or inaccessible, and 27% of children under the age of five are stunted, according to the 2016 SA Demographic and Health Survey. Stunting is a condition that prevents children from ever achieving their full potential.

Optimal nutrition is partly a function of dietary variety and many households around the world follow a fairly limited diet. Financial constraints contribute to it, but so do habit, familiarity and availability of new and different ingredients. The latter is to a large extent a function of today's commercial agriculture system in which economies of scale drive production, largely due to the imperative to keep a growing global population fed within the context of dwindling resources and, increasingly, climate uncer-



tainty and unpredictability.

Sorghum ticks many of the nutrient-related boxes: It is a highly nutritious grain that contains a wealth of proteins, minerals and vitamins, and it is naturally gluten-free. But it offers much more. A hardy crop well adapted to withstand drought and heatwave conditions; sorghum deserves attention purely from a climate change perspective. It can furthermore be grown in marginal soils and requires fewer inputs, such as fertiliser, to do well. Sorghum also offers producers several income streams. These include human consumption in the form of food and beverages (traditional beer is brewed with sorghum), animal feed and biofuel production.

This doesn't mean that sorghum sells itself, however. In seasons with good rainfall, maize yields outcompete sorghum. Maize also benefits from well-established R&D programmes that have resulted in cultivars suited to a wide variety of conditions. Far fewer resources have been devoted to sorghum on a global scale.

"To achieve this, 100,000 hectares of new sorghum must be planted and a rural hub for sorghum food processing established – the Eastern Cape has been earmarked for this – to exploit entrepreneurial opportunities.

The National Treasury will also be engaged to achieve VAT-exempt status

ed to acnieve vAi-exempt state for sorghum." - Hunter

Farmers are also deterred by market volatility, the impact of pests (birds especially) on yield, and, importantly, the fact that sorghum is the only grain subjected to VAT in South Africa

which seriously affects its competitiveness.
 Sorghum has not disappeared completely,
 but it has become a marginalised crop in South

Africa

The revival strategy

In 2022, the Department of Science and Innovation (DSI) commissioned the sorghum value chain upgrade feasibility study to determine the state and potential of the local sorghum industry, given that sorghum is the second most important grain in Africa after maize, and the fifth most important globally (after maize, rice, wheat and barley).

In assessing the industry, the study found that local sorghum demand had slumped over the past decade as consumption of traditional African beer declined. In addition, exports to Botswana have stopped as that country became not only self-sufficient but now exports to South Africa.

Over the same period, a precipitous decline in local production saw South Africa moving

from being a net exporter to a net importer of sorghum, primarily from the US.

The study noted lessons to be learned from the US and Australia where sorghum is less costly than maize and benefits from quality research conducted by institutions such as the Queensland Sorghum Alliance and Texas A&M University. Furthermore, promotion and advertising by the United Sorghum Checkoff Program in the US have contributed to Americans consuming 250% more sorghum now than five years ago. All this was achieved in a country with no historical ties to sorghum, unlike South Africa, which is on the continent where sorghum was first domesticated. Imagine the results we can achieve by tapping into this rich legacy.

The DSI's feasibility study set the objective to improve the competitiveness of sorghum and increase local production to 500,000 tons per annum, local consumption by 15% per year, and the export market by 250,000 tons per annum.

Driving these outcomes is the Sorghum Cluster Initiative (SCI) which was established to coordinate efforts to improve the complete sorghum value chain – from genetics and seed, to processing and marketing. Joining forces under the SCI umbrella are the departments of agriculture and science and innovation, as well as the Sorghum Forum, whose members include Grain SA, the National Agricultural Marketing Council, Southern African Grain Laboratories (SAGL) and the South African National Seed Organisation (Sansor).

Pannar's involvement

Pannar runs one of the oldest sorghum breeding programmes in the country. Established in 1978, the company has already been working for almost 50 years to supply farmers with ever-improving cultivars. In the recent review of Pannar's product portfolio, the company opted to retain sorghum as one of its four focus crops (the others are maize, sunflower and soybeans), signalling the company's belief in sorghum's role in agriculture and food security in South Africa.

Citrus export season yields unexpected results

N the 2024 export season, Southern African citrus growers packed 600,000 fewer cartons for global markets than last year This year's 164.5 million 15 kg cartons is a slight decline, but still a strong performance for the sector, given the truly uniquely demanding circumstances growers faced, according to Justin Chadwick, CEO of the Citrus Growers' Association of Southern Africa.

Chadwick says a number of unforeseen factors forced the Citrus Growers' Association of

Southern Africa (CGA) to adjust its export estimates regularly during the year. The initial estimate for total exports was 181.7 million 15 kg cartons. The final figure falls 9% short of this.

One of the most prominent factors affecting export volumes was the high price offered for oranges destined for local processing. Precious Kunota, business intelligence and data manager at the CGA, explains: "Sources in the juice industry reported a significant increase of between 60% to 80% in volumes

of oranges processed at their facilities, compared to the 2023 season. It's estimated that about 6 million 15 kg cartons of oranges - that is 7% - destined for exports were diverted to juice plants."

Another factor was the abnormally hot and dry conditions during the mid to late summer period, which led to smaller fruit sizes. This meant that approximately 4% more fruit was required to fill the same carton than in the previous year.

No less than three severe weather events also had an impact on exports. Freezing temperatures in Limpopo, floods in the Western Cape (Citrusdal), and strong winds that caused fruit to drop in the Eastern Cape resulted in a reduction of fruit packed for global markets.

Chadwick says it is important to note that even though export numbers have declined slightly from 2023, the volume of citrus being produced in South Africa continues to increase. It is estimated that in total 10.1 million cartons were diverted to local juicing and lost to weather events. "Considering this, the CGA is confident that, if all role-players come together, our long-term growth target of exporting 260 million cartons and creating 100 000 jobs by 2032 is achievable," says Chadwick.

The final packed figures for 2024:

- This year 14.3 million cartons (15 kg equivalent) of grapefruit were packed for export.
 This is 300,000 less than in the 2023 season and is a 14% shortfall from the initial estimates made in April 2024.
- 41.6 million cartons of mandarins were packed, representing a notable 3.6 million increase since the previous season. It is, however, 3% less than the initial estimate.
- Lemons showed a decrease compared to both the previous season and the estimate: 34.7 million cartons of Lemons were packed in 2024, being 9% down from the estimate and 1.1 million cartons down from
- Navel oranges packed for export have shown an increase of 400,000 cartons compared to 2023. This year 25.1 million cartons of Navels were packed, a 2% decrease from the original estimate.
- A total of 48.7 million cartons of Valencia oranges were packed this year. Notably, this is 4.7 million less than in the 2023 season and is a significant 16% shortfall from the initial estimates.

Port efficiency remained a serious concern for the citrus industry during the past season. The lower-than-expected citrus export volumes reduced peak volumes at ports dramatically, which eased pressure on the container terminals. However, all indications are that this is just a temporary reprieve in pressure on our underperforming ports and will not last. Volumes will increase over the next few seasons and if ports are not improved and capable of handling it, citrus exports and the wider economy will suffer greatly, Chadwick said.



1 5

ELECTRICAL & ELECTRONICS

The importance of environmental monitoring and visibility at data centres

ATA centres are one of the most energyintensive building types, consuming up to 50 times the energy per floor space of a typical commercial office building.

With organisations embracing advanced technologies, data centres powering these technologies are under increasing pressure around the globe to constantly increase capacities and improve efficiencies.

Greater loads on data centre racks create higher pressure on power and environmental infrastructures. Faster, hotter chips, larger servers, cluster networks, storage and rising densities are putting increasing demands on data centre infrastructure and designs.

Legrand specialists emphasise that as the use of information technology grows, data centre and server energy usage also increases. Although many efficiency strategies are successfully employed in data centres – including predictive analytics and data-driven machine learning – these critical facilities require improved levels of intelligence to provide a complete picture of data centre conditions at the rack, aisle and facility levels.

Advanced tools – like intelligent environmental sensors – are designed to survey critical resources accurately and in real time, alerting operators to potential threats. Sensors provide important information, for example, if there is sufficient power, a harmful hotspot, wasteful overcooling, or if there is an unauthorised user near an open cabinet.

Monitoring tools are used to advise if there is evidence of harmful environmental hazards and how new workloads could be affecting specific cabinets.

Monitoring tools and sensors enhance

In the past, monitoring and management was done manually, which was time-consuming and often unreliable. Outdated sensors and systems had little interoperability with existing rack infrastructure, putting greater demand on management.

Legrand SmartSensors have been developed to create an intelligent data centre infrastructure platform, enabling a proactive environment. These advanced sensors are designed to work with the existing infrastructure and can be installed without having to halt operations. When looking at a data centre sensor instrumentation project, optimising the total cost of ownership is essential.

Legrand's environmental sensors form part of a dependable intelligent solution in data centre operations and can be deployed as plugand-play options with intelligent rack PDUs, inline meters, branch circuit monitors and other rack management solutions, eliminating the need for a separate controller and underlying networking.

Legrand's SmartSensor technology, which uses advanced metering components to provide more accurate and valuable data, automatically sends environmental data to DCIM software solutions, revealing real-time environment data and trends, along with other infrastructure metrics, like power capacity and power quality.

To increase operational efficiency and maintain higher service levels in data centres, it is important to monitor critical environmental



variables like cooling conditions, temperature, humidity, power and rack conditions.

Sensor deployment

Best monitoring practices have been developed to reduce downtime and improve efficiency in critical operating environments. Every watt of power consumed by IT equipment is turned into a watt of heat and as computer loads fluctuate, so do temperatures. That's why real-time, accurate monitoring of cabinet temperatures is a top priority

temperatures is a top priority.

Maintaining proper humidity levels helps avoid electrostatic discharge (ESD) problems when humidity is low and condensation problems when humidity is high.

Aisle environmental control involves temperature, humidity, airflow and hot/cold aisle monitoring.

Tracking the temperature ranges in aisles assists in identifying problems quickly to improve efficiency.

Specialists also recommend the installation

of sensors to protect equipment from excessive vibration and shock.

Airborne particles and dust deposits – such as organic dust, concrete dust, ferrous metal particles and electrostatic dust – are an invisible threat to data centres, server rooms and other areas where IT equipment is installed. Although not naturally harmful to IT equipment, these ultrafine particles can build up and interfere with a device's normal functioning levels, leading to a short circuit. A dust/particle sensor monitors particle levels and indicates whether levels are above or below custom thresholds.

The installation of water/leak sensors on the outside walls of the server room and beneath a raised floor is recommended to detect water and coolant leaks.

Sensors also play an important role as security systems, by alerting security personnel of unauthorised access to a cabinet. Some systems are designed to activate a camera system that points to the exact rack that has been accessed, while proximity sensors capture when someone passes near a cabinet.

Selection of the correct sensors

Legrand specialists offer advice on which monitoring devices are best suited for each environment. Firstly, it is important to look for scalable solutions and to design a system that will easily accommodate changing requirements. A suitable sensor and environmental monitoring platform should integrate into the overall management platform, providing visibility and granular control.

E-commerce platform launched for distributors and end-users

SCHNEIDER Electric, a leader in the digital transformation of energy management and automation, has unveiled its online marketplace designed to allow its customers in South Africa to purchase its products and solutions anytime and anywhere, with plans to scale to the rest of Anglophone Africa in the next fiscal.

Mandisa Guliwe, e-commerce manager for Anglophone Africa at Schneider Electric, says the company has engaged with authorised reseller partners from the company's distribution network to be onboarded as sellers on the Schneider Electric Marketplace.

She explains that through e-commerce, the business aims to transform and disrupt business as usual for the electrical products and industrial automation industry which comprises largely of brick-and-mortar operations. Schneider Electric says it is excited to take partners along on this digital transformation to ensure its end-users have a seamless buying experience online.

"The platform is mainly geared towards B2B transactions; however, we have now made it possible for B2C customers to purchase directly from authorised resellers. Through the Schneider Electric Marketplace, this option will be available to the market at launch," says Guliwe.

She says that while the Schneider Electric e-commerce marketplace is a new concept in the South African market, it is already active in a few other markets across the globe and has been well-received by resellers and endusers.

Convenience

"Primarily, it is about convenience. The platform allows customers to place orders anytime, anywhere, without the constraints of traditional business hours. It also offers better efficiency as buying can be done across multiple sellers, reducing waiting periods and doing away with the need to drive to different distributors due to stock unavailability," says Guliwe.

Additionally, buyers can take advantage of online exclusive offers, bulk order processing order tracking, account credit purchases (based on seller agreements with buyers) cash, card and EFT purchases and customer support.

She says that the marketplace allows for a project-based approach, where an electrician or any other service provider can log on and bulk order everything they require for a specific project. This provides the benefit of ease of use, as well as time savings.

"Ultimately, the vision for the platform is to be able to deliver the products as and when they are needed. From a purchasing perspective, it already ticks the boxes, but from a fulfilment perspective, we are onboarding partners who can ensure that products are delivered within the required time," she says.

Fulfilment timeframes

"Currently, we are working with a fulfilment timeframe of about three to five working days, but with some items, particularly the ones that we know are in great demand, we are working towards achieving same-day delivery. This will differentiate our marketplace from just any other stock-listing platform."

Guliwe notes that through the marketplace, Schneider Electric can also offer personalised journeys to buyers, based on the type of retailer, wholesaler or end-user they are. Different types of buyers will experience different journeys as they navigate through tailored product offerings for electricians, panel builders, contractors or end-users.

"While we are transitioning to a digital plat-

form and experience, we are not leaving our partners behind. We offer a marketing development fund (MDF) that partners can use for marketing and that now includes an e-commerce portion where they can also transition their business," says Guliwe.

"Additionally, we offer programmes that can enrich and enhance our partners' websites and ensure that the content is effectively positioned. As much as Schneider is progressing, we are taking our distributors on the journey with us."



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RECYCLING & WASTE MANAGEMENT

From waste to energy – boilers benefitting the industrial sectors

TEINMÜLLER Africa's fired boilers capitalise on sustainable waste disposal to produce steam, which is a valuable source of energy for industrial plants converting raw materials into products, or for generating electricity.

The versatility of the company's boilers is making a valuable contribution to sub-Saharan Africa's industries. Although the mining sector is the largest driving industry in South Africa, the pulp and paper, and sugar industries have significantly larger volumes of waste requiring disposal. Fired boilers are fuelled by waste products combined with fossil fuels such as gas, oil or coal to generate steam.

Pulp and paper plants process wood chips and use heat and chemicals to dissolve lignin to obtain the fibre used for paper making. The remaining liquor is thickened into a tar-like substance and burned in special boilers, heating water in the boiler tubes to generate steam.

In the sugar industry, sugar cane is cut, heated and crushed to extract the juice, which is crystallised to yield sugar. This process results in high volumes of cellulose fibre waste, known as bagasse, with a high residual moisture content. Sugar producers need to dispose of



bagasse. The bagasse makes up approximately 30 to 40% of the sugarcane volume and can be burnt in special bagasse boilers generating useful steam for use in the sugar-making process, ensuring environmentally friendly waste disposal.

Finally, the mining industry generates waste during the process of sorting valuable mineral ore from the surrounding rock, or the refining of ore to yield the valuable commodity. In the coal mining industry, coal is washed to separate high quality and medium to low quality products. The finer coal dust and coal rich in sulphur are generally rejected and disposed of in large reject coal dumps. Some of the

coal rejected as "low quality" can be burned for energy production. For example, Eskom or steam production plants use this energy to power large fans used for mine ventilation. Alternatively, rejected coal is sold to other industries to assist in the sustainable disposal of other industrial waste such as bagasse or fibrous wood waste.

"Waste in all three industries serves as fuel to generate steam in a fired boiler, making these industries more sustainable," comments Warwick Ham, boiler process group leader, Steinmüller Africa. "We can engineer the most profitable solution based on the client's waste source, steam, temperature, and pressure requirements."

Steinmüller Africa's competitive advantage lies in its in-house design and engineering expertise, allowing for local customised solutions. It has secured several large contracts in South Africa for its maintenance and inspection services, which are highly specialised to ensure optimal performance and longevity.

Boilers are typically designed to operate for about 200,000 hours. Boiler tubes are essentially the only parts that can require repairs. Due to the large average boiler size, Steinmüller Africa conducts its inspection and maintenance services at the client's site and brings all necessary inspection technology and experts, welding technology, cranes and equipment. These inspections and maintenance outages require a careful plant shutdown where the very large boilers are cooled slowly, which takes days before any tubes can be inspected or cut and replaced.

Steinmuller Africa says boiler inspections should occur every 18 months to determine whether the boiler tubes are corroding due to low quality water, or eroding due to ash or heat damaged from excessive temperatures. Once inspection reports and engineering assessments of the root causes are completed, these tubes are replaced, giving the boiler a new lease on life. Typically, the outage schedule includes a first inspection at 18 months for assessment; the mini overhaul outage at three years with inspection and minor replacements, another inspection outage at the four-and-ahalf-year mark; and the longer general overhaul outage at six years where a more detailed inspection is carried out, followed by more extensive replacements and refurbishment of worn components.

Exhibition stand showcases environmental responsibility

ULTOTEC, a leader in the mining and minerals processing industry, showcased its strong commitment to environmental responsibility at this year's Electra Mining Africa, held in Johannesburg, with its sustainable exhibition stand constructed entirely with sustainable goals in mind. Every component was either recyclable, repurposable or reusable, setting a high standard for eco-conscious

exhibition practices in the industry.

Sustainable design and materials

This year's stand featured a significant reduction in material use and waste. Multotec opted for recyclable Xanita board, a high-strength, lightweight, and recyclable material made from cardboard, instead of traditional non-recyclable

materials. To provide stability to the board structures, Multotec used 60 bags (10 kg each) of corn, which was donated to a school feeding scheme.

The stand's structure also incorporated reusable fasteners, including 2,000 threaded bolts and 4,000 steel washers, minimising environmental impact. Additionally, Multotec opted for an eco-friendly solution by using biodegradable hot glue, underscoring the company's commitment to environmentally friendly practices.

"By prioritising sustainability in our exhibition design, we are not only reducing our environmental impact but also inspiring others in the indus-

but also inspiring others in the industry to follow suit," says Vivienne Murray, group marketing manager at Multotec. "We encourage industry peers and other exhibiting companies to also adopt sustainable practices."

The production and assembly of the stand were streamlined through innovative techniques. The components were crafted in a compact 150 sqm mini-factory using computerised CNC cutting technology, allowing for precision, flat-packing and efficient transportation and assembly on-site. This method not only reduced the space required for production but also minimised the carbon footprint associated with logistics.

The stand was efficiently assembled on-site by a small team of specialists using pre-cut and numbered sections.

Repurposing and recycling initiatives

Multotec's sustainability efforts extend beyond the exhibition. The company plans to repurpose elements of the stand, such as serving counters and lightbox signage units, for use in its offices across South Africa. Furthermore, larger sections of the board will



Multotee's stand was made from recyclable board instead of the traditional non-recyclable materials

paper recycling methods.

A collaborative effort for sustainable innovation

be transformed into functional items like lap

desks for school children, supporting local communities and reinforcing the company's

social responsibility initiatives. Any remaining

cardboard is fully recyclable through regular

The success of Multotec's stand highlights the power of collaboration. The project was made possible through partnerships with DK Design, which designed the stand and project managed the build; SI Digital, which executed the creative vision; and Xanita, the South African manufacturer of the recyclable board material. These collaborations ensured the stand met high standards of sustainability while showcasing Multotec's innovative products.

"Our goal with this year's stand was to highlight our commitment to sustainability in every aspect of our business," says Murray. "We are proud to demonstrate that innovation and environmental responsibility can go hand-in-hand."

Brewer backs city farming, recycling

HEINEKEN and the Greenpop Foundation are developing sustainable urban spaces around the country. The Heineken Green Zones (HGZ) project is dedicated to creating eco-friendly, accessible spaces in underresourced communities.

The initiative is a key part of Heineken's global "Brew a Better World" commitment, empowering communities, promoting environmental health, and ensuring "fields green with grass, not glass" throughout South Africa.

Turning glass into grass
A pivotal element of the HGZ project is
Heineken's broader mission to reduce singleuse glass waste and foster a circular economy.
This year, Heineken introduced the returnable
650 ml Star bottle, a key innovation aimed
at replacing single-use glass and curbing
glass waste across South Africa. Beyond this,
Heineken has also launched its Waste2Wear
initiative, which transforms collected glass
waste into iconic jewellery and homeware

pieces – cult items for eco-conscious consumers. These unique creations symbolise the HGZ philosophy of turning waste into beauty and ensuring fields green with grass, not glass.

At the launch of the Sisonke City Farm green zone located in central Durban, Bhavna Mistry, senior brand manager for Heineken said, "This green zone at Sisonke City Farm exemplifies our commitment to making fields green with grass, not glass. By working with the local community to transform this area, we're creating a space that replaces waste with natural beauty and brings new life to what was once overlooked. Through sustainable initiatives like our returnable STAR bottle and Waste2Wear products, we're helping reduce single-use glass and showing how environmental stewardship can empower communities to thrive. We're proud to support Sisonke City Farm in building a sustainable, resilient future for all.



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EC Industrial & Business News

HARBOUR INFRASTRUCTURE & SHIPPING

PE Car Terminal handles car carrier's first Africa call



HE Port Elizabeth Car Terminal marked a major milestone on 19 November when it handled Vessel Höegh Aurora on its first call to Africa

This advanced cargo-handling vessel, with a capacity of 9,100 vehicles, discharged 1,966 imported vehicles from the Bremerhaven and Santander ports in Germany and Spain, respectively.

"Welcoming Höegh Aurora is a proud moment for our terminal. It demonstrates our ability to manage high-volume shipments efficiently while showcasing our commitment to supporting South Africa's automotive sector," said Wandisa Vazi, managing

executive for Transnet Port Terminals in the Eastern Cape region.

She added that collaborative efforts ensured seamless cargo handling and adherence to safety protocols which were essential for a vessel of this scale. "The terminal demonstrated its readiness through meticulous pre-arrival planning with shipping line representatives and the stevedoring company."

According to Transnet's Eastern Cape Port Terminals, the Port Elizabeth Car Terminal is a critical hub in South Africa's automotive logistics chain and has, in the last seven months of the 2024/2025 financial year, handled 8% more volumes than budgeted for the

same period. The terminal has consistently exceeded operational targets, handling 114,041 fully built units (FBU) against budgeted volumes of 105,596 FBU. This achievement has demonstrated the terminal's ability to attract global automakers and foster long-term partnerships, said the regional terminal operator.

After 16 hours of offloading, Vessel Höegh Aurora departed from Gqeberha to the Durban Car Terminal before returning to Europe.

The Port Elizabeth Car Terminal forms part of the Eastern Cape Terminals managed by Transnet Port Terminals (TPT), a division of stateowned Transnet.

Articulated skips a 'game-changer' for neo-bulk exports

PILOT operation using articulated skips instead of traditional skips in the chrome loading operation at the Port of Durban has set an efficiency record of more than 50%, increasing the loading rate from an average of 140 tons per hour per vessel crane to 350 tons per hour per vessel crane, according to a joint statement by Transnet and Samancor Chrome.

Transnet said the pilot project was run in partnership with its customer Samancor Chrome and its extended partner Bidfreight Port Operations (BPO) and Steinweg. "It underscores the collaboration with customers to improve efficiency and maintain competitiveness," the statement said.

Vessel turnaround time also improved by over 40%, with the vessel completing the loading of 20,000 tons of chrome in three and a half days. The automation in the articulated skips also improved crane swing times from a maximum of 8 to 3.5 minutes.

According to the joint statement, the Maydon Wharf trial will be extended to other bulk handling terminals across the country, with potential full roll out, if successful. The process enhances safety, improves productivity and is cost effective in the long term. Terminal manager, Sihle Mpungose commended the team for the successful pilot after Vessel MW Observator set sail, ferrying South Africa's export chrome to China.

Samancor Group manager: logistics and exports, Lawrence Pillay said: "Samancor Chrome, on behalf of the industry, is grateful to its partners, BPO and Steinweg for their willingness to invest in this trial including Transnet, and TPT Maydon Wharf, in particular, for supporting the trial.

This is the first piece of new equipment (articulated skip) that has been introduced since the original skip loading operation, which was first introduced in the late 1970s. If partnered correctly between TPT (Maydon Wharf and Richards Bay) and industry, this could be a game changer for all neo-bulk exports out of South Africa."

The Maydon Wharf Terminal at the Port of Durban is one of 16 sea-cargo terminals managed by Transnet Port Terminals, the operating division of Transnet.



Mobile ship-loading equipment 'revolutionising' ports



NNOVATIVE equipment from Astec Industries is revolutionising the way port-based companies handle materials. Machines like the Astec Telestack TB52 telescopic boom ship loader and the Astec Telestack HF523 'Revolution' tracked hopper feeder are enabling logistics operators to save time, money and fuel, while increasing their production rates.

Making its mark around the world and supplied and serviced locally by Johannesburg-based Astec Africa Middle East (AME), Astec Telestack equipment delivers enhanced flexibility and efficiency in handling dry bulk material, whether from the pit, the port or plant.

"Telestack's "All Wheel Travel" (AWT) technology is one of the most exciting developments in the bulk handling industry in recent years and promises to transform ship loading," says Astec regional product and sales manager Andre Kruger. He notes that the use of mobile systems at ports and inland terminals is expanding globally.

The Astec Telestack HF823, which is part of the manufacturer's Revolution series, delivers unmatched hopper feeder

flexibility, according to Kruger. It features a centre-mounted slew bearing that enables 360-degree rotation and movement of the hopper to enhance mobility on site. This makes this machine ideal for barge loading and unloading, rail wagon loading and unloading and stockpiling. "The ability to move parallel enables the operator to manoeuvre the unit parallel to the vessel or wagon, removing the need to reposition when loading or unloading the ship. This translates into significantly improved loading rates and efficiency," Kruger explains.

Loading directly from wheel loaders, grabs and excavators can also be done with ease, and the unit's other applications include stockpiling from secondary crushers and screens; building stockpiles in warehouses; feeding fixed equipment; reclaiming and discharging onto overland conveyor systems; and feeding auxiliary Astec Telestack equipment. In addition, the HF823 can be used as a mobile reclaim hopper, feeding onto a stacker or reclaimer belt.

Kruger says that this machine boasts a high throughput of up to 1,100 tonnes per hour. With

a maximum distance between the tracks and head drum, its stockpiling capacity is optimised. "Fuel costs can be cut by up to 75% and operating costs by up to 70% when employing the Astec Telestack HF823," he says. "By loader stockpiling reducing operating costs and safety are improved. The machine's hydraulic folding head section allows for compact road transportation. It can be packed into 40ft containers for easy, cost effective transport around the globe. This is a heavy-duty, high-specification machine designed for ease of maintenance and commanding an excellent life cycle and resale value, if necessary, at your project's conclusion."

Also delivering big benefits at ports around the world and supplied in South Africa by Astec AME, the Astec Telestack TB telescopic boom ship loader is designed, manufactured and built with the customer's specific requirements in mind.

Kruger says that its mobility offers exceptional flexibility when handling dry bulk. "Other important considerations are that there is no civil construction needed, and no planning permissions required to deploy the TB52.

The capital expenditure is lower than that needed for fixed infrastructure and mobile harbour cranes. There are environmental advantages, too, since this unit features integrated dust extraction and containment systems. It is ideal for loading multi-cargo hatches when handling dry bulk, containers or break bulk. It is a multi-

function machine that can be used for ship loading and unloading, for stacking, stock-yard management and reclaiming. "This ship loader represents the perfect investment for logistics and dry bulk companies aiming to lower their costs per tonne while substantially improving the ship loading time," says Kruger.



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COMPANY & PRODUCT NEWS

Investing in skills in SA's renewable energy sector

ITH a constrained national power grid and a global move towards greener energy, many South Africans are considering installing solar electricity solutions at home. However, they are often faced with a tough choice: paying a premium for high-quality products (often imported from Europe) or opting for more affordable products (often from China) and compromising on quality.

In both cases, when something goes wrong, there is often no recourse, as the consumer usually deals with a local agent – not the manufacturer that issues the warranty. Ener-G-Africa (EGA) says it has found a way to bridge the gap, providing high-quality, certified renewable energy products at an affordable price point, while also offering warranties.

EGA offers innovative energy access solutions, designed and built in Africa for African needs, including solar panels (TÜV certified), biomass stoves and 100% locally made

stainless steel clean-cooking stove components.

Through a combination of innovative manufacturing, local expertise, and a focus on sustainability, the company manages to provide products that are both high-quality and cost-effective, making a meaningful impact in African markets. EGA chief production officer, Charlie Leaper shares two lessons for other local manufacturers.

Invest in first rate equipment; minimise supply chain costs

"High-quality production often requires advanced technology and equipment, which can be expensive and difficult to acquire for local manufacturers. Without modern machinery and tools, it's hard to meet international quality standards while keeping costs low," Leaper

Leaper explains that the EGA business started in Malawi and is now headquartered in South Africa. "We are an African company that understands the local markets, so we

know what people are looking for and we focus on delivering that, rather than trying to retrofit products from overseas markets," he says. "We also understand how to do business here. We manufacture our products in Africa for Africans, which reduces shipping costs and avoids import tariffs."

By outfitting its facilities with custom-made metal forming machines and cutting-edge precision tools, EGA achieves high production efficiency. These tools enable the company to produce bespoke metal parts, improving quality while controlling costs through in-house capabilities.

EGA has actively engaged with several educational institutions and training providers to upskill employees, develop leadership capabilities, and meet technical requirements for its product lines.

Find a balance

Leaper says creating a sustainable business in Africa requires balancing production efficiency (such as automating aspects of the manufacturing process) and socio-economic elements (such as job creation and skills development).

"EGA is a Proudly South African member, which means

we're committed to local socio-economic progress, and to making a meaningful contribution to building South Africa's economy and alleviating unemployment," says Leaper.

EGA primarily recruits its workforce from the communities in which it operates. For example, in 2024, when EGA launched its new solar panel manufacturing facility in Paarl, it invested in upskilling a previously unemployed community member, Shane Swaartbooi, training him to operate its state-of-the-art laser cutting machine.

Šwaartbooi, who had no prior experience, says he had always wanted to work for an organisation such as Ener-G-Africa "because they do not just manufacture their products in quantities, but it is about manufacturing quality products that make a positive impact in people's lives."

He now manages the EGA laser cutting machine, worth \$1 million, and is proud to work for the business. "Our products are good for the environment, but more importantly than that, South Africa has a huge energy crisis, and a high unemployment rate. Local manufacturing is important because it means that customers do not have to pay more for quality products because they are made right here at home."



By leveraging local tech and expertise, SA can arrest its infrastructure decline

HE condition of South Africa's government-owned assets and deteriorating infrastructure is a serious challenge that frustrates citizens and businesses daily. But key issues like water management, hospitals and logistics in the country can be turned around using locally-developed solutions, according to South African-based enterprise asset management company Pragma.

The South African government manages over 93,000 buildings and 74 hospitals. Many of these assets, belonging to municipalities and state-owned enterprises, have tremendous potential for improvement and revitalisation.

Bani Kgosana (pictured), chief revenue officer at Pragma, explains, "Scheduled maintenance enables best outcomes. Eskom has shown the impact of maintaining its electricity generation and transmission fleet over the last year which has led to more than six months without load-shedding.

"Pragma has developed advanced solutions for maintenance and asset management issues which are being implemented locally and exported beyond our borders. These home-

grown solutions have the potential to not only improve maintenance for government-owned assets but optimise them for the greater good of South Africans and our economy."

Pragma is a specialist enterprise asset management business headquartered in South Africa with enterprise clients in 46

countries. With roots in engineering consulting, the company helps industrial businesses and municipalities maximise their return on asset investments to support highly functional and reliable operations.

"Pragma's On Key enterprise asset management software enables the end-to-end management of maintenance processes and resource allocation. Resources, including third-party contractors, are tightly managed to remove the risk of work falling behind, jobs completed poorly, or work dragging out due to unprepared or poorly skilled teams not being able to complete the work. An added benefit for contractors is that work is allocated to the most suitable contractor closest to the job.



This ensures contractors can respond quickly, complete the job and conclude administrative processes in On Key to get sign-off and submit their invoices. This saves time and costs," adds Kgosana.

Pragma's network of contractors is located across the country.

A stringent accreditation process

A stringent accreditation process ensures that contractors with the right set of skills are identified and trained to legislated standards. Aspects such as hourly rates, the time required to perform a job, and best practices are agreed upon with the client and contractors and set up in On Key.

Spare parts are also specified to ensure that the correct spares are used to prevent re-work due to poor quality. Doing the job properly eliminates the need to revisit sites, saving time, fuel and costs.

"With this approach, Pragma administers the efficient and quick distribution of work to smaller contractors. Instead of a big behemoth making money from government, much maintenance work is outsourced to smaller businesses, ensuring much-needed business for smaller contractors. Our approach has created significant job opportunities for regional SMEs," says Kgosana.

Positive outcomes

Several municipalities, as well as public-private partnerships in the healthcare sector, have seen positive results from using Pragma's services. "We are the technology partner for Tsebo on facilities management at Albert Luthuli Hospital in KZN, for instance, one of the bestrun public hospitals in the country and this showcases the potential for broader application."

With Pragma's active engagement, the electrical support services department of a large metro reported a 2,500% increase in operational output, with accurate asset data driving improved decision-making and reporting. Centralised communication streamlined scheduling, job tracking, and bottleneck identification, while standardised work planning enhanced control.

Managing the tyres of a fleet at a metro's refuse management department resulted in improvements that saved the metro R10 million a year. The metro's solid waste department reported a 90% reduction in overdue vehicle services.

Pragma's On Key offering focuses

- Intelligent asset register: Creates a detailed asset register with scalable maintenance plans.
- Work management: Streamlines operational processes to ensure timely maintenance and repairs.
- Supplier material management: Manages suppliers, spares and spending to enhance service delivery and efficiency.

"If the same commitment to planned maintenance that we eventually saw at Eskom can be implemented by water management, healthcare, the building management sector and other utility management sectors, the impact on our country will be immense.

"I invite industry stakeholders, government officials, and potential partners to join us in revitalising our nation's infrastructure," concludes Kgosana

A strong partnership delivers advanced valve solutions

MG delivers state-of-theart valve solutions to diverse industries across Africa, in collaboration with InterApp, a global leader in the design and manufacture of high-quality valves.

"Our shared commitment to quality, innovation and customer service ensures that we provide the best possible flow control products to our customers, helping them optimise their operations, enhance safety and minimise downtime," says Susan Victor, sales manager, BMG's fluid technology division. "BMG, which celebrates 50 years of business this year has established an extensive distribution network and this footprint, enhanced by in-depth market knowledge, makes us the ideal partner to bring InterApp's valve solutions to the African market. In today's industrial sector, the need for reliable, high-performance flow control solutions is more critical than ever.

"BMG's skilled engineers and technical support teams work closely with

customers to ensure selection of the appropriate flow control products for each specific application. The use of the correct valve ensures precise control, operational efficiency, reduced downtime, improved safety and extended service life.

"Through close teamwork, BMG and InterApp offer a comprehensive range of valve products for use in demanding conditions. These industries include the oil and gas sector, where high-pressure valves are critical to operational safety and in mining operations that require corrosion-resistant valves to efficiently manage the flow of abrasive and chemicalladen fluids.

"Embracing advanced valve technology enhances seamless operations and reduces costly downtimes in all sectors, including food and beverage facilities, pharmaceutical production, water treatment and mining," says Victor.

"Looking ahead, InterApp and

"Looking ahead, InterApp and BMG specialists are committed to

providing the African market with advanced solutions by driving continuous innovation in valve technology. We are committed to ensuring that the local market has access to the best-performing products available, supported by dependable technical expertise."

Key products in BMG's InterApp range are Desponia and Bianca butterfly valves, which are designed to handle corrosive fluids, extreme temperatures and fluctuating pressures. These valves feature highperformance linings and coatings, ensuring longer lifespans and fewer maintenance cycles and are suitable for sectors including water and wastewater treatment, where durability and efficiency are critical.

Robust Bianca butterfly valves are designed for dependable shutoff and control of corrosive fluids, as well as high-purity applications. Compact butterfly valves, with good flow characteristics and low maintenance requirements, are extremely versatile and ensure dependable operation, even in the toughest environments.

BMG's InterApp Bianca centric butterfly valves, with durable PTFE liners, are built for long service-life and are suitable for aggressive and corrosive fluids and for applications where absolute purity is essential.

BMG's multi-purpose InterApp Desponia and Desponia Plus centric butterfly valves, with a tough body and robust elastomer liners, are designed for safe and reliable regulation of liquids and gases in diverse sectors.

Desponia valves, which are available in sizes from DN 25 to DN 1600 and pressures up to 16 bar, are suitable for various industrial applications. This range can be supplied with a cast iron and ductile iron body.

The Desponia Plus range comes in sizes between DN 25 and DN600, with high-pressure applications up to 20 bar and is suitable for high-temperature or vacuum applications,

as well as process automation. This range is available with a body made of ductile iron, cast iron or stainless steel.

The liners and discs of this series play a crucial role in elastomer-lined butterfly valves, as they are the only two parts that are in contact with the fluid. Flucast liners are suitable for abrasive applications and also meet FDA and EU regulations.

Notable features of this range include an external shaft sealing mechanism which protects the valve neck hole and a long neck design that allows pipe insulation. A retaining washer offers blow-out protection and O-rings that are built in the shaft passage, form part of the reliable shaft sealing system. Sealing lips on the flange face offer perfect tightness and the optimised liner shape ensures a precise grip to the body. The square driven disc offers effective and durable torque transmission and polished disc edges minimise friction

Ten years on, leading automotive blanking and commercial vehicle company innovates

Automotive has grown to become South Africa's premier black-owned automotive blanking company, with its sights set on becoming a major global player. Specialising in both aluminium and steel blanking, VM Automotive is a trailblazer in the automotive sector, and the only company in South Africa capable of processing aluminium in both 5000 and 6000 series.

Located in Rosslyn, Pretoria, and Berlin, near East London, in the Eastern Cape, VM Automotive's plants are equipped with world-class technology, including the first Schuler high speed Laser Blanking Line in the southern hemisphere. This hightech machinery gives the company the precision and efficiency required to supply top-tier automotive brands with high-quality

Expanding service excellence

Beyond its automotive blanking process, VM Automotive has also expanded its capabilities through its VM Commercial Vehicles division. This division specialises in the manufacturing and supply of truck bodies, as well as repairs, on-site call-outs, and the fitment of additional parts and equipment. VM Commercial Vehicles is dedicated to ensuring the continued performance and reliability of the truck bodies it produces, offering a comprehensive suite of aftersales services that underscores the company's commitment to quality and customer satisfaction.

The company says through VM Commercial Vehicles, it is able to provide clients with end-to-end solutions that don't stop once the vehicle leaves its factory. The company stands behind the products it creates, and its customers can rely on it for ongoing support.

Global automotive brands

As a supplier of critical automotive blanks, VM Automotive has forged strong partnerships with some of the world's leading car manufacturers. The company has supplied blanks for vehicles such as the BMW F30 3-Series, BMW G01 X-Class, BMW G45 X3 Series, Mercedes-Benz W205 C-Class, and the new Mercedes-Benz W206 C-Class. These highprofile clients speak to the company's ability to consistently meet international quality standards, delivery, and competitive pricing.

Leading the change

At the heart of VM Automotive's operations are its two key plants in Rosslyn and Berlin. The Rosslyn facility focuses on blanking services and press tooling maintenance for Original Equipment Manufacturers (OEMs). Meanwhile, the Berlin plant is home to the cutting-edge Schuler Laser blanking line, a machine that positions VM Automotive at the forefront of global blanking technology.

Driving success

VM Automotive's achievements are the result of visionary leadership. The company's CEO and majority shareholder are backed by an experienced executive team, and together, they lead a workforce dedicated to maintaining the highest standards in technology, processes, and performance across all company operations. The company's board of directors also includes strategic representatives from the Industrial Development Corporation (IDC), reinforcing its significance in South Africa's industrial land-

drives innovation NTEGRATED Air Solutions, a With capacities of up to 6,000 prominent name in advanced compression technology, equipment and services, has reinforced its partnership with global

Turnkey support for

next-gen air compressors

compressor manufacturer, ABC Compressors, by facilitating the installation and commissioning of two next-generation direct drive ABC machines for a prominent plastic manufacturer in South Africa. One of the first of their kind in Africa, the Horizon oil-free machines from ABC Compressors empioy a direct drive system that replaces the traditional beltdriven mechanism. This cutting-

edge direct-coupled motor design eliminates the need for regular belt adjustments, ensuring higher operational efficiency and significantly reduced energy losses, with notable energy savings of up to 15%.

In addition, the advanced Horizon oil-free technology is known for its robust, low-maintenance design and longer intervals between services that result in reduced maintenance and related

"The arrival of ABC's new direct drive compressors in South Africa sets new energy efficiency and reliability benchmarks for compressed air generation," notes Wayne Jacobs, managing director at Integrated Air Solutions. "The added value of reduced maintenance requirements also drives up machine uptime and subsequently increased production lev-

m³/h, these direct drive compressors feature an efficient, horizontally opposed cylinder structure that virtually eliminates vibration. Jacobs points out that this innovative design enhances the lifespan of key components and offers a highly efficient compressor solution tailored to high-performance demands.

Integrated Air Solutions is responsible for the installation and commissioning of ABC Compressor's two Horizon oil-free machines at the plastic manufacturer's facilities in Johannesburg and Cape Town. "We will also provide the necessary ongoing service and maintenance support for the customer at both plants to ensure enhanced performance and longevity of the compressors," says Jacobs.

As the exclusive distributor of ABC's PET high-pressure, oilfree compressors in South Africa, Integrated Air Solutions provides turnkey support that includes technical services and spare parts

supply.
"This positions us as an outstanding customer partner for advanced compressed air solutions throughout the region," adds Jacobs

"Our capability to provide all essential support for this advanced compressed air technology to customers in industries, underscores our unwavering commitment to delivering comprehensive, worldclass air solutions to the local market," concludes Jacobs.



Future-focused growth and expan-

VM Automotive has big plans for the future. The company is currently upgrading the operational capacity of its Rosslyn plant, further enhancing its ability to meet growing demand from both local and international clients. In

addition, the company is refreshing its digital presence, ensuring its website and media content reflect the latest innovations and operational achieve-

Economic transformation

As the only 100% black-owned

automotive blanking and commercial vehicle company in South Africa, VM Automotive is a symbol of the country's industrial and economic transformation. By combining world-class technology with a commitment to quality and customer satisfaction, VM Automotive is poised to continue its rapid growth and play a pivotal role in the global automotive supply chain.

AIDC-EC congratulations

Automotive Development Centre Eastern Cape (AIDC-EC) visited the company's facility in Berlin to congratulate it on ten years of success and to wish it more decades of global competitiveness

and component supply capabilities.
The AIDC says VM Automotive established the additional state-of-theart plant in Berlin 2020.

The AIDC-EC, represented by the CEO, Thabo Shenxane paid a special visit to the company and was well received by the CEO, Gibson Njenje and team, the development centre

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Supplier support helps EC transport business to thrive

ABCOCK recognises the vital role that SMEs play in building a sustainable and resilient supply chain in South Africa and supports emerging companies that are determined to succeed. Entrepreneur Mfundo Gadalane, owner of TMG, had a vision to establish a construction equipment hire business, but a chance encounter with a high-school friend, who was working as a DAF Trucks sales representative at Babcock at the time, prompted Gadalane to consider diversifying into the transport sector.

With Babcock's support and encouragement, Gadalane obtained financing for his first DAF 104-460 truck in 2018. The truck was used to transport timber from his home province of the Eastern Cape to Durban, and before long, demand for his efficient services grew, necessitating a second

"As a start-up business, I didn't have sufficient capital for a second truck, but Babcock saw the potential in TMG and stepped in again to motivate the financing on favourable terms," says

Despite Covid-19 putting the brakes on many businesses, TMG continued to provide essential transportation services and was in a position to purchase a third DAF truck in 2020.

By 2021, demand for TMG's services was growing and it was time to take things to the next level with the purchase of a brand-new DAF XF 480 Smart truck. Three more new DAF trucks followed over the ensuing years, and in August 2024, Gadalane took delivery of his fifth DAF XF 480 Smart truck.

Reflecting on the performance of the new DAF trucks, he says the improved fuel efficiency is excellent. "The Eastern Cape to Durban route is not forgiving but the drivers are doing good numbers. They also find the new DAF trucks very comfortable to drive."

Gadalane credits his success to his firm faith, support from his wife Thembeka (the 'T' in TMG), and Babcock's encouragement.

"My career followed an unexpected path into the transport sector, but I am grateful for all the guidance and help I have received along the way. Babcock wanted me to succeed," he says

"One of our core principles is encouraging our people and our customers to set bold goals, and we find the right way to empower them to achieve these goals," says Mariette Joubert, sales manager at Babcock. "We support those who are brave, ambitious and determined, characteristics so clearly demonstrated by Gadalane."

Generator delivers critical backup



production, two critical demands in countless industries such as manufacturing

ducer of concrete slabs in South Africa, these requirements were met through the supply of the QES450 portable diesel generator.

by Atlas Copco Power Technique's trusted distributor, Brutes Air Solutions, is now providing essential reliable backup power to the

power for leading concrete producer customer's facility in case of a national control systems, superior accessibility for maintenance, and sound attenuation, it pre-

sents an optimal solution for even the most challenging worksites.

Built for quick and easy transportation between job sites, featuring a plug-and-play installation and the ability to deliver stable power in under 10 seconds, the QES450 epitomises efficient performance and reliability, key factors for sustaining production and minimising operating and ownership costs.

The unit's corrosion-treated, waterproof canopy and its ability to operate in temperatures up to 50°C, make this machine especially well-suited for South Africa's harsh climate. Additionally, the market-leading 500-hour service interval and service time of under two hours enhance the generator's appeal to customers who prioritise minimal downtime.

Brutes Air Solutions was responsible for the commissioning, delivery and installation of the QES450 at the customer's site, completing the entire process - from quote submission to installation - in just three days.

A combined team of skilled technicians from Brutes Air Solutions and Atlas Copco offers ongoing support and after-sales maintenance to the customer, reinforcing the reliability and service excellence that have become hallmarks of both companies.

"The combination of Atlas Copco's globally renowned quality brand and Brutes Air Solution's service capabilities was key in offering this solution," adds Du Plessis.



The generator is specifically designed and engineered to deliver a practical, reliable power solution for the construction, retail and general rental sectors. Featuring integrated

Many benefits to mechanical weed control

HE rising cost of chemicals and a strong move towards organic farming methods have paved the way for a more innovative approach to control weeds and make growing conditions more difficult for them to grow and impact crop production using tractor implements.

Chemical methods have dominated in recent years but growing environmental awareness and tough regulations are shifting the focus toward mechanical means. In South Africa, the Dutch-made Perfect line of weed control implements is leading the way with its mowers and mulchers specifically designed for these tasks. Servicing an extensive fleet of Kubota tractors in South Africa, the local distributor, Smith Power Equipment, is perfectly placed to introduce

these means to local farmers and is seeing significant demand for these versatile tools that help farmers to manage weeds efficiently and sustainably.

Jan Schoeman, national implement sales specialist for Smith Power Equipment, says effective weed management is critical for most agricultural operations, especially orchards, vineyards, nuts and even solar farms.

"Perfect Implements has a long history in South Africa and its product line consists of a variety of mowers and mulchers that serve different needs in controlling weeds and managing farm waste. These machines are crucial for farmers looking to avoid herbicides, especially in organic farming practices. One of the standout features of these implements is their ability to control weeds mechanically while also contributing to soil health.

"Perfect's mulchers play a dual role in weed management and soil conditioning. In orchards, for example, after tree pruning, the pruned branches can be mulched to create a natural barrier that prevents weeds from receiving sunlight. "Mulching is an important part of weed control. When you prune trees, the branches are thrown into rows and mulched. The mulch either stays in between the rows or can be spread to improve the soil structure," says Schoeman.

He explains that the mulchers also eliminate the labour-intensive process of manually carrying away pruned branches, making mulch off the field and placing it manually. The Perfect approach can save both time and



money, as the entire process is completed quickly by a single tractor, reducing the need for additional equipment like chippers.

"One of the key aspects of Perfect mulchers is their efficient design. Their heavy-duty hammers are used to chip and smash materials to size. Each one weighs around 2.2 kg and operates with centrifugal force to maintain momentum during operation. This reduces the power demand on the tractor, making the machines more fuel-efficient.

"The heavier hammers keep the momentum going, so you don't need a lot of horsepower to mulch effectively. In addition, they are built with durable materials for tough farming conditions and are easy-to-maintain with rugged, well-designed components. For example, the hammers are mounted on bushes instead of traditional pins, which means they can be replaced easily without the need for expensive rebalancing of the rotor.

"Apart from the effective strategy of mulching, Perfect also has specialised mowers with a unique design and side wheel that allows it to navigate around trees. The RF mower is designed to mow under trees and around obstacles like solar panels and the side wheel helps guide the machine around the tree. This makes it especially ideal for weed control in orchards and vineyards where ground clearance is critical before harvest. This mower can also be used in solar farms, where panels are mounted close to the ground and require careful mowing to prevent weeds from obstructing the panels.



Multiple upsides to motion plastics

NGINEERED plastics from German polymer manufacturer igus continue to revolutionise mechanical systems across various industries worldwide with a pledge to "Improve what moves" by replacing moving steel components with polymer equivalents.

The igus range of polymer bearings, spindles and energy chain cable management systems have revolutionised machines in the lifting, agricultural, manufacturing and a host of other industries and is steadily being introduced to machines in other industries to improve performance and longevity.

Managing director of igus South Africa, lan Hewat, says its range is known for their lightweight, durability and lubrication-free operation and have become indispensable in improving machine efficiency, reliability and longevity. From complex robotic systems to heavy-duty industrial machinery, the benefits of motion plastics by igus are vast and diverse and offer significant advantages in design and performance.

"One of the standout features of our motion plastics is the tribological self-lubricating properties, which eliminate the need for external lubrication. This not only reduces maintenance costs but also prevents environmental contamination caused by leaking oils or greases. In industries like food processing or pharmaceuticals, where hygiene is paramount, these components offer an invaluable advantage by ensuring clean and oil-free operations.

"Our bearings, linear guides and bushings provide smooth and friction- less motion without the need for continuous maintenance, translating to reduced downtime and extended machine lifespan. They are also designed to withstand the most demanding environments such as extreme temperatures, chemicals, dirt or high levels of moisture. Here they perform reliably under stress and unlike traditional metal parts,

which can corrode, seize or wear down in these conditions, igus polymers are resistant to corrosion and wear, making them ideal for use in outdoor equipment or in areas with high exposure to the elements. For machines in industries like agriculture, mining, and construction, the robust nature of igus motion plastics ensures uninterrupted operation even in the harshest conditions.

and logistics, reducing the overall weight of components directly leads to improved energy consumption, faster operation speeds and

In robotic systems, for example, using lightweight polymer bearings and gears improves the speed and precision of movements while decreasing the energy required to drive

the motors. The reduction in mass not only increases efficiency but also reduces wear on other components of the machine, further extending its overall lifespan," says Hewat.

He explains that in addition to these components, igus is also synonymous with cable carriers designed to guide and protect cables, hoses and other conduits in

constantly moving machinery. Its e-chain carriers are engineered to ensure smooth, uninterrupted operation by preventing cables from twisting, tangling or wearing out due to continuous motion.

"Unlike traditional systems like festoons, cable reels or drag chains, which often have limitations in terms of movement range and can result in cable damage or failure, the igus e-chains provide flexible movement with minimal wear. They offer several advantages over these older systems, including greater design flex-

ibility, lower maintenance requirements and improved longevity for cables. E-chains are extensively used in industries like robotics, automation and material handling. Moreover, they eliminate the need for cumbersome, space-consuming cable loops seen in festoons or the mechanical limitations of cable reels, resulting in more compact, efficient, and reliable machine designs.

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- Renewable Energy

Mar/Apr 2025

Ad Booking / Editorial Deadline: 7 March

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"In industries such as automotive, aerospace lower operational costs.

Compactors engineered for Africa's terrain and soil



YNAPAC has proudly unveiled its highly anticipated Rhino range of soil compactors - the CA50, CA55, CA65 and CA70. The new CA50 model is a purposefully designed and engineered 16-ton model for the South African and wider African markets, underscoring Dynapac's dedication to meeting local industry needs and advancing infrastruc-

ture development in the region. Bob Kegelaers, regional general manager Dynapac International and Dynapac South Africa, shared his enthusiasm for these new cutting-edge machines: "The Rhino range embodies the evolution of Dynapac over the last nine decades. Built on our legacy of innovation, these compactors are tailored to

meet the unique environmental challenges of the African continent. We are extremely excited to introduce these machines to support our customers' growing demands for durability, performance, and efficiency.

The Rhino CA50, CA55, CA65, and CA70 soil compactors are engineered to tackle the tough terrain and diverse soil types across Africa. Each model strikes a balance between power and precision, with weights ranging from 15,5 to 22 tons. Powered by a Cummins 6-cylinder engine, the Rhino range delivers up to 24% more power, making it the ideal solution for largescale infrastructure projects where exceptional compac-

tion performance is critical.

These models feature three engine emissions standards, including Stage 4, enabling owners to comply with South Africa's maximum environmental regulations. With a focus on fuel efficiency, these compactors are perfect for contractors looking to minimise fuel costs and reduce their carbon footprint without compromising on performance.

A standout feature of the Rhino range is the Dynapac Compaction Meter (DCM) technology, which provides real-time compaction feedback. "This system allows operators to assess soil stiffness on-the-go, optimising each pass and ensuring superior compaction results,"

explains Neville Marthinussen, Dynapac business manager for the southern Africa region. "Furthermore, it also helps reduce unnecessary passes, notably cutting fuel consumption by up to 25%, a critical cost-saving benefit for contractors in South Africa's energy-sensitive

In addition to their robust mechanical features, the Rhino soil compactors set a new standard for operator comfort and safety. The ergonomically redesigned operator cabin boasts 35% more glass area, improving visibility and facilitating safer operations in challenging environments. With a 60° seat rotation and powerful LED lighting, these compactors excel in low-light conditions, making them suitable for day-and-night projects. "Our customers told us what they needed, and we listened. The Rhino range is not only powerful but also designed to enhance operator comfort and efficiency while on the job," says Marthinussen.

As Dynapac celebrates its 90th anniversary, the company reflects on its legacy while also looking to the future. "We take pride in our heritage, but we are equally excited about the road ahead," says Kegelaers. "The Rhino range symbolises our ongoing commitment to developing world-class solutions that cater to the specific needs of our customers worldwide. This launch paves the way for the next 90 years of Dynapac.'

The Rhino CA50, CA55, CA65 and CA70 models are now available in the South African market, ready to tackle the country's most demanding challenges in the road and general construction sectors and is also highly suited

Real-time belt rip detection saves costs, reduces downtime and prevents injury

ECKER Mining has launched the newly developed BRS4.0 belt rip detection system, with advanced features for greater durability, higher efficiency and improved safety. Typical applications for this system are in mining and quarrying, manufacturing, food and beverage conveying, packaging and general

The new Becker BRS4.0 belt rip scanner, which is a replacement system for the BRS-2 system, continuously monitors a belt conveyor for belt rips and uses real-time loop diagnostics to stop the belt in the event of a problem, reducing damage, minimising downtime and preventing injury.

"The global operation - Becker Mining Systems - developed its BRS belt rip scanning system decades ago, which has proven to be the most reliable solution to conveyor belt problems. Belt rips can quickly and unexpectedly become a costly problem, leading to extended shutdown times in critical conveyor belt infrastructure," says Rick Jacobs, senior general manager (SGM) for consumables, Becker Mining South Africa.

"The BRS4.0 is the latest generation belt rip scanner with new design features encompassing the latest technologies and advanced

"The principal task of this new system remains the same – to detect longitudinal rips on steel cable and fibre conveyor belts as soon as they occur, thus limiting the implicated costs. This highly efficient system provides real-time information that can be accessed locally or remotely.

"Advancements of this system over the previous generation include a new user interface and revised data visualisation system. The updated system can be optionally equipped with an RFID reader to detect embedded RFID chips in the belt. An advantage of this design is that the traditional reference coil is not necessary, and commissioning is more

"For those applications where the BRS controller is mounted on top of the conveyor framework, the new BRS4.0 system can be accessed via a WiFi interface, allowing full functionality on a mobile device. For additional convenience, an LTE modem allows for remote integration via a cellular network.

To enable monitoring of steel cord belts, induction loops are embedded in the belt structure. Once installed, the BRS4.0 system detects the loops on the conveyor belt and assigns them numbers. It creates a real-time image of the belt and loops to monitor their

The system includes two types of sensors the BR2010 transmitter and the BR2020 receiver, which are placed under the belt, with a maximum distance of 250 mm. These sensors continuously monitor the condition of the line in real-time and if a rip is detected, the BRS4.0 stops the line to minimise further damage and minimise downtime.

The system provides detailed information about loop positions, their status and the last ten status changes of each loop. Other notable features include accurate belt speed measurements (up to 15m/s), real-time graphics, a forward and reverse facility, password protection and a record of the last 10,000 system

Donated tow tractor keeps Eastern Cape air ambulances flying

Gqeberha region of the Eastern Cape, the team at Toyota Material Handling, a division of CFAO Equipment, donated a tow tractor worth R600,000 to the South African Red Cross Air Mercy Service Trust (AMS).

The AMS facilitates access to healthcare services for critically ill or injured people who require specialist medical expertise, especially in remote rural communities. It is the only aero-medical operator in Southern Africa that offers a complete package of air ambulance, health outreach and rescue services to local communities.

AMS urgently needed to replace its tow tractor at its Gqeberha base and reached out to Toyota Material Handling for assistance as the existing unit was no longer economically repairable and needed to be replaced to relocate the emergency helicopter out of the hangar.

Pilots hook a tow tractor onto the aircraft - or a towing platform in the

case of helicopters - and tow them out of the hangar onto the apron to take off for emergency aero-medical flights. The tow tractor allows medics and pilots to be airborne as quickly

as possible in an emergency.

AMS CEO, Farhaad Haffejee, says the vehicle is crucial to AMS's daily operations. "Without a reliable substitute, we faced potential disruptions that could negatively impact our ability to provide our critical services to local communities.

"The new tow tractor represents a transformative asset for our organisation. We are incredibly grateful to Toyota Material Handling for the generous donation, which is a pivotal enhancement for our AMS Gqeberha operations."

CFAO Equipment's head of human capital, Arveen Ramdhani, says when Toyota Material Handling heard about AMS's dilemma, they immediately understood how critical the situation was and offered to help.

"This is not the first time we have assisted AMS. In 2021, AMS

tractor at its Richards Bay base and relocate it to Cape Town. At that time, the AMS only had operational bases in KwaZulu-Natal and the Western Cape. Since then, they have expanded into the Eastern Cape and now have three active helicopter bases in Gqeberha, East London and Mthatha," he adds.

Ramdhani says this second donation highlights Toyota Material Handling's commitment to enhancing healthcare accessibility through infrastructure support to local communities.

"The tow tractor will help facilitate AMS's operations, make medical transportation more efficient, and ultimately, save more lives. As we celebrate Toyota Material Handling's 40-year anniversary, this donation is a fitting testimony to our commitment to give back to the communities we operate in. Accessible health services mean that every individual receives the necessary care when needed most," he adds.



Haffejee says for AMS, the tow tractor is not just a logistical upgrade. "It is a commitment to maintaining the highest standards of care for those who depend on our services in their most urgent times of need."

AMS is a non-profit aero-medical organisation with active operational bases in the Western Cape (Cape Town & Oudtshoorn), KwaZulu-Natal (Durban), and the Eastern Cape (East London, Gqeberha, and Mthatha) that provides an air ambulance network, outreach, and emergency rescue services.

In the Eastern Cape, the AMS collaborates with the Eastern Cape Department of Health to deliver aero-medical emergency services to local communities. This is achieved through the use of three specialised. fully equipped helicopters.

Powered grease gun a leap in **lubrication innovation**

KF has launched its innovative TLGB 21 battery-driven grease gun that optimises lubrication efficiency and reduces costs by seamlessly combining advanced technology with a smart, rugged design. Engineered for exceptional performance, the robust TLGB 21 is ideal for the efficient lubrication of bearings and machines that operate in diverse industrial, manufacturing, agricultural and construction environments.

At the heart of the grease gun is the integrated grease meter that monitors and tracks the exact amount of grease dispensed. This practice ensures precise and reliable lubrication control, mitigating the risks and expenses associated with both over- and under-lubrication. Eddie Martens, SKF product manager MaPro, explains why accurate lubrication is so critical: "Under-lubrication can potentially cause premature bearing failure, while over-lubrication of bearings, especially in fast-moving equipment like electric motors, can result in excess lubricant which can damage seals and generate high temperatures, significantly shortening lubricant lifespan, causing machines to break down. Moreover, under- and over-lubrication can lead to the entry of contaminants. The end result of both unwanted scenarios is that downtime goes up, production goes down and operational costs soar!



Capable of delivering pressures of up to 700 bar, the versatile grease oun features an adjustable two-speed high and low volume flow rate that allows for precise lubrication tailored to the customer's specific application requirements.

The tool's powerful 20 V 2.5 Ah lithium-ion battery is able to dispense up to 24 grease cartridges on a single charge, contributing to extended operating time and boosted productivity. "We also offer an optional high-capacity battery that can dispense up to 40 grease cartridges with longer intervals between charges, further driving up productivity," adds Martens.

SKF grease cartridges, available in a convenient 420 ml size, are designed for quick and easy refills and come in a wide variety of grease types, tailored to meet diverse application demands. All greases rated up to NLGI 2 are compatible with all SKF

The TLGB 21 boasts durable ergo-

nomics to ensure maximum operator comfort and ease of use. A built-in LED light illuminates the work area for easy location of grease fittings in low-light conditions while the unit's lightweight design with optimised balance, coupled with a convenient fourpoint stand, further facilitate use. The device is equipped with a clear display that indicates critical data such as the charge level of the lithium-ion battery, the pump/motor speed, the amount of grease dispensed, the remaining grease level inside the cartridge as well as blocked lubrication points.

Additional noteworthy features and benefits of the TLGB 21 include:

- A filler nipple allows for clean and easy filling from drums with filler pumps
- Spring guards prevent kinks thus extending the life of the flex hose, ensuring smooth operation
- A vent valve eliminates trapped air inside the grease gun for effortless priming and consistent performance
- A precision-machined 4-Jaw coupler ensures reliable connection and exceptional durability

Suitable for a variety of manual lubrication tasks, the grease gun is supplied in a convenient easy-to-store and -use carry case that contains a grease tube assembly, lithium-ion battery, battery charger and lubrication

Maximum compatibility and safety from new connections

WITH the new, optimised Nexus Connect flare connection, the Ingelfingen-based technology company Gemü is now introducing an innovative flare connection for its CleanStar and iComLine valve series. As a result, Gemü is now offering its customers another optimised flare connection to Gemü valves and a range of suitable fittings.

In the semiconductor industry, flare connections have long been an established standard in the area of media distribution and media supply. However, this connection type reaches its limits in applications with extreme pressure and temperature requirements.

Ġemü now has an innovative solution. The Nexus Connect (a registered trademark of Fit-Line Global) connection not only provides greater safety, but it also ensures seamless compatibility with existing fitting systems.

Gemü already offers the optimised flare connections that are currently available on the market for Gemü CleanStar and Gemü iComLine valves. With the Nexus Connect connection, the company now has the opportunity to offer this connection consistently throughout the entire HP product range and to supply suitable fit-

Due to its compatibility with the most widespread optimised flare connection, Gemü's customers can equip their plants without needing to replace other components. This is also underlined by the successful test results of Fit-Line Global, which confirm that both connection types can be seamlessly combined.

The introduction of this Nexus Connect includes the Gemü CleanStar valves series, which will initially be available with welded-on adapters as well as in the compact SpaceSaver version. For the iComLine series, the connection will also be

available in a machined version on single valves as well as the Gemü PC50 valve blocks. Its expansion to the entire HP product range is planned.

With the Nexus Connect connection, Gemü is setting a new standard with respect to flexibility and performance in the semiconductor industry. Integrating this innovative design not only promises to make installation easier, but also to increase efficiency and reliability in critical production environments, according to the company.

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