CAPE



Business News

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Overloaded by 25 tons



Go straight to jail.

Libstar's cash cow

TESTERN CAPE-based dairy products specialist Lancewood is proving a strong cash cow for food brands conglomerate Libstar - last year was listed on the JSE.

Libstar's latest annual report for the year to end December noted that Lancewood had an outstanding year after completing the integration of recently acquired Sonnendal Dairies.

Lancewood produces and supplies a range cheeses, as well as butter and other dairy products. These include cheddar,gouda and mozzarella, cottage cheese, cream cheese, mascarpone and yoghurts as well as milk, amasi, buttermilk, cream, dairy blends and fruit juices. It also produces a range of private label and dealer-own brands as well as distributes a range of well-known international brands - including Kiri, Laughing Cow and Bel cheese products, Lurpak Butter and Castello Cheese.

Lancewood has two production facilities - one in George (which is in the pasturefed region for dairy farming and in close proximity to its milk suppliers) as well as a dairy facility in Athlone Industria in the Western Cape.

Libstar CEO Andries van Rensburg said that Sonnendal Dairies' margins - as promised - were steadily improving due to product diversification driven by the launch of new, value-added products.

The big success was the launch of a new line of yoghurts - which since launching last year have grown yoghurt value share by an astounding 85.6%.

Van Rensburg said Lancewood (which already holds a dominant position in the cheese market) was a good example of how the innovation of new products - specifically higher-margin, quality, branded, taste differentiated yoghurts - could counter the negative pressure of the cash-strapped consumer on a business.

'This yoghurt line, despite only being in operation for the latter part of 2018, has already captured substantial market share, well ahead of our forecasts.'

He stressed the full benefits of the yoghurt launch would only flow through in the first half of the 2019 financial year.

Van Rensburg disclosed that during the year cheese and butter revenues were up despite a very competitive market.



He noted that successful margin control initiatives and reduced input costs had bolstered gross profit margins.

Libstar's annual report showed the Perishables segment - of which the dairy hub is a key ingredient -contributed 46% of group revenue and 43% of profits in the 2018 financial year.

Perishable revenue jumped 22.5% to almost R4.6 billion – driven by "a very strong performance" in the dairy sub-category. Organic revenue (excluding the acquisition of Sonnendal Dairies and Millennium Foods) was up almost 12% with a 2% improvement in profits to R455 million.

Looking ahead, Van Rensburg believed the change in consumer diets coupled to a strong focus on health and wellness meant dairy was perfectly poised to meet consumers' lifestyle changes.

"We are seeing that consumers are increasingly focused on gut health, nutrition and high fat products, resulting in demand creation for these type of products. Consumers are also seeking products that offer convenience and fulfil their snacking

Van Rensburg explained that as Lancewood's existing production capacity was not able meet all of these trends, Libstar evaluated the investment cost of building an additional factory or acquiring an existing business to deliver high quality prod-

wood identified Sonnendal Dairies as a potential acquisition target as the company already produced high quality private label

"Its product mix was weighted towards the sale of bulk and commoditised milk, with lower gross profits and net profit mar-

He said Libstar's intention with Sonnendal Dairies was to utilise the production capacity to manufacture Lancewooddeveloped new products and to change the product mix towards value-added and higher-margin dairy products.

Libstar also looked to broaden the reach of Sonnendal Dairies to other retailers.

Not surprisingly Libsatr has invested heavily in Lancewood's production capacity spending R64 million on capacityenhancing equipment and leasehold improvements.

"We increased the group's hard cheese manufacturing capabilities and reduced dependency on third-party manufactur-

The new plants will locally manufacture Kiri and Laughing Cow Cheeses.

"We will remain focused on innovation and new product launches in this business to protect and grow market share. We will also continue to invest in capacity and efficiency improvements...'

The annual report shows R100 million earmarked for multiple facility upgrades at Following a rigorous process, Lance- Lancewood in the financial year ahead.

Baudouin Marine Engines, set to make waves



eninsula Power Products, (PPP) the Cape Town and Port Elizabeth based suppliers of marine and industrial diesel engines, gearboxes and generators have secured the exclusive Southern Africa dealership of the ubiquitous Baudouin range of marine engines, manufactured in its French factory since 1918.

Guillaume Costa, Baudouin's Sales Manager for sub-Saharan Africa explained that Baudouin designs, manufactures and sells engines into the marine and power generation markets in 48 countries around the world. "While we have a strong presence in north, east and West Africa, we approached PPP to expand our brand footprint in the south of the continent due to PPP's 50+ year's reputation of technical expertise, spares and service excellence in the local market".

Baudouin marine range of engines offers both electronic and full mechanical fuel injection options and expands the PPP range from 4.5 litres right up to 39 litre marine propulsion engines providing the opportunity to enter the market of 130 to 1 650hp continuously rated workboat range. Its marine genset range covers outputs of 85kVA to 1 100kVA.

"Attractive benefits of these engines are that they are very well priced and easy to work on which combined with renowned durability, reliability and built with the robustness that is required of the marine environment. Our engines are not adapted land based stationery engines but are exclusively designed for marine applications" he expounded.

For more see P3



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CAPE **Business News**

Premier's octopus garden

& Brands decision to acquire a controlling 51% stake in Port Elizabeth-based squid business Talhado looks like a profit buoying transaction.

Premier recently reported that the muchenlarged squid division delivered strong returns for the half-year to end February period - even though catch rates were down compared to the same period in the prior year.

The squid division managed revenues of R172 million and posted profits of R59 million in the interim period.

This means the squid division accounted for nearly 60% of group revenue of R289 million compared with less than 20% in the previous interim period.

Premier said the market for South African squid remained strong with a steady increase in the average Euro selling price.

Premier's other 'export orientated' divisions also performed satisfactorily.

The lobster segment generated R59 million in revenue and netted R16 million in profits. The lobster segment traditionally enjoys



stronger trading in the second half of the financial year.

Premier noted that the 2018/19 total allowable catch (TAC) for South Coast Rock Lobster was 316 tons - less than the prior year's TAC of 331 tons.

The company said the South Coast rock lobster specie remained a stable fishery and well managed resource. "Our South Coast Rock Lobster brand is a top leading brand in the US market due to its high quality standards and we are able to attract premium prices."

Premier said the favourable size mix resulted in a 4% increase in dollar pricing for the South Coast rock lobster landings.

Premier warned that the West Coast Rock Lobster sector remained a challenge for the industry. - advising that this specie represented less than 10% of revenue and profits.

The abalone farming venture in Gansbaai generated R16 million in revenue and R5 million in profits.

Premier said it remained focused on the expansion of the abalone farm with a target holding capacity between 300 to 350 tons.

The company reported an increase in spat (baby abalone) production from an average of 100 000 spat per month to an average of 200 000 spat per month.

Premier also pointed out that the hatchery continued to produce good quality - which provided a good platform for the planned expansion in production output.

The pelagic division performed more or less in line with last year managing revenues
 of R18.5 million and slightly lower profits of R3.9 million.

Industrial fish catch rates were the same as last year.

The big factor was that Premier's pelagic operations had less fishing days for this interim period compared with the corresponding six months last year - which meant lower volumes landed. However, Premier expected landings for the second half to improve.

Premier disclosed its quota allocation for sued for the reporting period as the pilchard quota for the 2019 fishing season commenced in March, and this performance will be evident in the second half of the financial year.

Premier's hake segment generated revenue of R13.5 million and profits of R5 million. The hake quota is caught, processed and marketed through a joint operation with Oceana Group's Blue Continents Products.

Premier said the hake division continued to deliver good performance with the division experiencing favourable size mixes as part of its catches.

The company added that market prices remained relatively stable resulting in the division maintaining its margins.

Premier Overall, reckoned the future outlook was positive as the company was well positioned to create and maintain shareholder value through organic and acquisitive growth.

"Our main strategic focus area is the 2020 FRAP (fishing rights allocation process) with the company continuing to be well positioned..."

Knife takes stab at new venture

CAPE TOWN-based venture capital backer Knife's investment in online private education has been the catalyst for an interesting new technology twist. Last month one of founders of SkillUp

Tutors announced the launch of room. sh - its free-to-use open beta program to ensure an interactive and functional meeting platform that can be extended to 'remote workers'.

In April last year

Knife invested in SkillUp Tutors in an effort to accelerate user acquisition of learners and tutors as well as leverage partnerships with content providers and scale the business

SkillUp is a Cape Town based education technology startup that that offers parents and students across South Africa access to thousands of highly skilled and

internationally.

tion, and budget. The SkillUp platform makes it easy to find and communicate with tutors and facilitates the purchasing and scheduling of both in-person and online

vetted tutors based on grades, subject, loca-

Knife's investment in SkillUp appears to have also sparked the development of Room. sh - which offers a oneclick connect meeting platform combines a number of collaborative tools – like shared digital whiteboards, documents and code editors, with traditional video conferencing capabilities.

Matthew Henshall, a co-founder of SkillUp and CEO of room.sh, said: "It's a bit hard to explain without trying it out, but try to think of it as Zoom meets Google Docs."

Henshall explained he was endlessly frustrated with meetings,

citing research that room.sh: "While we showed organisations were growing SkillUp, collectively spend 15% we realised that takof employee time in "No-one meetings. likes meetings, but they are incredibly important to run a business effectively, especially when everyone can't be in the same place at the same time. So we found it strange that, in the last 25 years of innovation with the Internet, the best we've managed to come up

Henshall said Knife's investment in SkillUp was pivotal to the development of

with is video calls as a

replacement for tele-

phone calls!"

ing lessons online was a growing trend with our users. Tutors on our platform were using a mix of existing tools like Skype and Google Docs to conduct lessons, but there was still too much friction." "We wanted to create a more seamless experience for them to conduct online lessons. We tried some off the shelf software, but we didn't find anything that had the power and flexibility that we were really looking for."

Henshall said that given the SkillUp team's strong software development ground, it was eventually decided to build a solution from the ground up. He said the during the development process, the developers quickly realised the potential for this tool to be used for online meetings. "We then spun out the core software, room.sh, into a standalone product." Henshall said Room.

sh has already seen over 10 000 hours of use - largely in education (on SkillUp and similar platforms) and internal company meetings of early private beta users.



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Baudouin Marine Engines enters market through **Peninsula Power Products**

up. We have twelve

technicians

marine



The ubiquitous Baudouin marine range of propulsion engines from 130 to 1 650hp and its marine genset range coverings outputs of 85kVA to 1 100kVA, are now exclusively available from Peninsula Power Products (PPP). Director of PPP, Bruce Lockhart said of the new dealership: "We are delighted to be representing such an auspicious brand and credentials as Baudouin in southern Africa and its range complements our existing business as multi-franchise suppliers and service providers for the marine and industrial sector, providing an extensive range of high-spec diesel engines, gearboxes and generators and their all-important spare parts.

"Our vast coastline presents an equally vast marine customer base of fishing vessels, charter boats, ferries, patrol boats, and salvage vessels. The fishing industry is a particular strength and we have supplied main propulsion engines, marine gearboxes and onboard marine generators to this market since 1965 building a reputation of trust amongst the most discerning marine industry. From small beginnings with just one brand of engine and one brand of gearbox, we have grown into a successful multi franchise business representing some of the biggest names in the business based on our technical prowess and commitment to excellence and

reliable service.

"Our premises in Paarden Eiland, Cape Town, houses two spacious workshops fitted and ready for every occasion, ample yard space, offices and an extensive spares department.

In Port Elizabeth, our branch is dedicated to servicing the chokka industry and other fishing sectors. We also service and maintain a number of National Port Authority vessels in the PE area.

PPP is fortunate to have a team of passionate directors, making it a hands-on owner business, managed employing an equally passionate team of 35 professionals, ensuring high level technical expertise coupled to reliable service backpoints

who will each receive

training and refresher courses on a yearly basis from instructors flown in from Baudouin in France" he said. PPP have service throughout South Africa, Namibia and Mozambique and service and supply marine propulsion units and marine generating sets to all commercial marine activities including workboats and ferries across sectors including oil and gas industries. It boasts an extensive stockholding of engines, ancillaries and spare parts which can be supplied usually within 24h or flown in at short notice.

"This of course also applies to the Baudouin range" said Guillaume Costa, Baudouin's Sales Manager for sub Saharan Africa, "which offers availability and price advantages over competitive products. This together with easy replacement procedures - our engines are designed to be quick and easy to work on means less downtime and faster turnaround times. We estimate that there are between 40 -50 Baudouin powered vessels operating in Mozambique alone which speaks volumes for their robustness, and now being able to be serviced by PPP will contribute to the engines longevity.

"An example of our reputation for robust, powerful and reliable engines is the recent award by a New York ferry operator. Fifty-two EPA Tier III and Tier IV approved Baudouin engines for a repower contract were supplied where we were in competition with a well-known American make. We were not the cheapest, but our technical specifications, formance and service back-up convinced the customer he was making the right choice!" concluded Costa.



With engines available in the 130hp to 1,650hp range for vessels of up to 60m, Baudouin and Peninsula Power Products are well-placed to provide a cost-effective alternative to the local maritime sectors.











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Rextru fashions stylish profit

SALT-RIVER-based Rex Trueform – which now takes the appearance of an investment company - fashioned a stunning comeback in the six months to end December with revenue increasing 14% to R362 million.

The big turnaround factor was the stylish 17.5% hike in gross profits from the Queenspark fashion retailing segment to R191 million.

Rextru's...move into water infrastructure contributed...R11.8 million to group profit.

Encouragingly, other group income - which includes rental income from Rextru's Salt River property development - pushed up by 14.2%. The group also enjoyed success in curbing operating costs, which only increased 4.3%. The end result was that operating profit increased 235% to R32.2 million (2017: R9.6 million).

Rextru chairman
Marcel Golding said
the Queenspark store
growth strategy progressed well with the
opening of five new
stores and the closure of
one in the interim period. He said this brought
the total number of
walk-in stores in South
Africa and Namibia to

seventy-four - excluding one franchise store in Kenya.

in Kenya.

Importantly Golding noted: "Where feasible and the risk of cannibalisation is low, Queenspark continues to introduce new brands to complement the existing ranges."

He said that as a result of the implementation of its strategy, Queenspark's turnover increased by 13.5% and it achieved an impressive gross profit margin of 54.6% (2017: 52.7%).

He noted that retail operating costs, which included additional store costs, were well contained and increased by a modest 3.9%. "This resulted in a retail operating profit of R29.4 million (2017: R7.0 million) for the retail segment.

Rextru's increasingly important property segment – mainly the Rex Trueform Office Park complex in Salt River – also looks poised for further activity.

Golding noted there were another two undeveloped properties in the Salt River precinct - one with heritage significance and the other is vacant land.

Another property is situated in the Wynberg precinct in Cape Town and is leased to Queenspark as a distribution centre.

The operating profit for the property seg-

ment topped R5.6 million (2017: R4.9 million). Golding said this improvement in operating profit was partly due to the containment of operating costs.

Rextru's recent (and somewhat surprising) move into water infrastructure contributed a surprisingly meaningful R11.8 million to group profit.

Looking ahead, Golding said that while the Queenspark strategy and initiatives were delivering the required result, management is cognisant of the difficult trading environment (including the recent spate of load-shedding and subdued economy.

"Management, however, remains confident in the retail segment's future and in its ability to deliver sustainable growth and value creation for shareholders."

Golding added that Rextru intended developing both undeveloped properties in the medium term. "One of the undeveloped properties has heritage significance. As a result, decisions regarding the development of the property have been delayed in order to consider the significance of the property in this regard and heritage guidelines more fully, whilst also ensuring that any development is sustainable and economically viable."

Fruitful split at Capespan

BELLVILLE-based fruit marketing giant Capespan has spun out its growing logistics operations into a separate stand-alone company.

From January this year The Logistics Group (TLG) has operated an independent entity. The move is not entirely surprising as Capespan's logistics arm had in recent years shifted its focus from moving mainly fruit to handling increasing amounts of general cargo.

TLG includes largescale port and warehouse operations in Cape Town, Durban and Port Elizabeth, warehousing and loading terminals for bulk minerals and agricultural cargo as well as cross-border and warehouse operations in Mozambique.

At the same time, Zeder – the PSGowned controlling shareholder of Capespan – injected its investment in the logistical application business, The Logistic Company, to TLG to ensure the newly separated company benefited from the latest logistics-related technology.

The TLG business comprises the entire Capespan logistics infrastructure - port terminal operator FPT, Tradekor, Port Stevedoring as well as Mozambique-based MCT and freight forwarding service provider Contour Logistics.

The logistics business will also see a change in leadership shortly with retiring CEO Dawie Ferreira set to make way for Anton Potgieter.

The bigger picture, of course, is that the separating out of the logistics operations will allow Capespan to focus more intensely on its fruit production and marketing businesses.

Capespan scored from a massive windfall this year after it sold its entire shareholding in the Joy Wing Mau Group in China – banking net cash of R988 million. This windfall was injected into its core fruit and farming divisions, and also used to reduce debt levels.

Zeder CEO Norman Celliers reported that in the financial year to end December 2018 all companies - apart from Capespan's fruit and farming divisions - stabilised or reversed lower levels of profitability reported in the results for the previous year.

Capespan reported a significant headline profit of R317.3 million – but this was largely due to the fair value gain on the investment in Joy Wing Mau. Operationally, the group delivered a loss of R21 million in consolidated recurring headline earnings.

Celliers said the losses were largely incurred within South African and Namibian grape farming divisions where lower production volumes and suppressed market pricing impacted negatively on

results.

He said these losses were offset by strong earnings delivered within the logistical division and fruit associ-

An interesting (and potentially important) aside is that in December Capespan acquired the remaining 52% interest in the pomegranite farm Sonkwasdrif for a (nominal) R1 purchase consideration.

Celliers explained that the nominal purchase price to the fact that the 48% investment in associate was carried at a negative carrying value due to previously recognised losses.

Previously Sonkwasdrif had a R250 million facility with the Land Bank and the Capespan group provided surety for the associate's facility in a maximum amount of R122,5 million. Celliers disclosed that the facility and security were settled before the acquisition of Sonkwasdrif.

Staying stuck



Superglue Gel for invisible and aesthetic repairs.

PRATLEY has introduced Superglue Gel - a high-performance, multipurpose, cyanoacrylate adhesive. This non-drip gel is said to be ideal for vertical and hard-to-reach applications.

With gap-filling properties and excellent adhesion to rubber, the gel also bonds exceptionally well to most other ma-

terials, including metal, ceramics, porous substances, jewellery, and most plastics. Available from Pratley in a dispenser of 20 x 3 g bubble packs, Pratley Superglue Gel sets clear, making it ideal for invisible and aesthetic repairs.

"Another really great feature is its non-drip property which, unlike normal Superglue, allows the adhesive to be applied to vertical surfaces," Pratley National Sales & Marketing Manager Mark Bell highlights. An initial handling bond is formed by placing the gel on one side of the substrate, and thereafter applying pressure, or holding the substrate together for only 30 seconds. For an even stronger bond, it is recommended that the newly-bonded substrate is left undisturbed for at least ten minutes, depending on the weather conditions. A curing period of 12 to 24 hours is recommended for the best bonding strength.

Pratley Superglue Gel is also ideal for bonding together separate elements or components made from Pratley FrogzEggz®. This hand-mouldable plastic is the latest innovative product from Pratley, aimed at the DIY, artsand-crafts and educational markets.

Recent new product launches included Frog-zEggz®, TaperTech brass compression cable glands for all circular unarmoured cables and a new grade of Grolite expanded perlite for horticultural use.

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Cyber-crime, the new scourge

Providing the Welcoming Address at the recent Cyber Cerebral South Africa Summit 2019, Advocate Jacqueline Fick, CEO of Viz Strat Solutions, outlined the scourge of cyber-crime



Jacqueline Fick, CEO of

Viz Strat Solutions. WHEN dealing with cyber-crime we need to understand that it is a borderless crime and that makes it extremely difficult to successfully investigate and prosecute these types of crimes. The need for legislation and international cooperation that enables us to cooperate and react to cyber-crime remains key. South Africa is a signatory to the Council of Europe Convention on CyberCrime (COECC), but has however never ratified the convention (also commonly referred to

as the Budapest Con-

vention). South Africa currently has a number of different Acts that deal with cyber-crime, the most important being the Electronic Communications and Transactions Act, No. 25 of 2002. There has also been a four year delay in finalising the Cyber-crimes Bill and to date we are still awaiting implementation of the Protection of Personal Information Act. Although the ECT Act does make provision for the prosecution of some cybercrimes, the sentences attached to the said Act does not reflect the seriousness of the offences. The new Cvber-crimes Bill will assist in taking the profit out of cyber-crime and to provide for the prosecution of offences that were not covered in previous legislation.

Why is this of impor-

Imagine that you fall victim to a cyber-crime in South Africa but there is no provision

"One of the biggest risks we are facing is lack of education and awareness when it comes to cyber-crime..."

that criminalises the conduct. An example is the theft of an incorporeal which is now criminalised under the new Bill. Although the so-

called "fake news" clause has been removed, the Bill still makes provision for the prosecution of offences relating to a data message which incites damage to property or violence, which threatens persons with damage to property or violence, and for the distribution of a data message of an intimate image. South Africa is currently facing an increase of fake news and the example was provided of where advanced software can be utilised to create fake video footage of an incident. If this does not fall into the category of malicious communications as described above, it could still be prosecuted under the Bill under the section dealing with Cyber Fraud.

Further to the borderless nature in which cyber-crime operates is the speed at which these crimes are committed. This also stresses the need for international cooperation to ensure that we are able to secure the relevant evidence, and more importantly share intelligence regarding cyber trends.

There is also a dire need for more effective and efficient public private partnerships in South Africa when it comes to the prevention and detection of cyber-crimes and matters relating to cyber security.

One of the biggest risks we are facing is the lack of education and awareness when it comes to cyber-crime and cyber security. When we specifically look at law enforcement it is not only the training of specialists that are involved in the forensic acquisition and analysis of cyber evidence, but also the first responders that attend any scene. Do they know to secure cell phones and computers as potential evidence and secondly, do they know how to do this so that the evidence is not rendered inadmissible?

One of the benefits of the new Bill is that it provides for assistance from "investigators" to assist law enforcement with the search and seizure of evidence. ["investigator" means any fit and proper person, who is not a member of the South African Police Service and who is— (a) identified and authorised in terms of a search warrant contemplated in section 29(3); or (b) requested by a police official in

terms of section 31(2), 32(3) or 33(4), to, subject to the direction and control of the police official, assist a police official with the search for, access or seizure of an article;...] In this way the public sector would also be able to effectively assist law enforcement where they lack the necessary skills and experience to deal with a cyber investigation. Also take note of the provision of a "fit and proper" person.

Identity theft remains rife in South Africa. We need to bear in mind that it is not about stealing e.g. money. It is all about stealing information that would enable a criminal to act as a "believable you". Your personal information can then be used to commit a variety of other (cyber) offences. No information is sacred.

The digital world is akin to a young democracy: people know that they have rights in this world, but need to also pay heed to their responsibilities when going online.

This is where the concept of digital citizenship is going to play an ever-increasing role.

My advice to people remains the same: do not do online what you would not do in the real world.

Finding good 'ground'

ACCORDING to Zest WEG Group, there are misconceptions around what constitutes 'earth' (or 'ground') and 'neutral' connections and not understanding the differences can create serious problems when connections are made from on-site transformers or other sources. This more often than not leads to earth leakage systems underperforming and compromising the safety of the equipment and operators.

Johan Breytenbach, transformer sales specialist at Zest WEG Group, says that the neutral connection in an electrical installation is designed to carry current all the time, while the earth connection is only supposed to carry current for a short period to trip your protection switch.

"Where this is not understood and the installation is not done correctly, the trip system will not work properly. In addition to this, stray currents are created that could cause other problems," he says.

Experience shown that many farmers use the neutral connection as the earth when they do an electrical installation, and this is not correct. Current carried on a grounding conductor can result in significant or even dangerous voltages on equipment enclosures. For this reason, the installation of grounding conductors



A WEG pole-mounted transformer (200kVA 11kV/400V) with the neutral and earth contact terminals visible.

and neutral conductors is carefully defined in electrical regulations.

In alternating current (AC) electrical wiring, the earth is a conductor that provides a low impedance path to earth so that hazardous voltages do not find their way to the equipment. Under normal conditions, the earth connection does not carry any current. Neutral, on the other hand, is a circuit conductor that normally carries current back to the source.

Neutral is usually connected to earth at the main electrical panel or meter, and also at the final stepdown transformer of the supply. Neutral is also the connection point in a three-phase power supply to connect cable termination in order to gain single phase power. In a three-phase circuit, neutral is usually shared between all three phases, with the system neutral being connected to the star point on the feeding transformer.

Earthing is therefore a vital part of electrical installations to ensure that circuit breakers will trip under fault conditions. Safe and legal installation needs to start with the selection of the right transformer, with a star configuration to allow the connection to the neutral point. Installation by a qualified and experienced technician is then ideal, to ensure optimal performance.

The correct earthing or grounding of electrical currents has a number of important benefits apart from the main concern around safety. It protects equipment and appliances from surges in electricity - commonly from lightning strikes or power surges - which bring dangerously high voltages of electricity into the system. Good earthing will ensure that excess electricity will go into the earth, rather than damaging equipment.



Zest WEG Group is able to offer a range of standard off-the-shelf products as well as end-to-end energy solutions by leveraging best practice engineering and manufacturing capabilities.

All products are engineered to facilitate a safe and reliable environment with operational stability and the highest possible production levels as an objective. Reduced maintenance and ease of serviceability assist in lowering the total cost of ownership.













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Afrimat mines new seam

DURBAN-VILLE-based building materials producer Afrimat looks set to venture further into the mining sector with a proposal to acquire the South African operations of Australia-based Universal Coal plc.

Afrimat - probably best known for its aggregates and lime operations - has already confirmed its intent to play in the bulk commodity space when in ventured into iron ore and manganese mining recently.

But the proposed Universal transaction - estimated to cost Afrimat more than R2 billion - is far larger. In fact, it will be the largest transaction ever pursued by Afrimat, and will probably require the group to tap its shareholders for fresh capital to fund the transaction.

Afrimat - headed by astute CEO Andries van Heerden - has over the years built a reputation as a smart and determined deal-maker with a rare ability to secure well priced deals on assets that can be tweaked for greater profitability.

Afrimat, famously, resisted acquiring (expensive) assets in the run up to the 2010 Soccer World Cup. The group was later able to pick up struggling assets at bargain basement prices as the construction and building industries faltered.

The Universal deal comes at an intriguing juncture for Afrimat as its diversification into bulk - specifically iron ore - looks like starting

At last count bulk commodities represented around a quarter of Afrimat's total business at the end of August last year. If Universal is dragged aboard, that ratio would change mark-

Afrimat's iron ore story is a compelling one securing hard currency exposure, higher margins and an ability to operate the mine as a quarry (meaning it's cost effective and has scalability).

Presumably some of these attributes also apply to Universal Coal.

Independent analyst Anthony Clark recently wrote in the Investors Monthly magazine that Universal's coal mines in Mpumalanga and Limpopo could add some R500m in additional profit to Afrimat.

He also believed there were some Afrimat efficiencies that could be bought to bear on Universal to lift operational capacity, lower costs and increase profit margins.

Fortunately for Afrimat, the performance for the full year to end February (which will be published next month) looks as resilient as ever.

Last month Afrimat advised its shareholders that it expected bottom line profits to increase by between 20% and 30%

What is happening inside your crane?

VISUAL inspections are essential to the health of your crane, but what you don't see can hurt. For the longevity of your crane and minimum downtime, it is important that crane specialists take an in-depth look at your crane, whatever make it is.

Konecranes' Critical Components Assessment and Consultation Services take a deeper look at the working parts of your crane. This includes:

- The Gear Case Inspection assesses the internal gear case components and is designed to uncover issues that may lead to hoist gear failure. This includes pre-mature wear on the gear teeth, damaged bearings and worn seals.
- The Bottom Block is made up of many internal components that are critical to carrying your loads. The Hook/ Shank Inspection is designed to look for wear and cracks that could lead to failure in any of these components. Serviceability of the safety latch is critical for accident prevention. Apart from that,

the sheave wheels, bearings and covers are also inspected to determine if lubrication is sufficient and that components match.

The RopeQ™ Magnetic Rope Inspection has been designed to assess the condition of a wire rope. This is done by a deeper assessment than the usual visual inspection. Purpose built equipment reports defects on and inside the wire rope, including worn or broken wires, strands and core that are not readily visible.

The Crane Reliability Study looks at the current condition and remaining life of your crane. A team of trained and experience

It doesn't matter who made your crane. Konecranes offer genuine Konecranes spare parts as well as replacement parts for all other makes and models.

Konecranes specialists gather detailed information about your crane, perform an inspection using specialized tools and methods and conduct an engineering analysis.

Calculations based on designed duty, actual duty, age and service history of the crane and reporting will suggest some dates on which certain machineries should be overhauled or replaced.

Geometric Analysis developed by Konecranes, work together for a total look at crane and runway geometry. Cranes that are running straight, square and are aligned experience less repair costs and are more reliable. The two parts of this service include RailQ and CraneQ.

RailQ Runway Survey typically utilizes a remote-controlled robot trolley which runs along the rail. Surveying equipment gathers information as the robot is remotely run down each rail of the gantry. The analysed data is processed and presented in reports whichhelp ize problem areas.

CraneQ Crane Geometric Survey utilizes the same surveying equipment to gather information on the

travel wheels of the crane. The analysed data is processed and presented in reports which help visualize details on the alignment of wheels and the square of the crane.

Truconnect Remote Monitoring facilitates remote monitoring and reporting on a crane's performance as well as the operator's handling of the crane.

This can either be done live through online access, with alerts via mobile phone or reported monthly via e-mail. This data alcustomers to make informed decisions on maintenance, production and operations to decrease downtime and increase the productivity of cranes.

It doesn't matter who made your crane. Konecranes offer genuine Konecranes spare parts as well as replacement parts for all other makes and models.

Upcycling or recycling – what's the difference?

By Yasmine Miemiec, **Managing Director** of 5inc

ACCORDING to the South African State of Waste Report, in 2017, South Africans generated 42 million tons of general waste, of which 4.9 million tons were

BAMR

recycled. This means that over 37 million tons of waste was sent to landfill to rot and pollute the atmosphere

We all know about recycling - but where does the waste come from?

The biggest waste stream in South Africa is general waste.

organic waste such as food, gardening or animal waste. In addition, we have construction waste such as building rubble, sand or wood and then other waste such as paper, glass, metal, plastic and elec-

tronic materials. The key differentia-

which is made up of tor of recycling is the fact that used products are put through a process to create the new version of the same product. However, even though most people are familiar with recycling, along with the public and corporates, know very little about the benefits of upcycling.

Upcycling: better quality and higher environmental value

Upcycling is the process of transforming waste materials or unwanted products into different, new products of higher environmental value. When one upcycles, they are not breaking down the materials of waste products as with recycling where plastic, for example, is melted down to create more plastic. With upcycling the item is refashioned, using the same materials. A good example here, is using old tyres to make products like bags, dog beds and shoes. The material is still the rubber from the tyres, just used in new ways.

So, what's the difference really? Both save the planet, right?

In a nutshell, the difference between the two is that recycling involves a shredding, melting and/or compressing process,

usually to recreate the same products as the original products. Upcycling involves taking unwanted or used items and repurposing them to create different items.

Both processes have an important role to play in the management of waste. Recycling is vital because of the volumes of material that can be processed and converted. Billions of tin cans are discarded each year but this amount of material cannot be upcycled into products that people will need. However, the problem with recycling lies in the fact that it has a high energy cost compared to upcycling due to the processes involved.

Upcycling, on the other hand has a human element because people are employed in the transformation of the products. The energy inputs for upcycling are also lower than for recycling. For example, there is electricity used for sewing or woodwork, but these are minimal compared to the industrial processes use for recycling.

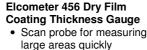
So, where does recycling and upcycling fit in with corporate waste management?

When a company produces enormous quantities of waste material like wood from construction sites, it may not be feasible to upcycle all of it. In this case the company may choose to recycle the bigger volumes of waste and upcycle the smaller volumes. The benefit of this approach is that both ends of the value chain are being supported. The recycling companies are employed but the company also contributes to income generation and job creation through upcycling.

Upcycling, however, as a practice is not as widely used by corporates. South African companies should be consulting with companies to try and see what waste they are producing and understand where they can make a difference.

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All (O)Kay again

EPPING-based wood products and packaging group KayDav nailed down some big profit gains in the year to end December 2018 despite the increasingly splintered economic conditions.

A recently released annual report showed KayDav showed a big improvement in bottom line profits - which more than doubled from R10 million to R26 million.

CEO Gary Davidson said the improvement was driven mainly by improved cost control - most notably the decrease in the bad debt expense to under R1 million from over R10 million in the 2017

Davidson noted the increase in other operating expenses was limited to only 2%.

KayDav ranks as the largest distributor of wood-based panels in South Africa with an extensive network of outlets in the Western Cape, Southern Cape, KwaZulu-Natal and Gauteng.

Well known trading names include Kayreed Board and Timber and Davidson's Discount Boards with clients predominantly in the furniture, shop-fitting and kitchen manufacturing and installation industries. KayDav also supplies significant quantities to other wood-based panel distributors.

More recently Kay-Day diversified into the packaging sector with Packit Packaging Solutions – which is a distributor of both

machinery and consumables to manufacturers, the agriculture sector, home industries and small businesses. Packit also has a retail store at the Western Cape outlet to service walk-in trade.

Davidson acknowledged that while Kay-Dav's earnings levels had not yet returned to historical highs, the results for the 2018 year were a big improve-

"Management remains aware of the significant task ahead in achieving its long-term goals."

Davidson said the Distribution Board and Adaptation Segment had a much-improved performance with operating profit increasing to R34.4 million (R14.7 million

previously). This is a notable achievement with turnover from this segment only growing

Davidson stressed management remained focused on cost control to preclude cost inflation from exceeding top-line growth.

'We are continually looking for opportunities to grow market share through the addition of new product lines and continually striving to service the requirements of our client base."

The Board Distribution and Adaptation segment made up 91% of KayDav's turnover. Davidson pointed out that for this key segment to grow materially, a substantial improvement in consumer confidence and

macro-economic conditions was required.

Turning to the smaller packaging segment, Davidson said this division continued to perform well with revenue and operating profit growing by 17%.

He said although the packaging segment made up only 9% of the total revenue, the division made a substantial contribution to Kay-Dav's earnings. "Being a relatively small player in the packaging market in South Africa, we believe further opportunity for market share growth exists.'

He said the packaging segment would continue to pursue growth by increasing its product offering and increasing market share in existing product categories.

ADVERTORIAL

A Printing Company that saves you money!



REPUTATION

What to look for when picking a printing company for your business. Firstly look into their reputation to avoid any disappointments. Deal with a reputable company who has the experience in the industry to avoid getting substandard work. Search or ask for Customer References and search the social media channels for more information.

CUSTOMER SERVICE

Customer service is second in line to a companies reputation. And ask the company to send referrals.

IN-HOUSE

CAPABILITIES Do they offer a wide range of printing services, without outsourcing some of the requirements. Smaller printing companies may have limited scopes and as a result they will outsource some of the larger projects, ultimately resulting in larger costs and longer lead times.

PRICING

The current economy is seeing many a printer closing their doors. With others literally hanging in the balance and charging next to nothing, just to get

A sustainable printer pricing model will guarantee you against sub standard work

Then make contact with those clients to find out the good and the bad about the printing company in question. A reputable company will also not be afraid to tell you themselves, and how they have learnt from past mistakes.

You also want to work with a printing company whose staff are *professional*: good at communication, trustworthy, sticking to the deadlines and will take care of your print requirements. They need to be responsive to your queries, print requirement changes and willing to deal with your matters. Then being **friendly** will make it a joy to work with them.

PAST WORKS

Another way other than taking people's word for it, is to have a look at their actual work? After all the best way for you to gauge their expertise is by having a look at projects they have done. Ask to see the printing company's product portfolio and actual printed products.

work in. Most printers will not admit to struggling, so tread carefully. Get more than one quote and you will soon see those companies that are offering what I call sustainable pricing. Always fair and willing to negotiate within reason. With this model of pricing you are guaranteed that the printer will not be cutting corners

ENVIRONMENT

Opt for a printing company that has effective energy conserving and recycling policies in place. This will reflect well in your business and ultimately the environment.

FINALLY

Find a printing company that works for you, and put the effort into building a relationship to enjoy quality service your company deserves. It is worth the effort, as most repeat customers enjoy discounted rates and a relationship that is prepared to work with you!

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CCMA and the key to procedural fairness

IN South Africa, stringent Labour Laws have created somewhat of a minefield for employers to navigate when it comes to disciplinary procedures. While protecting the rights of the employee is paramount, employers that are not completely up to date with the relevant legislation could soon find themselves in hot water.

Research reveals that employers lose about 60 percent of cases referred to The Commission for Conciliation, Mediation and Arbitration (CCMA) by disgruntled employees or their union representatives. Losing a CCMA case has three drawbacks: the employer is usually found to be financially li-



able; the business' reputation is damaged, and a record of wrongfuldismissal or treatment made; and precious business hours are lost while attending CCMA hearings, hampering productivity and morale. According to Thom-

as Matthee, Managing Director at NeTrec, there are four main reasons why employers lose CCMA cases. "The first reason is that they do not follow the correct disciplinary procedures. Whether this is due to ignorance or done intentionally makes no difference in the eyes of the law, ignorance is no excuse. The second shortcoming occurs when employers fail to act consistently, for example, when one employee is more harshly disciplined than another for a similar offence. Thirdly, employers lose cases because they fail to hold a procedurally fair hearing. There are

strict steps to follow, and if this is not adhered to, the employer is in trouble. The last is the failure to maintain a reliable and accurate document trail throughout the entire disciplinary process. Complete documentary evidence is essential to success."

"In many cases, the purpose of the disciplinary process is to correct an employee's path, to help them improve in their position and learn from their mistakes," adds Matthee. "Yet, too often, employers approach incorrectdiscipline ly, leading to costly CCMA cases, further disgruntled employees, and a sour experience for all parties.

Cape Town is the place!

with the most job opportunities, with 14 023 jobs advertised on the site in January 2018. The finding is based on an analysis of 140 000 vacancies advertised over this period.

Cape Town was also found to be the city with the highest average salary, and the Western Cape topped the tables as the province with the highest average salary of R385 401.

Minister of Economic Opportunities, Beverley Schäfer said: "StatsSA data has consistently shown us

though it measures a short period, this Adzuna data shows that we're also leading the pack in terms of job opportunities and salaries."

StatsSA 3rd quarter data for 2018 indicated that employment in the City of Cape Town grew by 3.9% year on year. More importantly, however, the number of unemployed declined by 38 000 over the same period.

According to Adzuna, the sectors advertising the most amount of jobs across

JOBS search engine that the Western Cape the country were IT, between 40 000 to Adzuna has found that leads the pack in terms consultancy, technolo-Cape Town is the city of job creation. Even gy, engineering and acter Schäfer said. counting and finance.

> "The Western Cape government has focused on growing tech skills and opportunities in the province as we want to position ourselves as a global tech hub. Last year, the Endeavour Insights report revealed that the Cape entrepreneurial tech sector is significantly more productive than other African cities, employing more than double the people of Lagos and Nairobi combined, with 450entrepreneurial companies employing

50 000 people," Minis-

The Western Cape is also home to a fast-growing financial services sector, which now employs nearly half a million people.

"Data for the third quarter from StatsSA's quarterly labour force survey indicated that the financial services sector grew by 32 000 jobs or 7.6% year on year," Minister Schäfer said.

"Cape Town was also named the top financial centre in sub-Saharan Africa, overtaking Jhb in the Global Financial Centres Index last year. It was the first time Cape Town has been named in the report, and was 2018's highest new global entry, entering the global list at number 38," Minister Schäfer said.

"As the Western Cape Government, our number one goal has been to create an environment conducive to investment and job creation. Data like this, which shows that opportunities are being created, is proof that our hard work, to attract investment and grow the economy through strategies like Project Khulisa, is paying off."

rsalitho DESIGN your SIGN

Liquid helium, the lifeblood of MRI machines

MAGNETIC resonance imaging (MRI) is a game-changing technology in the medical community, enabling specialist physicians to gather vital information about a patient's condition in a non-intrusive, radiationfree way. Afrox's Hans Strydom talks about the technology and the essential role of liquid helium, which enables these life-changing machines to work effectively and reliably.

Magnetic resonance imaging is a state-of-the-art imaging process that has become an essential tool in the medical profession in the fight against numerous life-critical conditions and diseases.

To successfully diagnose conditions such as strokes, tumours, aneurysms, spinal cord injuries, multiple sclerosis, and eye or inner ear problems, the medical community needs imaging technologies that provide high-contrast, detail-rich views of the inner workings of the human body. MRI is a game-changing imaging technique that gives unprecedented levels of



clarity, especially when scanning soft tissue such as the brain or muscles. It also helps doctors to see inside joints, cartilage, ligaments, muscles and tendons, which makes it helpful for detecting various sports injuries.

"And, unlike traditional X-rays, MRIs do not expose the patient to radiation," says Strydom.

MRI works because of the large amounts of water present in the human body. Water molecules contain hydrogen atoms, each with a single proton that is spinning. The spinning axes of these protons are

aligned in the presence of the very strong magnetic field applied by the MRI scanner.

A pulse of electromagnetic energy from the MRI pushes the 'spin' on these protons off the aligned path. When the pulse is turned off, the protons begin to move back into alignment, releasing the electromagnetic energy they gained. This energy is measured by the scanner and used to create the MRI image.

To work, MRIs require a coolant to give the magnetic coils in the scanner superconductive properties. This enables

an electrical current to flow through the coils with little resistance, enabling the high intensity magnetic fields to be generated. "Liquid helium is the only medium cold enough to deliver the superconductivity levels required in MRI scanners in metals," Strydom explains.

Another challenge for the imaging business is uptime. Given the high up-front investment and operational costs of MRI equipment, hospitals are keen for these expensive assets to be continuously scanning patients so that the expense can be fully instiffed.

This means that maintenance tasks such as recharging the units with liquid helium need to be completed as rapidly as possible so that units can be returned to service within short scheduled maintenance windows.

"With the most diversified helium sourcing portfolio in the industry, Afrox is uniquely positioned to meet these needs for reliability and speed. In addition, hospitals have the reassurance of our global delivery capabilities.

ery capabilities.
"Our L5 filling capabilities on the liquid helium offering is bundled with an extensive service package designed to maximise uptime and efficiency gains. Extending across the entire logistics chain from ordering through delivery to the point of use, our service experts save MRI operators time and money by ensuring the highest fill efficiency levels in the industry. We even look after inventory management and scheduling to enable hospitals to concentrate on accurate diagnoses and patient care."

month

12 200 potholes

repaired each

Image by Jacob Ode from Pixabay.

THE City's Roads Department has a rehabilitation and reseal programme which is implemented within each district according to priority and available resources. Otherwise, potholes are repaired on an ad hoc basis, as they occur and when residents report these to the City.

'We have a total of 47 teams from 20 depots that are responsible for repairing potholes. In 80% of the cases we are fixing a pothole within 72 hours of it being reported to the Roads Department,' said the City's Mayoral Committee Member for Transport, Alderman Felicity Purchase.

The teams repair on average 12 200 potholes across the city every month.

Although the presence of water is the primary cause of potholes, their formation differs somewhat depending on the existing roads pavement composition. Potholes can also result from non-structural causes such as diesel spillages, vehicle accidents, fires, and poor road drainage over certain subgrades.

The majority of potholes form in the wet or rainy season. When it rains and the water accumulates on the road, tyres from the vehicles actually squeeze the water into the road pavement layer. The repeated pump action between the road surface and the tyres of the vehicles causes ter gets through the cracks and weakens the pavement layer, which in turn leads to more cracking and eventually a pothole forms.

Residents should report potholes in their areas before the heavy rains come to ensure that their roads are able to cope when it rains.

It is not practical to do permanent repairs in winter due to the wet weather conditions.

We often do temporary repairs on potholes. We then return in more favourable weather conditions to do repair work that will last longer.

Temporary repairs consist of infilling the pothole with what is referred to as a 'cold-mix' while the permanent repairs entail the cutting of the existing road surface around the pothole, preparing the base course, apply tack coat to the prepared base course and finally placing the hot premix.

Residents can report potholes to the Transport Information Centre on 080 065 6463. This is a 24/7 information centre and is toll-free from a landline or a cell phone.

Alternatively, residents can email Transport.Info@capetown.gov.za.

'Residents are reminded to please include their name, contact number and the location of the pothole. The exact location is very important because this will save us time in finding the pothole and to do the repairs as soon as we can. We want to thank our residents who have been reporting potholes. We tience while our teams are attending to the increased volumes of reports that we have been receiving,' said Alderman Purchase

No entry for birds, insects or dust



Apex Strip Curtains allow easy access for forklifts at Coca Cola Canners.

TO prevent the ingress of contaminants such as birds, insects and dust into both the production and warehousing areas, Coca Cola Beverages South Africa (CCBSA) recently installed Apex General Purpose Strip Curtains on all the external doors at its manufacturing facility in Wadeville.

James Candy, production manager at Apex Strip Curtains, says that general purpose strip curtains offer a quick and cost effective solution for doorways and other entrances that need to be covered. Most importantly, the locally manufactured Apex General Purpose Strip Curtains feature the

patented Balledge™ design which ensures longevity of the strips even in the harshest applications. Constant movement through conventional strip curtaining often results in tearing of individual strips which compromises the thermal seal.

Candy explains that this is not the case with Apex General Purpose Strip Curtains which incorporates this special reinforced edge. "The Balledge™ allows both people and motorised materials handling equipment to enter and exit without snagging or scratching. And while closed the individual strips form a very effective seal preventing birds and insects from entering."

The PVC strips are made from specially formulated material which is exceptionally durable and is transparent allowing good visibility for safety. The strips do not become brittle or discolour with age, even when exposed to external elements.

In total Apex General Purpose heavy duty 400 x 4 Strip Curtains were installed in four large doorways with dimensions of 5 metres by 5 metres. The installation is on galvanised mounting hardware.

Apex Strip Curtains & Doors was the first company to locally manufacture general purpose strip curtaining in South Africa.





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Spillage crane up for grabs

GRABBING cranes are usually large machines with wide spans and high lifting heights. Not so the Condra grabbing crane installed in February at the railhead serving Sishen Iron Ore Mine, near Kuruman.

Completed in December and delivered by road in January, the crane is the final link in Sishen's ore spillage recovery chain, using its 0,5 cubic metre clamshell grab to transfer dumps of ore spilled by the conveyor system and subsequently recovered, into railway cars.

This double-girder electric overhead travelling grabbing crane is a relatively small machine with a capacity of 1,5 tons, a span of just 7,2m and a lifting height of a fairly standard 5,7m.

Condra has previously manufactured much bigger grabbing cranes for various applications, such as the 25-ton 30mspan machine for a cement factory in Mozambique, but the Sishen specification called for a very high degree of operational precision, resulting in the need for low-tolerance engineering of the crane clamshell grab so that it can move smoothly in and out of the railway cars.

Working speeds are quick for the short distances involved. Crosstravel speed is 16m/min for the 7,2m end-to-end travel distance. Long travel speed is 32m/ min for a gantry length of just 20 metres. Hoist speed is 6,2m/minute.

A Condra spokesman explained that the design challenge lay in configuring a crab to operate within the relatively tight travel and lift

Crane input over three continents

AN order shipped in February by South African company Condra provides a good example of international cooperation, with manufacture of a crane and five hoists taking place in southern Africa to the design specifications of a North American consulting firm, and installation being effected in Guyana, South America, where the Bonasika bauxite project near the Essequibo River is using the machines for general loading duties and in workshops.

Development of this open-pit bauxite mine began in June of last year.

The order placed on Condra comprised a 5-ton 13,5m-span single-girder electric overhead travelling crane and five hoists.

"For a grabbing crane this is a very confined area in which to work. Spans and lifting heights are usually much larger," the spokesman said.

"There was also the design requirement to be able to dismantle the crane beyond the normal requirement of transporting an abnormal load by road,

because shipping was scheduled to take place in the second half of December during the road network embargo on abnormal loads which allows free flow of peak seasonal holiday traffic," the spokesman explained.

Although the dismantling requirement was met and the crane completed on schedule,

transport was for various reasons delayed to January.

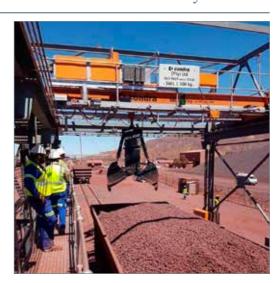
The spokesman said that manufacture of the crane was relatively straightforward and standard, though the lead time of twelve weeks was tight.

"As far as crane technology goes this was a very interesting crane to build, with several

design and fabrication challenges," commented the spokesman.

"We are happy to have it in our portfolio of successfully engineered bulk handling products."

Photograph shows Condra grabbing crane working at the railhead serving Sishen iron ore mine, near Kuruman.





portal cranes | bridge cranes | cantilever cranes | hoists | end-carriages

single & double-girder overhead travelling cranes | crane components

High-resolution wind resource map for South Africa, now available

THE high-resolution wind resource map for South Africa was launched recently at the final Wind Atlas for South Africa (WASA) Seminar.

In the keynote address, delivered by Ompi Aphane on behalf of the Department Of Energy's Director General, he noted that wind energy remains an integral part of South Africa's renewable energy plan.

"It would be difficult to plan thoroughly for the increased uptake of wind energy if one does not have certainty on wind resource availability.



"Therefore, the need for reliable, accurate and representative data on wind is critical. It is for this reason that the Department of Energy undertook to complete WASA, the wind atlas of South Africa," he noted.

"WASA constitutes

one of the most critical elements of South Africa's renewable energy efforts due to its contribution to the repository of knowledge about the scale and location of our wind resources. Thanks to the WASA project, South Africa has developed an excellent wind resource assessment capability at key public institutions, namely CSIR, South African Weather Services and the University of Cape Town, which allows for the planning of large-scale exploitation of wind power nationally.

"Secondly, we have

also developed critical project management and knowledge management expertise particularly at the South African National Energy Development Institute and the CSIR, which hosts the WASA project database and website," he added.

Greenpeace not happy

This country is blessed with some of the best renewable energy resources in the world; it's time to back renewable energy

IN response to the announcement that French oil giant Total has just made a significant oil and gas discovery 175 km off the southern coast of South Africa, Greenpeace (www.Greenpeace.org) Àfrica's Senior Climate and Energy Campaign Manager, Melita Steele, has said:

"Greenpeace Africa strongly condemns Total's reckless oil exploration off the coast of South Africa. Discovering yet more oil and gas is not something to celebrate when burning fossil fuels is driving potentially catastrophic climate change. This is essentially oil that we

cannot afford to burn in the face of extreme weather conditions and recurrent droughts.

"Deep sea drilling is far too risky. The possibility for an oil spill always exists, and the environmental impacts of deep sea drilling for oil and gas are too significant to be ignored, with very little benefit or job creation for South Africans. It is reckless of the South African government to allow oil and gas exploration to go ahead, and unfortunate that this was lauded as a victory at the State of the Nation Address last night.

According to NASA, 2018 was the fourth



warmest year on record, and it is clear that if we are serious about stopping the worst impacts of climate change, then some fossil fuels must remain in the ground. This country is blessed with some of the best renewable energy resources in the world; it's time to back renewable energy, and stop the reckless and dangerous dash for fossil fuels."

Renewable energy for our cities and towns

THE WWF Nedbank Green Trust has launched an in-depth investigation into the existing electricity distribution system at metro and municipal level in South Africa in order to develop workable models for metros municipalities. The study will also make recommendations for alternative sources of revenue and funding from renewable energy (RE) to cash strapped municipalities," says WWF-SA Urban Futures Programme Manager Louise Scholtz.

Key partners this investigation are South African the Government Association, South African National Energy Development Institute, Association of Municipal Electricity Utilities, the Centre for Renewable and Energy Sustainable Studies at University of Stellenbosch, the met-



ros as well as selected smaller municipalities.

The 2019 WWF Nedbank Green Trust investigation builds on work by WWF-SA and its partners, metros and municipalities. In 2018 a household and industrial energy survey was conducted in partnership with the Centre for Renewable and Sustainable Energy Studies at Stellenbosch University to determine who converts to RE, what motivates them to do so and how this could assist city planners. National sampling for the survey consisted of 2 678 online respondents from all over South Africa.

The City of Cape Town is busy with a comprehensive audit of its current RE footprint, using aerial photography. It has also lodged a high-court application to allow it to purchase electricity from independent power producers.

Current disputes about how the electricity regulatory system must change need to be resolved. Policies and processes also need to be developed to ensure that private owners of RE who are connected to the grid register with their municipalities and pay a connection fee, as all electricity users must do. This is key from a municipal planning perspective. Equally important is the need to address grid defection through a suitable tariff system that will make it attractive for private owners of RE to feed into the grid.

While Eskom has not considered largescale migration from fossil-fuel-generated electricity, an escalation in RE is essential to growth and development in South Africa and the reduction of our hefty carbon foot-

Alternative power solutions help cope with load shedding



An example of a standby power generation solution from Cummins.

FROM mines to factories and even the small business and residential sector, Cummins has a full range of alternative power solutions on offer. Its technology is particularly suited to dealing with load shedding due to features such as full load acceptance for critical equipment.

In addition, its energy-efficient engines not only comply with international emission standards, but also have a high fuel tolerance level, which makes them ideal for arduous African opconditions. erating In terms of automatic start-up, Cummins gensets have one of the best response times on the market.

The key differentiator of Cummins is that it is able to supply a small 17 kVA genset for residential or commercial use, all the way to a 3 750 kVA unit for mining, data centre, and hospital applications, for example, Sales Manager: Cummins Power Generation Zivai Zvinokona explains.

In addition, Cummins can also supply one-stop solutions for multiple back-up power requirements for largescale clients such as mining operations or factories. It not only provides the gensets themselves, but all ancillary components, from air and oil filters and even coolant.

"Clients also have peace of mind in that we only use certified installers,..."

"This is integral to our value proposition, as it not only allows us to offer the highest-quality products, but also to ensure that they are serviced and maintained properly," Zvinokona notes. Cummins has a fully-fledged training facility where its own technicians and clients can receive customised training on any engine platform. This training is fully accredited, with certificates presented to all successful candidates.

Another significant benefit for Cummins clients is that it can supplement its gensets with maintenance contracts of varying duration, depending on the application and specific requirements. This ranges from simple inspection and cleaning to a recommended yearly service of any standby units. "Clients also have peace of mind in that we only use certified installers, in addition to being able to offer the type of warranty that sets an industry benchmark,' Zvinokona stresses.

Cummins can even become involved with the design phase of alternative power solutions, all the way through to installation and commissioning. Fully-trained nicians are located throughout South Africa, in addition to an extensive dealer network that can also accommodate remote locations.

Commuters to be covered

THE City of Cape Town has commenced with the installation of roofing and glass panels to cover the exposed walkways at the MvCiTi stations in Atlantis and Table View. The work will take place at night, outside of the MyCiTi operating hours.

The walkways connecting the three commuter platforms at the MyCiTi station in Atlantis and the two platforms at the station in Table View are

currently exposed.

'These two stations are extremely busy, and count among the most popular along the MyCiTi network. Given that the walkways are exposed, commuters and school children aren't sheltered from the sun, wind and rain while they're waiting for buses.

Schools in these areas and local residents had requested the City to consider improvements to the

design to make the stations more commuterfriendly.

The total project cost is approximately R11 million. Up to R6 million is budgeted for the work at the station in Reygersdal Drive in Atlantis, and about R5 million for the station in Blaauwberg Road in Table View.

The project will be completed within six months, if there are no unexpected delays.

All in all, 11 Port Jackson fig trees will also have to be relocated to make way for the roofing at both stations. The trees will be replanted at other My-CiTi stations and stops across the city.

Commuters contact the Transport Information Centre 24/7 on 0800 65 64 63, or follow @MyCi-Tibus on Twitter, or visit the facebook page 'MyCiTi Integrated Rapid Transit System' for the latest information about the MyCiTi service.

Goscor extends a helping hand



Darryl Shafto, MD GLTC, signing the cheque for the Enez Foundation.

AS part of its belief that much of a country's success lies in the involvement of corporates in their communities, the Goscor Group has extended a helping hand to four needy charities with a R30 000 donation to each of them.

"At Goscor, we believe that business should be an active citizen. This should be motivated by the desire to contribute to building better communities. It is rooted in our understanding that business is not separate from society, but inextricably bound to the fortunes of its people," says Goscor Group CEO Neil Wilson.

Wilson is of the view that any corporation's CSI initiative shouldn't be driven by regulation, but by the company's desire and commitment to the well-being of the society it serves. He adds that companies

can exhibit their inherent, welfare-creating strength by means of words and action.

By actively tackling issues that affect society, individual companies can show that voluntary efforts are more effective than regulation.

"At Goscor, we believe that business is the cornerstone of prosperity in society. Apart from creating jobs, offering goods, services and processes, as well as investing in the skills of our employees, we have always gone the extra mile to make a difference in other parts of communities we operate in," he says.

With that in mind, the Goscor Group has made R30 000 donations to four recommended charities. Three of the benefitting charities are based in Gauteng and one in Cape Town. The three Gauteng charities are Little Eden, TLC Charity and El-Shammah, and the Cape Town beneficiary is The Enez Foundation.

The Enez Foundation

The Enez Foundation provides services in substance abuse, which include individual and family counselling, group and employee workshops that are designed to assist the individual, their family members, colleagues and educators. It also assists with the reintegration of the substance abuser into the

family system. Providing service in areas like Paarl, Stellenbosch. Somerset-West and Malmesbury, The Enez Foundation is the only resource centre of its nature for families in the northern suburbs of Cape

The Enez Foundation strives to empower affected families by educating them about addiction and its effects. It also provides support to spouses, parents, partners and children affected by addiction.

Its mission is to affordable counselling services to families and substance abusers and to offer workshops that highlight the effects of addiction on family members; the impact of it in the workplace; government sector, education systems, including tertiary institutions; as well as churches and communities at large.

D of Agri provides drought relief

DROUGHT support in excess of R40 million has been allocated to farmers in the province for the months of March and April.

Department The of Agriculture in the Western Cape has been providing livestock farmers with vouchers to buy fodder throughout the drought.

During the second round of the summer Provincial Disaster Risk Assessment, conducted earlier in March, it was determined that monthly support to farmers in the Central and Klein Karoo will continue, as veld conditions in those areas had not improved.

Most areas of the Overberg had shown recovery and as such, support is no longer being provided. However, specific areas are still deemed to be

critical and these will continue to receive support.

Support is also still being offered to farmers in parts of the Cape Winelands, West Coast and the Garden Route.

Minister of Economic Opportunities, Beverley Schäfer said: "Agriculture is an important sector of our economy in the Western Cape and we continue to support farmers throughout this difficult period in a bid to ensure that they can continue farming, thereby supporting important agricultural jobs."

The breakdown for fodder support for March 2019 is as follows:

Central Karoo: fodder support to 631 farmers to the value of R8 982 048.22

Part of the Cape

support to 65 farmers to the value of

R525 032.42 West Coast: fodder support to 780 farmers to the value of

R7 626 311.62 Garden Route (Eden) & parts of Overberg: fodder support to 451 farmers to the value of R4 317252.80

The fodder support for April 2019 has been provided as follows:

Central Karoo: fodder support to 632 farmers to the value of R8 942 584.00

Part of the Cape Winelands: fodder support to 59 farmers to the value of R 434 822.18

West Coast: fodder support to 443 farmers to the value of R4 788 615.30

Garden Route (Eden) & parts of Overberg: fodder support to 599 farmers to the value of R7 048 245.28.

Space for Macassar's farmers

HISTORICALLY fishing and boat-making community, the small town of Macassar in Cape Town is branching

out to farming.
The Cape Agency for Sustainable Integrated Development in Rural Areas contacted Kwikspace about providing alternative building solutions that are prefabricated and modular for these emerging farmers.

The emerging farmers of Macassar farm vegetables in tunnels and needed office space as well as a vegetable processing area. With Kwikspace's innovative products for any sector requirement, they had the solution -



Emerging farmers in Macassar use tunnels to grow vegetables.

two double-wide modular units. Each unit is 15 m in length by 7 m in width.

Kwikspace is a sperelocatable cialist building manufacturer

in South Africa. Their modular construction double-wide structures can be used for industrial, residential and commercial applica-

Technology to achieve uniformity in the vineyard

ON Tuesday, April 9, precision agriculture company Aerobotics recommendations relating to postharvest vineyard management to a room full of wine farmers at the first event of its kind at Workshop17 in Paarl. Aerobotics hosted the event to help farmers and the industry get new ideas and input on novations in precision agriculture to lay the foundation for a strong start to next season.

presentation The and recommendations were made by Aerobotics' Head of Agronomy Devin Osborne. Osborne revealed how to use technology to achieve uniformity in the vineyard. He also made recommendations on when farmers should utilise drone technology and analytics to build a better foundation for next season.

"A lot of farmers

are misled into believing that the variation in vineyards attributes to the uniqueness of the wine and start talking about terroir," said Osborne. "The key to growing world-class grapes and producing an excellent wine is obtaining uniformity as this allows for consistency. We can then start talking about terroir."

drone flight of the season should be done at first leaf. Using Aerobotics to obtain and process the data from this flight will enable farmers to monitor early season growth, evaluate bud break and locate deficiencies in vine resources. The second drone flight should happen during flowering and fruit set. The third drone flight should be conducted during fruit ripening, known in the wine in-

dustry as veraison. According to Os-

portant use for drone flights after the harvest is completed. The data and analytics from this flight can be used to locate vines and blocks that are stressed after the harvest. This enables wine farmers to create zonal maps for representative pling and also helps them to prune moderately on zones and harder on more fertile zones.

"Healthier vines during this period generally have higher carbohydrate levels going into dormancy," said Osborne. "Partnering with Aerobotics to capture and process the

data from post-harvest drones flights empowers farmers to build a solid foundation for the next season "

Aerobotics

cesses data from drone and satellite imagery through its proprietary artificial intelligence software to discover and analyse problems, pests and diseases affecting individual trees or vines health, the software also measures size, height and canopy volume. This type of highly accurate data empowers farmers to make better decisions in the field, so they can increase their yield and produce a more balanced crop.



Center for Distributed Power and Electronics Systems (CDPES) **Battery Test Center**

The new 'BattLab', battery testing laboratory funded by the National Research Foundation (NRF) equipment grant, is able to complete a host of battery testing regimes. The facility is a multi-channel charge/discharge tester for battery modules, packs and individual cells. The regenerative battery test system is suited for different battery chemistries such as lithium-ion, lead-acid, nickel-cadmium, etc.

BattLab comprises the Chroma 17020 battery test system which is a high precision system specifically designed for secondary battery modules and pack tests. Accurate sources and measurements ensure the test quality that is suitable to perform repetitive and reliable tests that are crucial for battery modules/packs, for both incoming or outgoing inspections as well as capacity performance, production and qualification testing. Chroma's 17020 system is equipped with multiple independent channels to support dedicated charge/discharge tests, on multiple battery modules/packs, each with discrete test characteristics. The channels can easily be paralleled to support higher current requirements. This feature provides the ultimate flexibility between high channels. count and high current testing. Advanced hardware design can create seamless transitions between maximum charge and maximum discharge (or maximum discharge and maximum charge) with a rapid 50 ms conversion. This feature allows for charge/ discharge modes simulating real world scenarios. Incorporates various battery testing standards such as IEC 61960, IEC-62391 and



Learning test for manufacturer

Life cycle test Balance control test

Direct current internal resistance (DCIR) test Capacity test

Performance test

Reliability test

Over charge/discharge test Thermal test

Impedance test Abuse test

Battery management system (BMS) test





For further information please contact Prof MTE Khan at 021-959 6246/6208 or khant@cput.ac.za

Flight simulator – a logistical challenge



PANALPINA's global contract with CAE resulted in some interesting work for the Bidvest Panalpina Logistics (BPL) Projects department in January / February 2019. CAE Inc. is a Canadian manufacturer of simulation technologies and was appointed by SA Airlink for the manufacture and installation of a flight simulator to be used in the training of their pilots.

The cockpit of a decommissioned plane was removed by Airlink and shipped to CAE in Canada where it was converted into a flight simulator. The flight compartment was shipped back to SA along with a Back Projection screen as abnormal sized cargo.

Various components to make up the complete simulator accompanied the shipment in HC containers. On arrival at Airlinks' newly built simulation Bay at ORTambo, BPL Projects, Panalpina's Technical Engineering Specialist from Switzerland, Mr Marcel Fehr, and its rigging team unpacked containers and offloaded the abnormal cargo from low bed vehicles.

Components of this simulator consist of the flight compartment, a back projection screen and a mirror bowl. All this equipment is very sensitive and out of gauge when assembled. Once assembled by the CAE technicians, the flight compartment had to be rigged into the simulator bay, making use of mechanical skids before the projection screen could be lifted on top of the flight compartment. For this lift, a 41-ton mobile crane was positioned in the doorway entrance of the simulation bay. When the back projection screen was in place on the flight compartment, the mirror bowl was positioned on top of the BPS/flight compartment combination, using the same mobile crane and a special fitting supplied by CAE to lift this sensitive equipment. After all components were fitted, the unit was rigged into its final position before being jacked up to a height of 1.7 metres and placed on aircraft jacks.

The CAE engineers then installed actuators and programmed the simulator for training of pilots.

The entire project took eight days and followed the guidance of a very detailed method statement, which often had to be deviated from considering the unique challenges presented by the lack of working space and equipment different to that used in other parts of the world.

Reachstackers for container-handling

BLTWORLD's extensive range of container handling equipment encompasses lor loaded and empty container handlers, as well as reach stackers - designed for versatile operation, enhanced performance and improved safety in busy container handling environments, particularly port operations.

"The Taylor XRS-9972 reach stacker, with a high-strength telescopic boom, is designed to handle loaded containers stacked up to five high in the first row, four high in the second row and three high in the third row," says Ken Mouritzen, managing director, BLTWORLD. "This container handler, which is built on a 6 550 mm wheelbase, is able to stack 2,9 m containers (up to 45 T) five high. The XRS-9972 is built to handle at least a million cycles, where the market standard is about 400 000 cycles, which means greater profitability for the user. High-yield T-1 steel is used throughout the manufacture of each truck, enhanced by horizontal/full penetration welding techniques and heavy-duty components working together to deliver high productivity and ensure extended service life. "This robust truck

features a 388-HP Tier 4 certified turbocharged diesel engine, a top-pick four-point spreader, hydraulic cab positioning for precise control and end-user diagnostics that allow users to customise operating parameters, without the need for a service call. The TICS (Taylor Integrated Control System) provides a safe and reliable service, utilising CANbus technology for accurate control and diagnostics. For operator convenience, data is clearly displayed on a dash-mounted full-colour display screen."

This spreader attachment includes hydraulic side shift and slew, as well mechanical pile slope adjustments. Hydraulic motors enable 95° counter-clock-wise and 185° clock-wise ro-



BLTWORLD's Taylor XRS-9972 reachstacker, with a high-strength telescopic boom, is designed to handle loaded containers stacked up to five high in the first row, four high in the second row and three high in the third row.

tation. This design feature separates control of the spreader cylinders, giving the operator greater manoeuvrability, which results in quicker lift cycles.

The all-welded steel cab can be moved electrically at the touch of a button - forwards or backwards - for easy access to engine, transmission, radiator and pumps, allowing for quicker maintenance checks for reduced

downtime.

The open design of this series enables easy access to hydraulic cylinders, valves, hoses, and electrical components, allowing quicker preventative maintenance and service diagnostics. No components are hidden within the attachment structure.

Over-sized windows and a T-shaped dashboard provide excellent visibility for the operator. A low-effort multi-function joystick, with integrated directional shift control, is mounted on a large adjustable armrest, to provide easy control of lift/lower, boom-in/ boom-out, attachment rotation and twistlock operation functions. These ergonomic advantages provide a comfortable, stress-free environment, allowing the operator to concentrate

DHL brings over 200 global online stores to African consumers with innovative platform

DHL Express has announced the launch of its new mobile and desktop app aimed at improving the online shopping experience for Africa-based consumers. The exciting new platform, DHL Africa eShop, enables customers to shop directly from more than 200 US- and UK-based online retailers, with all shipments delivered by DHL Express, to the shopper's door. DHL Africa eShop will be available in

11 African markets to start - South Africa, Nigeria, Kenya, Mauritius, Ghana, Senegal, Rwanda, Malawi, Botswana, Sierra Leone and Uganda.

This solution was developed in partnership with Link Commerce a division of Mall for

Heymans, Hennie CEO of DHL Express Sub Saharan Africa, says that the DHL Africa eShop app offers African consumers much greater

access to international retailers on an easy-touse platform. "DHL Africa eShop provides convenience, speed and access for online customers in Africa. As the global leader in express logistics, DHL is well positioned to connect African consumers with exciting global brands. This is yet another opportunity for DHL to reaffirm its commitment to supporting the growth of e-commerce in the re-

According to a report by McKinsey Global Institute, the demand for world-class online shopping opportunities is growing exponentially in Africa's leading economies, as urbanisation and incomes continue to rise.

Despite the growing demand, many US and UK-based retailers do not offer shipping to African countries, owing to the perceived logistical challenges involved such as high last-mile

delivery costs and fraud concerns. However, DHL Express was the first express operator to set up in Africa over 40 years ago, so we are well positioned to offer innovative and reliable solutions on the continent."

"E-commerce offers enormous potential for the region, and we are proud to provide this platform to further connect African consumers with global opportunities," concludes Hey-



Freight forwarding challenges grow as economy struggles

WARDING is a tough industry where price is king and forwarders are price takers rather than price setters, forcing many operators to discount heavily in order to close deals. These discounting measures without weighing up the related risks can adversely affect the quality of service delivered and the outcomes for both forwarders and clients,' says Kennedy Ntenjwa, Marine Broking Centre Manager at Aon South Africa.

Seemingly, the biggest threat is the magnitude and complexity of risks that transport companies are willing to take on in order to secure business, without thoroughly interrogating the financial and liability implications if something does go wrong.

"We see forwarders taking the bare minimum of cover on a general commercial policy in order to save on costs, instead of working with a broker to ensure that the cover is purpose built for the real risks facing the business and industry. Even more worrying is the growing number of operators who have no insurance cover at all, taking on risks and assuming liabilities that are well beyond their capabilities and that equally leave their clients in a massive predicament if things go awry," says Kennedy.

In an embattled economy, solid risk stratemanagement gies need to be front and centre, backed by appropriately scoped insurance covers to protect the bottom line of the business and the client's goods entrusted to it.

Aon offers the following important tips to freight forwarders when taking on new business and ensuring that the appropriate risk management measures is in place:

· Thoroughly understand what you are taking on with every client: With a firm focus on securing business, freight forwarders are often rushed into signing contracts with clients without thoroughly interrogating the terms of the agreement or the liabilities they entail. Do not get pressured into signing rushed agreements without fully understanding the

risk that you place your business, your reputation and your people under.

Escalating crime: The level of crime related to the freight forwarding industry is omnipresent. Sophisticated crime syndicates are targeting anything from tech items, consumables and shoes through to cigarettes and liquor. The modus operandi is to jam radio frequencies around the truck, severing contact with control rooms, leaving the driver and the load at the mercy of these brazen criminals.

Training and

- vetting employees properly: Driver training is crucial, not just from a vehicle handling perspective but also from a cargo loading and handling point of view. Drivers often do not know how to load or label cargo, or to recognise when something is fragile. Perishables are a major concern with drivers not understanding the correct temperature to set the thermostat at, or simply not setting the temperature at all for cargo that needs a temperature-controlled environment, such as meat or dairy products.
- Legislation: Freight forwarders are operating in an increasingly litigious environment, where operators need to make sure that the business understands what is being transported, the risks associated with and regulations surrounding items being transported, particularly pertaining to the transport of hazardous chemicals such as pharmaceuticals combustible substances or dangerous gasses.

Much more stringent and detailed roadworthiness regulations are also on the horizon.

"Operators need to familiarise themselves with these new developments, as insurance cover is dependent on the vehicle being roadworthy, ultimately necessitating the implementation of a comprehensive vehicle maintenance programme," says Ken-

Electric forklifts lift higher

IN line with global trends, provider of materials handling equipment in southern Africa, Goscor Lift Truck Company, (GLTC) Company, (GLTC) reports there is also a growing preference for electric forklifts in South Africa.

In its recent report, research company Technavio forecasts that the global battery-powered forklift market will grow at a compound annual growth rate of 9% from 2018-2022.

Darryl Shafto, MD of GLTC reveals that the company recently delivered a big order of 55 electric Doosan B35-Pro7 4-wheel counterbalance trucks to AB InBev in preference to its usual order of gas-powered trucks.

Key drivers

From a sector perspective, electric trucks are especially popular in the food and bottling, retail and distribution sectors. These industries prefer electric forklifts owing to their low greenhouse gas emissions and noise

"Apart from the environmental benefits, electric forklifts also offer lower running costs compared with their internal combustion engine counterparts. Bear in mind that fuel is a major cost component of most logistics operations, and any opportunity to cut this cost is most welcome," says Shafto.

From a running cost perspective, Shafto reasons that a batterypowered forklift can be as much as 50% less than the cost of propelling an internal combustion engine forklift.

"Additionally, electric forklifts generally have a longer lifespan than internal combustion engine forklifts. With electric forklifts, services are also less frequent - scoring a 3:1 advantage over an internal combustion engine forklift which translates into huge cost savings," adds Shafto.

Meeting demand

With its wide range of electric forklifts available, Shafto says GLTC is well equipped to meet local customers' needs. "For example, our principal, Crown, only manufactures electrics which target the warehousing sector - such as the powered pallet truck range (WP, WPS, WT and GPC), the three-wheel counter balance (SCT) and reach trucks (ESR)," he says.

Meanwhile, another GLTC principal, Doo-



Loading operations with a Doosan NX series forklift.

san, is targeting the four-wheel counter balance market, which is traditionally dominated by gas and diesel ranges. This is regarded as the benchmark for electric trucks in four key areas: productivity, ergonomics, safety and serviceability.

Advancements in battery tech

"Our ranges of electric forklifts are powered by lead-acid, copper stretched metal (CSM) and lithium-ion batteries. Lead-acid batteries have for years been trusted as the power source for electric forklifts. The usage of these batteries in material handling equipment has proved to be more cost-efficient diesel and gas equivalents," explains Shafto.

One of the downsides of lead-acid battery technology has always been short intervals between recharge, resulting in unwanted downtime. However, with improved battery technology and management systems, leadacid battery cycles have improved from 1 250 cycles to between 1 500 and 1 800 cycles, according to Shafto.

There have also been advances in the battery technology with the arrival of CSM and lithium-ion batteries, which also does away with traditional battery bays. "Lithium-

ion batteries, in particular, have improved cycles of up to 3 000, compared with 1 250 on older technologies. Last year, Doosan gave a glimpse of its new high-tech forklift, running on lithium-ion batteries. Thanks to this new power source, the B25S-7 Series will run two to three times longer than with the existing lead-acid battery, with 33% shorter charging time," concludes Shafto.



Ready for inspection

Quality inspection is critical in all manufacturing and packaging lines

FOR products in the pharmaceutical industry, quality inspection of the packaging is especially critical. An unreadable barcode or an incorrect expiry date could result in perfectly good medication being discarded. And increasingly strict legislation is making clear marking a top priority for all types of products.

All production lines face challenges regarding inspection and quality control. But in the pharmaceutical industry, mistakes must be avoided at all costs. Therefore, the pharma industry leads the market in ensuring its line equipment delivers the best guarantees against defects. The effects of defects reaching the public domain can be far-reaching, affecting everything from consumer health to brand confidence.

Governments want to protect their citizens, and as a result, are enforcing ever tighter restrictions on package markings, especially in the pharma sector. For example, in South Africa, the government reviewed the Medicines and Related substances Act in August 2017 to ensure that it complies with the standard of the World Health Organi-

All present and correct: Omron system solution

Omron systems cover all parts of the production line, including quality inspection. Whether providing a complete system solution or a partial upgrade to an existing system, each component is geared towards ensuring the highest quality control. For



inspection and quality control, Omron's compact visual inspection units monitor production in real time and respond instantly to any defect.

Data sent from the vision system is processed locally and sent via the cloud for powerful analysis that allows the system to take appropriate actions. The system is totally interlinked, with the improved connection between machines in a manufacturing line delivering more

accurate quality control and higher efficiency. If any error is detected, the system can often compensate automatically, allowing production to continue unaffected. Omron's smart automation solutions are very fast and possess lots of processing power, yet they are easy to use. This combination of speed, intelligence and user-friendliness delivers the most effective inspection and quality transparent control.

Following the rules

For an inspection system to be able to make smart decisions, it needs to collect data from a sensor, such as a vision camera. Vision cameras can be set up to monitor different aspects of the product, perhaps to check for imperfections, or to check labels for misprints or missing information. Powerful processing then analyses this data to monitor the process, comparing actual results with expected results. If any problems are found, the system follows programmed rules on how to respond to any

It may even be able to deal with the matter automatically, but in every case an operator will always be informed for correct process management and in case any additional action that might be required.

The more data there is, and the more processing performed, the 'smarter' the machine can be to help keep manufacturing lines running longer, with less downtime and higher productivity. All data is logged by the system and is typically stored in the cloud. This also helps meet regulations as operations can be later reviewed for auditing purposes.

Flexibility, now and in the future

In addition to catching production errors and reducing waste, a further advantage of an effective inspection and process management system is flexibility.

By combining vision, motion, control, safety, and robotics, all in a single management system, such as Omron's Sysmac Studio, production lines can readily accommodate short production runs and adapt to market demands. Line set-ups can be changed quickly for new production runs, and the recognition pattern for quality inspection can be updated easily in the software. This ensures different variants or even different products are produced and packaged correctly.

The system is also future-proofed as it can be easily adapted to accommodate any changes to regulations. Therefore, manufacturers do not need to worry about what they might need to do to their production lines to meet future regulations. All that is required is to rollout a new firmware update for the existing solution.

Novel solar solutions for transport operators

SINCE partnering with its first major client Shoprite Checkers in 2017, Resurgent Energy claims to be a frontrunner in the development, fitment and maintenance of integrated solar powered systems for the trucking industry and by so doing helps to ensure a sustainable and affordtransportation infrastructure in the country, now and into

the future.

One novel application of solar technology developed by Resurgent Energy is its custom built "Solaron-the-move" systems which have been perfected over the past two years. Solar and battery storages systems vastly reduce the trailer's consumption of diesel fuel by independently powering the Cryo-refrigeration

unit, tail lift system, security and fleet tracking systems simultaneously. Systems are guaranteed for a minimum of 5 years which translates to a quick investment pay off period and immediate fuel cost savings.

Resurgent Energy currently has upwards of 500 fully operational solar powered trailers nationwide.

Innovation and tech-

nology are key differentiators in the highly competitive solar market. "With our diverse expertise, strong commitment to quality standards and innovation-driven culture, we have introduced game-changing stratagems to the benefit of our clients" adds Steven Burford, Technical Director of Resurgent

An unreliable na-

tional energy grid and subsequent load shedding conditions, added to the rising electricity tariffs have presented a logical business expansion opportunity for Resurgent Energy.

Development and introduction of an all-inclusive plug-andplay solar and battery storage inverter system that is affordable and accessible, was a natural extension to its

product offering. "The Load Shredder" scaled systems are designed to suit average levels of consumption for small to mid-scale households and businesses. It is compactly designed, conveniently pre-assembled, tested and packaged. Further expansion into the minigrid scale energy storage market for larger business applications Resurgent positions

Energy as a turn-key alternative energy solutions developer and product supplier.

Resurgent Energy will be showcasing its solar and battery storage solutions in collaboration with Eberhart Martin CC, at Africa Utility Week from 14 - 16 May 2019 Cape Town International Convention Centre, Stand C42 on the Main exhibition floor.





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Global events company launches in two new territories

THE launch of HI Design Americas and The F&B Summit in Oman expands company's suite of hospitality brands as international reach grows.

dmg events, the international company, is expanding its global reach with the launch of HI Design Americas in the US and The F&B Summit in Oman.

HI Design Americas and The F&B Summit are niche events for the hospitality sector focusing on personal contact between buyers and suppliers.

HI Design Americas will debut at the Omni Amelia Island Plantation, Florida from 9 to 11 September this year. On the 23rd of that same month, The F&B Summit will launch at the Shangri-La Barr Al Jissah Resort, in Muscat and run until the 25th.

The launches complement the company's existing exhibitions model, anchored by the Hotel Show series and its design event IN-DEX. The Hotel Show is celebrating its 20th year in Dubai, with the geo-adapted editions growing fast in Saudi

Arabia and South Africa. HI Design in particular cements the gap between the two sectors – hospitality and design - perfectly complementing The Hotel Show and IN-DEX offers.

HI Design Americas enters a market where currently there are 1 484 hotels planned or in development across the Americas, more than 500 of which are on the US East Coast. Similarly, the F&B Summit will launch into a region where annual F&B sales topped US\$145bn in 2018 and are expected to rise by another US\$35bn by 2023.

"HI Design is focused specifically on the interior design of luxury hotels," explained Andy Stuart -Senior Vice President - Design & Hospitality, dmg events.

'The event curates specialist business meetings between key buyers from currently active hotel projects and a carefully vetted selection of suppliers. It dovetails perfectly with the work our teams do with a growing portfolio of Hotel Shows, giving us another way to serve our market and reach into new territories.'

In Oman, The F&B Summit will be applying the same oneto-one meeting event model to the Middle-East's vibrant hospitality and food retail industries.

With 90 per cent of all F&B products consumed in the region being imported, the Middle East represents a great opportunity for suppliers to expand their customer base.

The F&B Summit will offer exactly this opportunity to a group of hand-picked F&B suppliers, who will be matched with senior procurement executives and executive chefs from the Middle East's largest hotel and restaurant groups, catering companies and supermarket chains. Collectively they have an annual spend estimated at more than US\$1bn.

Both HI Design Americas and The F&B Summit clearly signal dmg events' strong belief that connecting professionals face-to-face. builds stronger and closer

African Utility Week

14 - 16 May 2019 CTICC Cape Town

THE 19th annual African Utility Week is the leading conference and trade exhibition for African power, energy and water profession-

2019 event brings the addition of POWERGEN Africa, adding an expanded focus on Generation (Including renewables, off grid, fossil fuels and nuclear) while still concentrating on transmission and distribution (including metering), new technologies (including storage, mini grids, micro grids, IOT and ICT systems) and of course water.

The event brings together over 10 000 decision makers to source the latest solutions and meet over 350 suppliers. Along with multiple side events and numerous networking functions, the event



also boasts a strategic conference with over

Visit auw@spintelligent. com for more informa-

The manufacturing event for Africans, by Africans

THE annual Manufacturing Indaba will be hosted at Sandton Convention Centre, Johannesburg from the 25 - 26 June 2019. The two-day event has shown impressive growth year on year and has proved its value in catalysing business connections and helping manufacturers to innovate and grow their potential. The aim of the annual

ba and its provincial roadshows is to bring together manufacturers, industry leaders, government officials, capital providers and professional experts to explore opportunities and grow their manufacturing operations. The event is designed specifically for private and public company representatives to hear from industry experts

lenges and find solutions for growth across manufacturing sectors and explore regional trade into Africa. The event will comprise a two-day conference and exhibition and is hosted in partnership with the South African Department of Trade & Industry (the dti), the Department of Science & Technology and the

Manufacturing Circle, representing the private sector.

For more info on this event, or to register for the Indaba, visit www. manufacturingindaba.

Facebook: https://www. facebook.com/manufacturingindaba/

Twitter: https://twitter. com/IndabaManufact

Pumps, Valves & Pipes Africa 2019

NETWORK and meet local and international suppliers of pumps, valves, pipes and components and learn from others' experiences and find out about new projects and innovative technologies at the forthcoming Pumps, Valves & Pipes Africa 2019 expo and conference 11-13 June at Gallagher Convention Centre, Johannesburg. Other show feainclude: Workshops:

- SABS LSD capacity, infrastructure and CSR Erich Seeger, Senior Manager: Civil Engineering and Johan Louw, Executive: LSD, SABS
- An engineering workbench solution for standards management Justin Hoffmann, General Manager, Bateman Watling & Associates
- Pipeline corrosion protection - choosing the best coating

- Vanessa Sealy-Fisher, Director, Isinvithi
- Selection criteria for critical API 610 process pumps Bhekinkosi Gumede, Machinery Engineer: Cape Town Refinery, Chevron South Africa
- Conference Sessions:
- Pump design, maintenance and operation Presentations from: AngloGold Ashanti, S A W Africa and Eskom
- Control & Automation Presentations from: Franklin Electric SA, SAIMC and nCoded Solutions
- Valves reconditioning, quality control and operation Presentations from: Valve Hospital, LVSA Group and Premier Valves
- Pipe performance and leak detection Presentations from:

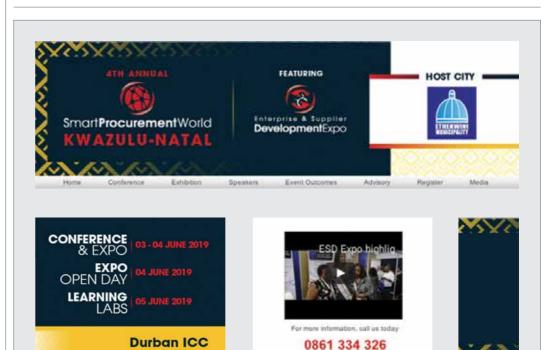
- SABS, Johannesburg Water and PHACT
- Tanks, vessels and drums Presentations from: Hvson Cells, Flexitank Systems and Petro-Base Group
- Stakeholder Engagement Forum:

Ministerial address:

- How will South Africa's energy transition address structural inequality and achieve goals towards Agenda 2063? Honourable Jeff Radebe, Minister of State, Department of Energy, South
- Panel discussion: Integrated urban planning and building for resilience - a roadmap to achieve Agenda 2063 and the Fourth Industrial Revolution (4IR)

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Africa's first international agricultural technology exhibition and conference coming to SA

AFRICA's first international agricultural technology exhibition and conference coming to SA

From the 17th to the 19th of June 2020, Cape Town will play host to the first ever Agritech Africa exhibition and conference, aimed at accelerating agriculadvancements tural on the African continent. Taking place at the Cape Town Inter-Convention national Centre (CTICC), the event is expected to draw thousands of professionals in the field of agriculture from around the world who will be exposed to the developments

and technological innovations in agriculture that can address pressing issues such as climate change, sustainable and inclusive economic growth, job creation and food security.

The event is being brought to South Africa by Kenes Exhibitions – a market leader in conferencing, exhibitions and educational platforms which has been producing exhibitions and conferences around the globe in the agricultural, water technology, biomedical, and cyberspace arenas for the past decade.

"Agriculture provides a source of liveli-



hood for 61% of the 337 million people living in the Southern African Development Community. It is also crucial for food security, which in turn assists in political stability and is central to the development of agro-industries," says Dr Max Wengawenga,

Assistant Chief Economic Advisor to the President of Malawi. "However, the local industry is plagued by challenges like climate change, not being able to meet the standards of international markets, changes in consumption patterns and pop-

ulation growth driving increased demand for food. The way forward in overcoming these obstacles and unlocking the opportunities offered by agriculture is technology."

"It was with this in mind that we decided to host an international agricultural technology exhibition and conference in South Africa – the country at the heart of the African renaissance," shares Kenes Exhibitions Managing Director, Prema Zilberman.

Issues affecting the African agriculture industry, including the management of land and water resources,

food security, as well as the development of an Innovation Ecosystem, will be explored in depth at the Agritech Africa 2020 conference by local and international experts, the names of whom will be revealed over the coming weeks.

Taking place alongside the conference will be an exhibition comprised of an anticipated 200 exhibitors who will showcase cutting edge technologies, products, and systems in the areas of aquaculture; fertilisers and chemicals; livestock and dairy farming; irrigation and water management; plant protection; rural development; poultry; agri-ecology; food security and safety; marketing; exporting and more. Exhibitors will range from start-ups with exciting new technologies, to existing companies with proven or breakthrough products.

"Agritech Africa 2020 will provide a platform to take on pressing challenges faced within the agricultural sector and find solutions that will allow for sustainable economic growth," concludes Zilberman.

For a sneak peek at what to expect, or more information, visit https://www.youtube. com/watch?v=gplRH-2wGX_s

Trade exhibitions: why they are still relevant

IT is largely understood that social marketing is a must-have in any business' overall marketing strategy. You only need to scroll Facebook, through Twitter, LinkedIn and Instagram timelines to find consumers of content, and in and amongst these billions of browsers, you might even find potential users of your services or products.

However, with this mass influx of marketing companies telling you that online is the place to be, it can be easy to overlook the value of seeing potential customers face to face - and history shows us that these customers feel the same way. This is according to Sven Smit, portfolio director at Specialised Exhibitions Montgomery, which is once again running A-OSH EXPO - Africa's largest occupational health and safety (OHS) expo - at Gallagher Convention Centre from 14 to 16 May this year.

"The number of returning visitors from a growing list of countries tells us that the value we believe is inherent to trade shows and exhibitions is also growing," says Smit. "A-OSH EXPO, for example, anticipates welcoming almost 3,500 visitors from over 20 countries who are choosing to attend due, in point, to the fact that we bring well over 100 OHS-focussed exhibitors they actually want to see, all together in one place over a jampacked spate of time."

Smit says the benefits don't stop at visibility but continue through networking, resentment-free sales interactions and staying on top of industry trends and customer pain points. He offers some detail around what to keep top of mind when deciding

whether to attend or exhibit at a trade show.

Access to a targeted, interested audience

Potentially the most attractive part of participating in an exhibition from both a visitor and an exhibitor perspective is that the people vou want and need to talk to are right there. You can be relatively assured of a level of eagerness to learn, engage and absorb, which can't be the assured result using online marketing or cold call tactics, says Smit.

"Exhibitions demonstrate a company's credibility and brand, which brings a certain peace of mind to visitors when it comes to the integrity of the businesses with whom they engage on site – and vice versa when you think about it," he continues. "If ever there were a prime opportunity to expand

a company's network and customer base, this is it, while history proves that customers attending our shows are primed to talk deals there and then."

Showing off is encouraged

Considering that visiting audiences, including in most cases a healthy contingent of media representatives, have done their research and chosen to attend, they will be expecting sales pitches and product demonstrations from your inhouse experts, which makes this the time to prime your sales teams and show off your product sets, says Smit.

"New product launches, existing and new product demonstrations, and networking events on stand are all welcome at expos," he says. "You've paid good money for your space, and most exhi-

bition organisers have worked tirelessly to ensure that the decision makers who may have previously been inaccessible to you are there. This will, as a result, empower you to use this space as comprehensively as possible in talking to them."

Competitor audits and trend monitoring

Generally, larger organisations are known to run expensive annual competitor audits to keep apprised around their competitors and competitor products. These campaigns are not cheap, says Smit, and therefore not a focus for companies with limited marketing budgets.

"Happily, exhibitions bring all of your competitors to one place giving exhibitors a close-up view of what they're up to," he says. "Here, you can see who competitors are target-

ing and the methods they're using to do so. The same sales team you'll be priming to speak to targeted visitors should also be tasked with walking the show floors, and bringing back intelligence on what and how competitors are selling back to the team, as this valuable information can prove vital in shaping the businesses focus going forward."

Using the same simple walk-through methodology, expo staffers can gather industry intel on current and future trends that may otherwise not have been apparent to them. In much the same light, exhibitors and visitors alike will gain valuable insights around concerns and issues affecting their industry at large, making exhibitions a good place for ongoing learning in general.

Smit says he could list many other ben-

efits, including the potential for recruitment, feedback gathering, networking, and brand solidification, even for smaller companies.

"The benefits, from

"The benefits, from face-to-face live-selling to industry trend and real time, current competitor audits, are vast and, with the right strategy in place, the return on investment from both a visitor and exhibitor perspective has been proven time and time again," says Smit.

"At its most basic, exhibitions are here to stay, even if only for the fact that they encourage human interaction, which is a sorely missing result in online marketing campaigns."

A-OSH EXPO, Africa's leading occupational health and safety (OHS) show, is back at Gallagher Convention Centre in Johannesburg from 14 to 16 May 2019. Find out more at www.aosh.co.za



EGYPS 2020 – Egypt Petroleum Show

THE region's leading oil and gas knowledge exchange and networking platform the Egypt Petroleum Show will take place on 11 - 13 February 2020 at the Egypt International Exhibition Center in Cairo.

EGYPS 2020 Technical Conference call for papers is now open. Please submit your abstracts before Thursday 27 June for the opportunity to share your knowledge, experience, research findings, new technology and industry solutions with colleagues from around the

world.
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Africa to see continued oil and gas investment



Dele Kuti, Head of Oil and Gas for Standard Bank Group

AFRICA is likely to experience continued oil and gas investment over the next three to five years as the stabilisation of crude prices above US\$ 60 a barrel, coupled with the continent's rapidly expanding population, lure both major and independent oil producers to one of the world's last remaining energy investment frontiers, says Standard Bank.

A string of successful exploration projects over the last decade has seen the number of African countries with proven oil and gas reserves rise to 28 thanks to new discoveries in Ghana, Niger, Mozambique, Uganda, Kenya, Senegal, Mauritania and South Africa. The investment required to bring these countries on stream will add further impetus to Africa's oil consumption, which at 4 million barrels a day already significantly exceeds the continent's 2.1 million barrels of daily refinery output, according to the bank.

"An expanding population, rapid urbanisation and accelerating economic growth are causing the gap between Africa's demand for gas and petroleum products, and its ability to supply them, to incrementally widen over time," says Dele Kuti, Head of Oil and Gas for Standard Bank Group. "This will serve to attract further investment from both major and independent oil producers, which in itself will exert further pressure on the demand side of the equation as the resulting infrastructure investment in refineries, roads, pipelines and housing drives energy consump-

Africa's oil and gas sector is once again attracting investment from exploration companies and refiners following a prolonged

break sparked by a slump in oil prices which saw crude drop to below US\$ 30 a barrel in early 2016. An improvement in oil prices, which Mr Kuti says are expected to average between US\$ 60 and US\$ 70 a barrel over the next three to five years, are attracting greater interest in the continent, which is seeing a population boom that will likely see the number of people double to 2.5 billion by 2050 according to UN projections. The BP 2019 Energy Outlook says Africa is 6% of global energy demand by 2040.

In 2018, the International Energy Agency (IEA) projected global energy demand would grow by more than 24% to 2040, requiring more than US\$ 2 trillion a vear in investment to bring new energy supply on stream. Given Africa's burgeoning population and economic growth, it is likely that a portion of this investment will be directed towards the continent's relatively untapped energy market.

"All of this investment activity will in turn spur demand for lending, deal structuring and transacting capabilities across the continent," says Mr Kuti. "Institutions with deep knowledge of the continent stand to benefit from those initiatives."

Standard Bank is one of the largest oil and gas lenders in sub-Saharan Africa given its on-theground presence in 20 countries across the

Lighting the way for 52 years

NORDLAND LIGHTING continues its prominent position in hazardous, mining and industrial lighting. The company was founded in 1967 and, after being ISO 9000:2008 certified for many years, it achieved ISO 9001:2015 and ISO 18 000 certification early in 2017.

Providing project specific engineering design services to all its customers, Nordland Lighting's extensive luminaire range are robust enough to meet the requirements of the mining and other industries in Africa and are accepted internationally.

Originally established as an importer of luminaires from Europe, it soon became apparent that the future lay in local manufacture and the company embarked on a process of import substitution. This ultimately resulted in a large range of explosion proof luminaires for Zone 1, 2, 21 & 22 locations; stainless steel and aluminium luminaire ranges, as well as luminaires in glass fibre-reinforced polyester with polycarbonate lenses. The company manufactures in line with South African National Standards to ensure that all luminaires comply with the relevant specifications. Nordland Lighting has been a permit mark holder for its entire range of lighting for use in potentially explosive areas continuously since 1977. Its non-hazardous product types comply with SANS/IEC 60598, and bear the safety mark.

Customers can avail themselves of the free application engineering design service aimed at reducing the risk of implementing inappropriate lighting designs. It's IESSA -accredited professional lighting team combines decades of expertise across all lighting disciplines with the latest lighting software.

Fifty-two years of experience in engineering allows Nordland Lighting to design, manufacture and supply the best possible solution for each specific application through HID or LED technology.

The company has acquired a 49% share in Ramika Projects in 2016 as an enterprise development project. Ramika Projects is a black woman-owned company and a leading role player in infrastructure development for previously disadvantaged communities.

Investors tempted by oil block auction

Angola in recovery mode with oil block auction, new refineries on the horizon

AFRICA's secondbiggest oil producer looks to benefit from a surge in crude prices that could boost companies' appetite for investments with an auction of nine blocks this vear and seeking new refineries.

The tenders for the offshore areas are part of efforts to lure back global explorers that cut spending after crude crashed in 2014, driving down output in the oil-dependent nation. The nine blocks are located in the Namibe basin, Angolan Oil Minister Diamantino Azevedo said, and are part of 55 that local newspaper Expansao has reported are expected to go under the hammer through 2025.

The government is offering tax concessions for companies developing smaller fields, is cutting bureaucracy and selling parts of state-owned oil company Sonangol EP to attract foreign



the efforts are bearing fruit as French major Total SA and Italy's Eni SpA began pumping from new areas in the past year and other blocks are set to start or resume this year, Azevedo said.

Reprinted from oilandgaspeople.com





Hyflo incorporated into **BMG** fluid-technology



This diving system - designed and manufactured by Hyflo - is used in applications where divers are lowered to deep sea levels, when working on oil rig pipelines and oil wells. This is typically referred to as pressure-saturation diving.

THE Engineering Solutions Group (ESG) of Invicta Holdings Limited has incorporated Hyflo Southern Africa into BMG's Fluid Technology divi-

"As part of this re-structure gramme, all Hyflo's customer and supplier trading activities will be integrated into BMG, yet Hyflo will retain its brand presence in the market," says Wayne Business Holton, Unit Manager, Fluid Technology division, BMG.

"We are confident that with access to BMG's central support functions, including engineering, technical expertise and manufacturing skills, we can further

improve our service to our loyal customer base.

"Apart from new customers and markets which are being leveraged through BMG, we are rolling-out our Hyflo product offering through BMG's network of 106 branches, thereby enhancing sales and creating new opportunities for both compa-

"Hyflo's product range and technical expertise are a perfect fit with BMG's Fluid Technology services. Complementary products include hydraulics and pneumatics, hose and fittings, industrial valves, instrumentation, filtration and pumps, as well as lubricants and lube systems. Hyflo's highly-skilled engineer-

ing, manufacturing and field service team will transition into BMG's Engineering division, to ensure continuity for our customers.'

Hyflo's operations

in Bloemfontein, Cape Town and Vredenburg will continue to operate from their current locations, but these branches will eventually become BMG Regional Service Centres (RSCs) - each with a focus on engineering, sales support and the manufacture and repair of hydraulic systems, pumps, cylinders and associated products.

Hyflo's Durban. Johannesburg and Port Elizabeth branches are being absorbed into BMG's existing RSCs in these regions.

Water regulation made easy

INSTROTECH is offering Kobold's REG mechanical flow restrictors and rate regulators, with their simple yet effective functionality which are ideally suited to consumer applications and uniform supply to multiple consumers. Once installed the REG limits flow to a preset value of throughputs of water, or of liquids similar to water, regardless of pressure fluctuations. The flow restrictors ensure equilibrium, particularly in systems with many users and resulting pressure fluctuations caused by random flow conditions. In other words, the desired throughput is not exceeded.

The REG valve operates without power



supply, keeping the flow rate of fluids constant with great accuracy (\pm 0.2 l/min) regardless of fluctuating inlet pressure. The principle is impressive, vet uniquely simple. The constant flow is generated by two stainless steel spring plates of the regulating orifice, riveted together across each other, and

which, depending on the differential pressure, open or close to a greater or lesser extent the ring or regulating funnel thus created. The REG flow limiter can be used wherever a constant flow rate is required despite pressure fluctuations in the system, for example switching a consumer unit on and off.

Notable Benefits

- No auxiliary power required
- Easy to assemble
- Compact design
- Reliable no wearing parts
- Energy-saving
- Easy to fit

So, it is not only in the sanitation and heating fields that unwanted fluctuations in flow and temperature occur, but also in many areas of general industry and plant construction, such as, heat exchange, livestock, cooling circuits, building technologies, filtration, dosing, watering and humidification.

Due to the high quality stainless steel design, REG is completely maintenance-

Knife gate valves withstand harsh slurries

THE Krebs® Technequip™ TGW series of wafer-style knife gate slurry valves was designed specifically for the harsh and abrasive slurries encountered in the mineral processing and power industries, dealing with minerals ranging from cement, sand and gravel to coal, phosphate, ash and alumina.

Designed as a space saving option for heavy duty applications, the long lasting replaceable elastomer sleeves rial build-up in the seat offer a reliable sealing solution using the latest technology. The valve's reliable operation is based on its full port design, which allows the gate to be fully isolated by the sleeves from the process in the open position.

As the gate closes it pushes between the two sleeves, discharging a small amount of material out of the bottom of the valve. This prevents mate-

area ensuring full gate closure, as well as preventing damage to the gate. When the gate is in the open or closed position, there is a 100% bi-directional bubble-tight seal and zero downstream leak-

To ensure long life, all valves are supplied with dust boots - or 'bellows' - as a standard feature, to protect valve stems and actuators. Hardware such as nuts, bolts, and washers are especially zinc-plated to protect against corrosion. Each component is also individually epoxy-painted before assembly. Several actuation options are available, including pneumatic, hydraulic, and electric and bevelgear actuators, as well as manual hand-wheel operators.

Sleeves are constructed of dense moulded elastomer, complete with an integral stiffener ring moulded into the sleeve. They are also available in a range of different materials to suit the application. The valve housing is ASTM A536 cast ductile coated for corrosion resistance, while the upper cavity is pre-lubricated with a silicone-based grease, to improve actuation and decrease wear.

Founded in Toronto, Canada in 1957, Technequip was acquired by FLSmidth in 1993 and integrated into FLSmidth in 2007. installations across the globe, the slurry valves have proved themselves worldwide with features like their fluorocarbon gate coating for reduced friction during actuation, the high strength stainless steel gate clevis and twocoat epoxy paint.

The valves also contain no packing gland, as this can jam the gate, and have machined gate guides so no spacer bars are required. Various accessories are available, including solenoids, limit switches and junction

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Mill circuit pumps reduce operating costs



Warman MCR with reverse rotation during installation.

ENGINEERED for use in the most aggressive duties, Warman® Mill Circuit pumps easily manage large size particles in highly abrasive slurries. These pumps are designed for the most severe slurry applications such as ball and SAG mill cyclone feed as well as water-flush crushing in mineral processing plants.

Marnus Koorts, Product Manager – slurry pumps at Weir Minerals Africa, says that the Warman® Mill Circuit pumps are based on 80 years of fundamental and applied research, backed by wear performance field trials.

"Mill circuit applications are among the toughest in a minerals processing plant, and the Warman® MCR® pumps incorporate the latest in hypereutectic alloy and elastomer technology," he says. significantly "This extends the wear life of the pump in highly abrasive and corrosive slurries, reducing operational costs."

The high resilience rubber wear liner enables the handling of coarse particles and ball scats with ease, while its lightweight design relative to other pumps in its category facilitates safer handling. It is also a lower cost than traditional heavy metal liners.

Importantly, different material combinations are available to ensure that the customer gets a fit-for-application pump capable of providing reliable performance cost effectively, tailored to their site conditions.

Warman® The MCR® pump has a large diameter, low speed, high efficiency impeller. Koorts explains that this can be manufactured from a range of abrasion resistant alloys allowing the most appropriate material to be selected for the customer application.

This will increase wear life and reduce operating costs when compared to other pumps in its category.

Reduced recirculation is achieved by the deep expelling vanes on the front of the high chrome alloy impellers. Expelling vane tip turbulence is minimised by the patented shroud feature that traps tip vortices and prevents localised scouring on the throatbush face. This, again, extends wear life and reduces maintenance.

The split outer casing on the Warman® MCR® pump provides structural integrity and high operating pressure capability, ease of maintenance and safety. This feature also allows internal liners to be fully worn before replacement.

Warman® throatbushes feature preswirl vanes which offer optimum reliability and wear life. There is a patent pending on this innovative throatbush design which was developed to improve impeller eye wear life and reduce the wear caused by recirculation at the impeller-throatbush interface. This has been accomplished by a series of guide vanes in the pump inlet which induce a rotational velocity in the slurry.

An adjustable stuffing box allows for the centring of the stuffing box and lantern restrictor to the shaft sleeve. This increases packing life and decreases gland seal water consumption.

Another new design feature is the singlepoint gland adjustment which facilitates safe packing adjustment outside of the stuffing box guard while the pump is operating.

New appointments for the **Middle East and Africa**

XYLEM Inc. a global water technology company, has announced the appointment of Francis (Frank) Ackland as the Regional Managing Director for the Middle East, and the repositioning of Vincent Chirouze as the Regional Managing Director for Africa. Francis and Vincent are expected

to play a pivotal role in reinforcing Xylem's presence and position in both markets.

The realignment of the Middle East and Africa region into two separate business operating regions comes as part of Xylem's growth strategy of strengthening its leadership position across emerging markets.

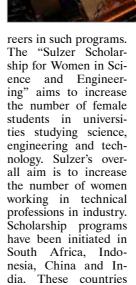
Vincent Chirouze will focus his efforts on expanding Xylem's business in Africa and penetrating growth opportunities across the continent.

He has previously held various leadership positions in Africa and and looks forward to again relocating to the conti-

Sulzer scholarship for women in science and engineering

SULZER has launched the "Sulzer Scholarship for Women in Science and Engineering" directed at female students studying for degrees in the areas of engineering, technology and science. The scholarship ultimately aims to support and increase the participation of women in the engineering industry. Reflecting its presence and its business needs Sulzer is currently initiating these scholarships in collaboration with universities in South Africa, Indonesia, China and India.

Sulzer has a long history of providing internship, apprenticeship and university support programs for students in many countries. For Sulzer, these programs are an investment in the future of the sponsored young people, as well as in its own future. Many employees started their Sulzer ca-



were selected because they combine a strong Sulzer presence and, with the exception of China, a relatively low proportion of female engineers. Offered in close collaboration with selected academic institutions, four initial scholarships will be awardedineachcountry. The support of the students is not only financial. Sulzer also offers discovery tours to visit the local facilities, learning and practice opportunities, access to Sulzer coaches and interaction with Sulzer executives, access to local industrial events and invitations to Sulzer social events Jill Lee, Sulzer Chief Financial Officer and sponsor of the scholarship program, said: "This scholarship initiative is another way in which we can contribute to our wider social environment and support the journey towards broadening talent diversity in technical professions."

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Upskilling flooring contractors

THE Flooring Industry Training Association (FITA) is the official facilitator of accredited training for all flooring installers. The association was established in 2013 to address the desperate need for new skilled artisans in the flooring industry as well as new legislation regarding the training and registration of artisans. FITA maintains a national register of installers and their qualifications and its goal is to develop this database.

Panayiotou, Jenny Communications Manager at FITA, comments: "FITA has been working closely with the Construction Education and Training Authority (CETA) to improve skills, create career paths and increase employment in the sector. Our collaboration with the CETA is to align the training of installers and artisans in the flooring sector with that of the rest of the world."

FITA has earmarked 13 types of flooring applications that will each receive its own specific curriculum in a qualification that has been scoped and is with the Quality Council for Trades and Occupations for registration. The curriculum for each flooring type is expected to be launched during 2019.

curriculum comprises theory, practical experience and work experience, and learners will be taught and assisted by CETA approved training providers in a classroom setting. Short skills courses run for varying lengths of time and installers can do these as when required, to earn credits. A full learnership, which FITA currently hosts for brand new installers, is four months of theory and eight months of practical training. Cad4ALL in Cape Town is a FITA service provider who recently started a learnership for 50 unemployed youths. The costs of the learnership are funded by Discretionary Grants from CETA and the host companies bear no financial responsibility for the learners. FITA covers them through the

cupational Injuries and Diseases Act (COIDA) and the grant allows for a stipend of R2 500 per person per month.

"Flooring installations have become increasingly complex and installers are expected to know how to install everything from vinyl to tiles and rubber. Without proper training and accreditation, this task will simply remain a 'job' that is done without quality control and precision. We want to develop installers so that they see their roles as career paths with varying levels of qualifications and prospects," says Jenny.

Creating business and entrepreneurial opportunities

FITA is focusing on facilitating the training of tradespeople who are both new to the industry as well as experienced in the flooring sector.

"Flooring systems on the market continue to change, and older

Compensation for Oc- What type of accreditation can an installer apply for?

If you have this much experience	you can apply for this title	in two of these floor types
1 year	Assistant Installer (NQF2)	Artificial grass, Bamboo, Carpet, Ceramics Glass and Stone, Cork, Laminate, Linoleum, Raised Access, Real Wood, Resin, Rubber, Seamless, Vinyl, Wet Pour Rubber
3 years	Installer (NQF3)	
5 years	Head Installer (NQF4)	
More than 10 years	Master Installer (NQF4)	

flooring experts aren't always eager to part ways with the old way of doing things. Staying up to date with the latest installation methods will ensure your business stays relevant into the future. Our training is for new tradespeople and experienced installers alike," says Jenny.

FITA recognises prior learning and has a procedure where more experienced workers who have not been formally trained can be assessed.

FITA's goal is to create a comprehensive network of courses, trainers and tools so that every person who wants to install flooring has the opportunity to do so. Access to the

information, correct upskilling opportunities, workshops and training are some of the ways that they plan on achieving this goal.

Mitigating costs of poor installations

Jenny says that it is important for architects to know that they can specify that only an accredited installer be used for a job. FITA has issued installers with cards, indicating their designation and skills set.

Sixty-eight years of local manufacture

A prominent supplier of steel grating on the African continent, Andrew Mentis (Trading as Mentis Sales) was started as a precision engineering works in 1950 by the man after whom the company was named. With its founder's ingenuity and pursuit of quality, the business grew even beyond the country's borders, and now has a significant footprint in Australia and New Zealand.

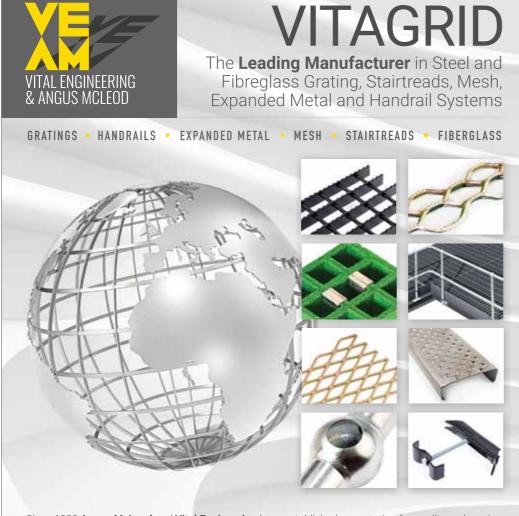
"Our recipe for success today continues to build on the philosophy of our founder, which includes specialised engineering expertise, innovation, high-quality products and constant investment in the latest technologies," says Lance Quinlan, national technical sales consultant at Andrew Mentis.

The company's exceptional Rectagrid grating, which it began manufacturing in 1967, remains the leading grating in South Africa, despite other manufacturers now replicating the design. As early as the 1970s, the company invested R1 million in specialised Austrian-built equipment to achieve the quality it sought - then the world's most modern fusion-welding equipment for grating.

"Now more than ever, South African manufacturers need to compete on the global stage, so we need entrepreneurs to follow in the footsteps of our founder Andrew Mentis, who can harness the combined power of skills and technology," says Quinlan.

needs to be a national focus in the country's efforts to keep local manufacturing vibrant and create jobs in which people can grow their skill-levels."

At its 55 000 m2 premises Elandsfontein, Johannesburg, the company walks this talk - employing over 400 people at the most modern grating manufacturing facilities in the southern hemisphere. Beyond its steel and fibreglass floor grating, it makes a wide range of expanded metal building products and meshes. This includes Interlink tubular, solid and angle iron hand-railing; Die-Line Safety walkways; Mentrail and EasyRail Highway Guardrail systems; Steel Floor tiles; and Hexmesh.



Since 1939 Angus McLeod and Vital Engineering have established a reputation for quality and service. Our brand names of Vitagrid, Maclock and Vitex have become synonymous with versatility, quality and service. Manufacture of all our gratings, stairtreads, handrails and expanded metal products is strictly controlled. We are able to cater for standard panels, stairtreads and handrails in addition to offering a cut-to-size and tailoring service. Meeting and surpassing customer needs are our goals!

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'Expanded' applications

a manufacturer with some 80 years of experience in the production of expanded metal products, safety hand rails, floor gratings and stair treads, Vital Engineering is yet to encounter a limit to the fields of application for their products. "Expanded metal products and their related applications can vary from our very popular base industrial range of meshes - typically used as walkways, screenings, to oil filter encasements; and small aperture meshes which are used as speaker covers, rodent control in phone towers, or to protect solar geysers from hail - and everything in between," says Glen Pringle, Technical Director at Vital Engineering.

Expanded metal is also increasing in popularity in architectural



Vital Engineering's Vitex expanded metal.

applications, where functionality like noise and light deflection is combined with interesting aesthetic effects.

Expanded metal possesses some very attractive inherent qualities. It has an excellent weight-to-strength ratio, and has an advantage over welded products, that the material does not have localised weak points because it is made from a single

sheet of metal. The material, structural design, and material-toair ratio can be tailormade to the customer's requirements.

"Our decades of experience has led to the development of various distinctive products. As an example, we are the only producers of non-slip serrated walkway mesh in South Africa," he adds.

Pringle however cau-

Ubiquitous expansion joint tions that customers should be discerning sealer when choosing expanded metal products, as there are certain visually subtle defects such

DEN BRAVEN Hy-

briflex-540 is a specific

sealant for expansion

joints for use inter-

nally and externally

on wood, bamboo and

laminated floors, con-

crete and natural stone

floors. It is highly resistant to ageing, weath-

ering and chemicals.

It has excellent move-

ment capability and

requires minimum sur-

face preparation and

has very good adhesion to most substrates:

stone, asbestos, wood,

enamelled surfaces,

Conforming to the

South African Green

Building Council stan-

dards, Hybriflex-540

is a one-component,

moisture-curing, low-

modulus sealant and

adhesive, free from iso-

cyanates and silicones

and with a low VOC

content, making it en-

vironmentally friendly.

It is also chemical and

tear resistant - an im-

portant criterion if one

considers the chemicals

steel and aluminium.

natural

concrete,



Den Braven Hybriflex-540 - applicating with a polyethylene backing cord as a bond breaker.

tural integrity. He advises customers to always choose products that adhere to SANS or ISO standards, and which are manufactured by a trusted supplier with an excellent industry track record.

as sharp edges or small

tears in the joints that

could be indicators of

compromised

The company has recently supplied its products to some of the newly built coal mines where the Vitex expanded metal range has been used for machinery safety guards and in the manufacture of mine walkways; as well as for certain security applications in gold mines.

keep floors sanitized.

The product does not bubble or yellow and has high resistant to UV degradation and weathering. Ideal for use with polyethylene backing cord available in various diameters - as a bond breaker to create the right joint dimensions for the sealant (available from selected retailers and Den Braven) Hybriflex-540

also be used to seal all types of external internal façade construction joints, joints and joints in precast elements, for external walling and cladding joints, infill panel joints, curtain walling, window and door frame sealing and many other applications.

Available in 290ml cartridges as well as 600ml foil packs in white, grey and beige.

Contact Den Braven Sealants on 021 552 9675 for further technical and application assistance.

Concrete floors - keep to the rules

THE construction of industrial floors, such as warehousing and factory floors calls for concrete with characteristics entirely different from that required for vertical structures, says Bryan Perrie, managing director of The Concrete Institute which monthly receives huge volumes of appeals for advice regarding faulty flooring. Perrie says that the properties required of the concrete for flooring are governed largely by using correct materials and in

correct proportions. Material specifications for all the ingredients of the concrete exist and should be adhered to - as well as South African Codes of Practice for the actual placement of concrete and the finishing of floor

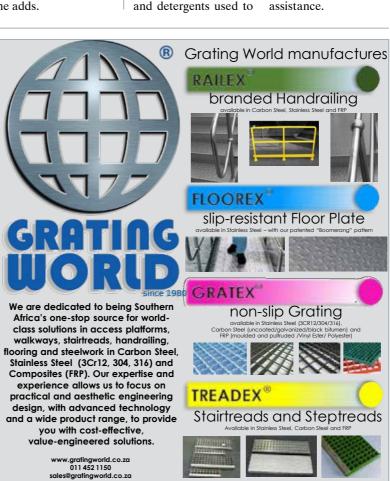
"A thorough understanding of all the characteristics of concrete, the influence of material selection, environmental inconsistencies, as well as handling and finishing, are essential to produce a quality floor.

A disregard for any of these factors can result in problems which are normally observed too late in the process to be corrected" he states.

Perrie stresses that consistency is crucial during all the stages of the construction process: receiving the concrete, discharging, placing, consolidating and finishing. The importance of protecting the concrete while it is being placed, and curing thereafter, is also vital factors

"An incomplete brief from the client; lack

of attention to correct proportioning, handling and finishing; inexperienced contractors and operators; could all contribute to a floor with poor durability, strength and aesthetics. The flooring process relies on the successful completion of successive phases; understanding what is being done in each phase, using the right concrete and equipment, by the right person at the right time,' he adds.





Concrete floors for success depend on a full understanding of the product used as well as all the phases of the laying process, says The Concrete Institute MD,



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An electrifying innovation



FOR decades wire cutting has been synonymous with the efficient, high-precision machining of electrically conductive materials. Machine manufacturers regularly introduce innovative refinements such as automatic wire threading and the tubular shaft motor. However, no less important for cost-effec-

tive eroding processes are suitable software solutions. Only with highly evolved software is it possible to make efficient use of a wire EDM system's hardware.

Wire EDM systems operate with extreme precision, with tolerances of a few thousandths of a millimetre. They generate

outstanding finishes, operate with high process security and create the ideal conditions for unsupervised machining for long periods – advantages marginally offset by the longer machining times. What is obvious is that manufacturers of tools and moulds need cost-effective systems. And this is where

wire-cutting machines with intelligent software come into its own.

A perfect example: The new cylindrical-drive technology of Mitsuibishi EDM's MV series wire EDM machines. The round magnetic shaft of the linear shaft motor creates a 360 degree magnetic flux for a revolutionary non-contact design.

Another example is the company's partnership with a software firm that has been concentrating entirely on wire EDM for almost 30 years - DCAM GmbH. Managing Director Jens Franke is convinced that: "For companies that don't constantly use their machines and only cut the simplest contours with them, the software solutions supplied by the machine manufacturer are sufficient. But the more complex the task, the more difficult it becomes to operate profitably bottom-of-therange CAM solutions." DCAM has therefore developed an ingenious CAM solution that delivers a number of advantages.

DCAMCUT and Mitsubishi EDM cover areas such as less programming effort thanks to templates, deviations are programming errors, new 4-axis clearing process, code generated directly, finding the most cost-effective solution and training at the machine in an effort to provide users with a tool that is

easy and quick to programme even for complex workpieces and one that ensures maximum process security and permits unsupervised machining over long periods.

Fiber optics improve EDM spark monitoring, wire life During wire electrical discharge machining (EDM) operations, effective spark monitoring is essential to ensure process control, maximise wire life and prevent wire breakage. In working to improve

the capabilities of its wire machines to best monitor the state of the electrical discharges between the wire and workpiece, Mitsubishi EDM ran into an unexpected problem: The electrical signals feeding back to the control were too slow for the monitoring system to make timely, necessary adjustments to on/off time and current on its new machines to maintain consistent sparks.

Source: Metalworking News

Additive manufacturing reduces vibration in long-overhang milling

Lower cutter weight increases stability and productivity

IN a move designed to offer customers a host of in-process benefits, cutting tool and tooling system specialist Sandvik Coromant is introducing its lightweight CoroMill 390, which features a cutter body produced using additive manufacturing. The lighter overall weight of the tool helps to minimize vibration and improve security during machining with long overhang. In turn, the productivity is also increased.

Additive manufacturing offers a superior way of producing complex structures with high precision and without joints. Use of the process can make components lighter, stronger and more flexible than ever before. With regard to tool bodies, additive manufacturing allows for the generation of shapes and features not possi-



ble with metal cutting. In addition, virtually any material can be printed, as in this case, a titanium alloy.

"When designing our new lightweight CoroMill 390, material has been tactically removed to create the optimal cutter design for minimizing mass," explains Magnus Engdahl, Product Application Manager, Sandvik Coromant. "This is called topological optimization and it makes the cutter more compact and significantly lighter than a conventional version, thus helping machine shops to boost the productivity of their long-overhang milling operations. Moreover, a shorter distance between the damper in the adaptor and the cutting edge improves performance and process security.'

Process security is paramount in a number of metal-cutting applications, not least when milling with long overhangs, which is a common requirement in components used by the aerospace and oil and gas sectors.

Here, the generation of features such as deep cavities can be compromised by vibration, leading to slower production, shorter tool life and poor surface finish. The new lightweight CoroMill 390 provides the solution. Combined with Silent Tools[™] milling adaptors, this optimized tooling combination subdues vibration to help maximize productivity and process security in demanding applications involving long overhangs. In addition, the inherent CoroMill 390 concept delivers light cutting action for a smooth cutting performance.

Lightweight oMill 390 can perform long-reach face milling, deep shoulder and side milling, cavity milling, and slot milling. The tool is available in 40 mm (arbor 16 coupling) and 50 mm (arbor 22 coupling) diameter variants. Three or four inserts (size 11) can be specified to suit the application. Differential pitch and internal coolant are provided on all cutters.

We value your input

Only through your input can we continue to improve.

- Comments
- Suggestions
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- editor@cbn.co.za



Industrial automation in data centers infrastructure of tomorrow and beyond

Bradley James, **ABB Data Centers Segment Lead**

THE dependence on data, computing power and connectivity is increasing exponentially at an unprecedented rate. We all rely on a data center somewhere and it needs to run efficiently. The approach to energy is becoming significantly more strategic to data centers and the enterprises they support. The same innovations being applied to the smart grid and to mission-critical industrial plants are finding their way into data centers. For example, data center operators now require an open platform to manage multiple levels of integration interoperability among a wide array of components and systems, coordinated controls to automate load shifting and real-time optimization of both facility infrastructure and IT, and two-way distributed generation to balance a data center's energy supply and demand.

It won't matter how robust or technically advanced the IT systems and facility equipment are if a data center's infrastructure management (DCIM) capabilities are inadequate for the task. The challenge for data center operators is to dynamically manage a flexible network

to achieve reliability, energy efficiency and maximum utilization from all data center assets. ABB Ability™ Data Center Automation can help.

We believe our industrial heritage, broad choice of electrification & automation solutions as well as our commitment to sustainability will help grow business.

ABB Ability™ Data Automation Center provides a scalable, modular solution that adapts to your data Traditional center. $B\ M\ S\ /\ P\ M\ S\ /\ B\ C\ M$ combinations are no $\begin{array}{ccc} \text{longer} & \text{needed,} & \text{since} \\ ABB & Ability^{^{\text{\tiny TM}}} & Data \end{array}$

Center Automation delivers this base-level functionality during the initial deployment. The modular approach allows you to achieve your data center strategy based on your current data center investments, instead of being dictated by a vendor's DCIM product strategy. Moreover, its open platform allows for reuse of infrastructure point-solutions to simplify migration.

The ABB Ability™ Data Center Automation solution delivers benefits that encompass these 5 areas of infrastructure and operations that help manage your data center

cost, capacity and control. At ABB, we group the many benefits a good DCIM system delivers into 5 categories:

System availability and performance - Industrial class visibility and performance metering of both IT and facility systems, including status change, energy consumption and environmental from any location.

Capacity planning and management -Maximize capacity of power, cooling and space through optimized placement of IT assets, 'current state' and 'future state' resource capacity planning, including what-if

scenarios and data center comparisons.

Resource forecasting and energy planning - Real-time energy market intelligence and analytics to determine \$/kWh, \$\$/MW, transactions/server, PUE, carbon emissions, and other data center metrics.

Facility & IT automation - Control technologies and process automation of work flow, asset management, and automatic demand response of facilities (e.g., power and cooling) and IT (e.g., load shifting).

Troubleshooting and root cause analysis -Granular performance detail, including timestamping and occurrences of alerts and alarms, for your entire data center operations.

Due to data centers having become a critical component of the business enterprise, they can no longer be looked upon as an adjunct to the systems used to manage your office environment. Over time, attitudes about the data center within the enterprise have adjusted and it is now seen as an integral part to business operations and revenue generation. As a result, data center strategies are more attuned with business realities.

Drives assembly features contactless energy transfer

THE MOVITRANS® contactless energy transfer system from SEW-EURODRIVE, in conjunction with its MOVIPRO® SDC decentralised drive, position, and application controller, have played a critical role in an assembly-line extension at a major automotive producer in Port Eliz-

The big advantage of the MOVITRANS® system is that it is based on contactless energy transfer. In this system, electrical energy is transferred without contact from a fixed conductor to one or more mobile consumers. The electromagnetic connection is made via an air gap. Not being subject to wear has the added benefit of it being maintenance-free. In addition, this type of power supply is emission-free, and there-fore environmentally-friendly.

"MOVITRANS® is the ideal supply system for all mobile applications, and has been tested according to BGV B11. It is perfect for equipment that has to cover long distances at high speeds, for example, or if maintenance-free operation is required. It is also suited for applications in sensitive environments where outside contaminants are not permitted, and in wet and damp environments," SEW-EURODRIVE (Pty) Ltd. Electronics Support Technician Juandré La Cock explains.

Wherever a trolley/

skillet (conveyor) system is implemented, such as with an automotive assembly line, custom-designed drive concept is required that must correspond to the necessary load-bearing capacity, the desired transport speed, the existing space restrictions, and the specific ambient conditions of the application.

Here the MOVI-PRO® SDC is an ideal solution for both horizontal and vertical trolley/skillet (conveyor) applications. It not only integrates all necessary functions, but allows for decentralised installation of up to 15 kW. The solution is characterised by its design robustness, especially in terms of reliability and precise positioning requirements. With its modular, standardised design and freely-configurable software components, this decentralised drive and positioning control system facilitates the integration of numerous functions, while reducing the complexity of the machine or system.

plant, SEW-EUROD-RIVE was required to replace an existing MOVITRANS® system installed originally in 2006 in order to be able to add a further four skillets to the existing line. This was done in order to upgrade the technology to the latest iteration developed by the research-and-development department in Germany.

At the Port Elizabeth



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The world around us is changing. An increasing reliance on data, computing power and connectivity means that optimum data center performance is crucial. At ABB, we can help you to meet the data demands of today and tomorrow, with solutions to support the continuous operation, efficiency, safety and security of your data center. Whatever the challenge, you'll find future intelligent thinking at the heart of our offering. Intelligent data needs intelligent power. Discover more at new.abb.com/africa/data-centers

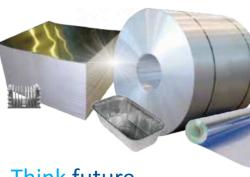


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Overloaded trucks weigh heavily on road safety

THE Traffic Services' Road Haulage Unit has flagged a concerning increase in the number of trucks that take to the road with more than their fair share of cargo.

IN one of the latest incidents a truck was found to be overloaded by at least 25 000 kilograms.

An officer attached to the Road Haulage Unit stopped the container truck in Paarden Eiland after noticing that it appeared to be heavily overloaded. The driver was instructed to make his way to the N7 weighbridge for testing.

En route to the weighbridge, two tyres burst but the officer insisted that the vehicle owner repair the tyres so they could proceed to the weighbridge.

When the truck was eventually weighed, it was found to be at least 25 tons over the permissible mass. The incident resulted in the issuing of 11 fines for various transgressions, totalling R42 000.

'Our staff are reporting more of these incidents and so we'd like to remind companies



to ensure that they are sticking to the prescribed regulations, not only because it is the law but also because overloaded vehicles are a danger to other road users.

'We have seen numerous incidents in Cape Town over the years where heavy vehicles have overturned or become stuck, often with consequences tragic for the truck drivers or other road users who happen to be in the vicinity at the time. The

city has also been left gridlocked on more than one occasion as a result of such incidents,' said the City's Mayoral Committee Member for Safety and Security, Alderman JP Smith.

In the last six and a half months, the Road Haulage Unit has stopped 5 509 heavy motor vehicles. Of these, 1 054 were weighed and 321 (30%) were found to be overloaded. Officers have issued fines for overloaded vehicles amounting to R1 064 650.

'The City appeals to fleet managers and truck owners to ensure that they abide by legislative requirements and that their drivers are properly trained. The enforcement statistics, along with the number of trucks that continue to get stuck under the Muizenberg bridge, show that there are problems that need addressing now and not when tragedy strikes.

'Our Road Haulage Unit will continue its

enforcement efforts to try and ensure compliance within the trucking industry. In the event of future incidents like breakdowns or accidents, our Fire and Rescue Service has acquired a special vehicle to fast-track the removal of heavy vehicles where they are blocking our major routes, but ultimately the trucking industry needs to get on track too and stay in the right lane,' added Alderman

New engine cuts fuel costs by up to 7%

IN order to provide leading fuel efficiency to its customers, Volvo Trucks is introducing Volvo FH with I-Save. By combining the new D13TC engine with updated fuel-saving features, this new solution can cut fuel costs by up to 7% in long-haul operations without compromising drivability. Demand for trans-

portation across Europe is growing and trucks are covering increasingly longer distances. At the same time, transport operators are faced with rising diesel prices putting pressure on profitability. At the core of Volvo FH with I-Save is the state-of-theart D13TC - Volvo Trucks' most fuel-efficient long-haul engine to date. It features pistons with a patented wave-shaped interior that improves combustion and increases efficiency by guiding heat and energy to the centre of the cylinders. Excess energy in the exhaust gases is then used to power the



The new Volvo FH with I-Save is Volvo Trucks' most fuel-efficient truck to date. By combining the new D13TC engine with updated fuel-saving features, it can cut fuel costs by up to 7%.

engine through an additional turbine in the exhaust flow, called the Turbo Compound unit.

The D13TC engine produces up to 300 Nm extra torque which means less acceleration and fuel is needed to keep a steady speed in highway traffic. It is the ideal solution for long-haul customers.

Other features of I-Save include new fuelefficient rear axles, an

I-See system that analyses and adapts to gradients ahead and includes gear-shifting software optimised for long-haul applications. The combined efficiency gains of all these products and services can result in fuel-cost savings by up to 7% compared to a D13 Euro 6 Step D engine*.

"We have tailored

updated map-based every aspect of I-Save to suit long-haul operators, especially those that typically drive more than 120 000 km per year," says Mats Franzén, Powertrain Strategy Director at Volvo Trucks. "The longer they drive, the more they can potentially save. It is a powerful engine which delivers a highly fuel efficient and smooth driving experience."

*D13TC Euro 6 step D with the Long Haul Fuel Package (I-Save) vs. D13 eSCR Euro 6 step D without the Long Haul Fuel Package. Actual fuel economy will vary depending on many factors, such as use of cruise control, vehicle specification, vehicle load, actual topography, the driver's driving experience and weather conditions.

Ctrack to monitor top 50 finalists in the Hollard Highway Heroes truck driver competition

VEHICLE telematics and tracking services provider, Ctrack, will monitor the driving performance of the 50 finalists in the 2019 Hollard Highway Heroes truck driving competition.

Hollard Highway Heroes, which kicked-off earlier this month, identifies and rewards South Africa's best long-distance truck drivers, who must prove that they drive better than their peers in order to win substantial prizes.

The proof of this will be provided by competition sponsor Ctrack, who's tracking hardware, will capture and record key driving information for the last 45 days of the competition, including how the drivers behave over the course of the event. Ctrack will keep track of driver speeds, harsh braking, fatigue Day/ Night and total kilome-

Ctrack's live Business Intelligence model, will be used to provide feedback to the top 50

finalists. These drivers in the 2019 competition will all win prizes, depending on their final positions, which makes the accuracy of the data provided by Ctrack all that more important.

Ctrack is delighted to participate in Hollard Highway Heroes since truck accidents are a major issue in South Africa. However, it is widely recognised that driver education and upskilling can have a dramatic, positive effect on reducing roadrelated risks. Employers also have a duty of care for their employees to ensure they are driving in a responsible manner. The competition has shown an in-competition improvement in driver skills of 65%, with drivers maintaining good driving habits thereafter.

Furthermore, businesses with a safe driving culture are achieving reductions in speeding and harsh driving events of 50% or more. This information is music to the ears of insur-

ance brokers. Ctrack systems can even generate alerts when high G-force events occur, enabling proactive contact with your driver to verify they are safe or in need of assistance.

For the first time, the competition is open to all truck drivers, regardless of who their insurer is. This gives more drivers the opportunity to win big, and encourages thousands more to drive better – which amplifies the road safety benefit that the competition offers.

While the competition therefore has a strong road safety element, there are a number of other benefits for

fleet owners when using fleet telematics and tracking solutions.

"The return on investment from implementing a holistic telematics system that is capable of capturing, measuring, and proactively identifying driver errors, as well as predicting possible accidents and even loss of life, cannot be emphasized enough," explains Hein Jordt, MD of Ctrack South Africa.

"Ctrack's total solution offerings for business fleets, transport operations and the warehousing and logistics industries, is second to none. Our ultimate goal, to drive efficiencies and save costs, has been proven time and again by the ac-

colades given to us by our customers, and we are very proud to have been selected by Hollard Insure to monitor the top 50 finalists."



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The difference between a Genuine Cummins part and a non-genuine part isn't always easy to see. It can be something as small as a ring gap that's a couple of millimeters too wide on a non-genuine part. In a Cummins engine, that small difference could result in less power, insufficient lubrication, poor fuel economy, premature wear and even catastrophic engine failure.

While you may save a little money up front by purchasing non-genuine parts, it could cost you a lot more in the long run.

To prove this, Cummins engineers performed thorough analytical testing pitting Genuine Cummins parts against their nongenuine counterparts. Testing included visual inspection, critical measurements, materials analysis and parts chemistry analysis. The following results demonstrate why Genuine Cummins parts are always better for your Cummins engine than nongenuine parts.

GENUINE CUMMINS PARTS

dmg events to launch new transport event in Mozambique

THE burgeoning transport sector is the latest to see a new launch from the company, with Mozambique Ports and Rail Evolution Forum 2019 set to take place in Maputo in May this year. The forum joins two existing transport events already taking place in Africa, as dmg events' grows its portfolio in the sector.

The new event is being launched as Mozambique expects to invest more than \$13bn into port, railway and corridor infrastructure developments and upgrades, creating significant opportunities along the way. "That's the kind of long-term investment programme that helps shape our strategy in the region," said Devi Paulsen, Vice President of dmg events Africa.

"As we look to further our expansion into the key markets and essential industries on the continent we will continue to comb economic data for the investment indicators we know will help us deliver great events for our exhibitors in dynamic markets."

The new launch in Mozambique comes as the third edition of the established West African Ports and Rail Evolution event debuts in Nigeria later this year.

Also heading to Nigeria is The Big 5 Construct Nigeria, an event based on the company's flagship construction brand, but carefully adapted to suit the regional market. These pioneering events demonstrate dmg events' ability to provide expert support to important industries, while developing new brands and markets for its global network of exhibitors.

These exhibitors benefit directly from dmg events' sustained investment in its Africa operations - including two offices in South Africa and one in Egypt- as the company deepens the level of support it offers to its exhibitors and participants onsite.

"This is part of our significant commitment to the region," said Paulsen. "Being onsite helps us to better reach our audience and understand the needs of the markets where we operate."

All of the company's events in Africa are underpinned by ministerial support. It is support that recognises the high-calibre platforms and opportunities that dmg events delivers to regional markets, as well as the company's ability to align its events with long-term government investment and planning in the sectors where it operates.

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Pickwick unlocks social housing prospects

THE City of Cape Town's first transitional housing project in Salt River, also referred to as the Pickwick transitional housing project, is on track. This project forms part of the City's greater commitment to unlock hundreds of affordable and social housing opportunities near the city centre.

The Pickwick transitional housing project will provide short-term accommodation to the households who are currently living in an informal settlement on the Pine Road site. The Pine Road site will be developed to unlock approximately 230 social housing (affordable rental) opportunities once the households have moved to the transitional housing site in Pickwick Street. It is important for the households currently living on the site not to be displaced, but to be offered shortterm accommodation in the area and at a nominal cost, while assisted with finding more permanent housing opportunities for which they may qualify.

these Some of families may qualify for the social housing opportunities otherwise as affordable rental units - that we will developed Pine Road. As such, they may choose to return to live in these should thev units qualify. Households



with a combined monthly income of up to R15 000 qualify for social housing opportunities.

The intention is not for tenants to live at the transitional site in Pickwick Street on a permanent basis, but rather to provide them with a helping hand, and to accommodate them in the shortterm. At the Pickwick transitional housing site short-term tenants will have access to social services, while they are in the process of finding permanent housing opportunities elsewhere. In this way, when they move on, the space at the transitional site becomes available for other short-term tenants.

Progress of the Pickwick transitional housing site

The Pickwick transitional housing site consists of 42 rooms, communal bathrooms and kitchens, as well as access control to ensure the safety of those residing there. The construction of the transitional housing site, situated on the

corner of Pickwick and Copperfield Roads, cost approximately R11 million, which was obtained from national government grant

funding. Now that the construction complete, the final snags on the are currently being addressed. The City is also in the process of obtaining an Occupancy Certificate for the site, which is a legal requirement before any person can reside on

Social housing going forward

This transitional housing project echoes the City's commitment to providing hundreds of social housing opportunities around the city centre on sites such as the Salt River Market, Woodstock Hospital and Pine Road (mentioned above), as well as other areas across the city.

As an update:

 The rezoning application for the Salt River Market site was tabled with the Municipal Planning Tribunal. We will be notified of the outcome once the appeal period has been concluded.

The Woodstock Hospital has been earmarked for social housing opportunities. The planning of these opportunities can only formally commence once the acquisition of the property from the Western Cape Government has been approved by Council. This process is currently underway and will be tabled at Council in due course.

Furthermore, City currently has five social housing projects under construction which include Bothasig, The Block Glen Haven, Weltevreden Park, and the City will continue to partner with the Western Cape Government on social housing projects, such as the Conradie Hospital Site and the Goodwood social housing project. Altogether these projects are expected to deliver over 3 800 affordable housing opportunities.

With this in mind, the City remains committed to providing housing opportunities in all of the central business districts – not only the Cape Town CBD, Salt River and Woodstock, but also in smaller near inner-cities such as Bellville, Parow, Khayelitsha, Claremont, Mitchells Plain, Wynberg and Plumstead.

Ratanga returns in R57m Canal Walk upgrade



HYPROP Investmentsowned Canal Walk Shopping Centre is set to undergo a multi-millionrand renovation, which will see a revamp of its food court and the inclusion of a new attraction, The Ratanga Family Entertainment Centre. According to the centre, the renovation is driven by global trends, an increased demand for food experiences and a focus on family entertainment.

The Ratanga Junction theme park closed in 2018 after operating for nearly 20 years. "Being very much family oriented, Canal Walk Shopping Centre saw the long-term value in investing in this development with Ratanga

World Ltd, as this will enhance the overall shopping experience, and speaks to shopping centres in South Africa remaining key destinations for retail and family entertainment activities. "We will see a number of the amusement exhibits find a new home with us, while at the same time, our food court will undergo a significant upgrade to provide a world-class food experience for all palates. Combined, we hope to be entertaining children of all ages (mums, dads and grandparents too) for many years to come, Gavin Wood, CEO at Canal Walk. The Ratanga Family Entertainment Centre is expected to open before

the end of 2019, while the food court refurbishment will commence in the first quarter of 2020. The anticipated cost of the project is in the region of R57.6 million – R24.3 million for Ratanga and R33.3 million for the food court renovation.

"The works have been outsourced to qualified partners, TDC & Co. (designers) and KMH Architects, so as to provide a seamless, unified, balanced and well-designed facility, while the team who will oversee the rides are internationally certified with first class service skills," said Canal Walk.

Read the original article on Bizcommunity.com

The Rubik launched in Cape Town, CBD

ABLAND, property developers for over 30 years, is developing a distinctive mixed use development in Cape Town's CBD in partnership with Nedbank. The Rubik, which launched last month, combines retail, commercial and residential components and will be located on Loop Street.

Work on the development is expected to commence in the latter part of 2019 with the demolition of existing buildings. Thereafter, bulk earthworks will take place followed by the construction phase which is set for completion in July 2021. 'When this property came up for sale, we wasted no time in its acquisition as the location is perfect for a planned mixed use development. We have undertaken numerous high rise developments in the Cape Town CBD and are very excited to bring this vision to life" says Jurgens Prinsloo, Managing Director, Abland.

Abland.

The building will have double glazing, an air-conditioning system that doesn't use water evaporation for cooling, energy efficient lighting and water heating systems which compliments green star initiatives.

The residential component will offer an eclectic and present-day design with residential units that are located at the top of the building giving residents an amazing view of the ocean, Lion's Head and the Table Mountain. Foyers will separate the residents from the commercial tenants.



OPINION

Sorry, but Sweden is not where socialism worked

Continued from back page

ist, they are not run by the government with the result that innovation and efficiency thrives.

Government has got out of the way of basic education as well. Families get school vouchers for each child which they can "pay" the schools where they believe their children will get the best education. The best schools attract the most vouchers which they can exchange for money. This system keeps them on their toes as schools compete with each other.

Sweden's State pension was also privatized in part to ensure its survival (it was rapidly heading for bankruptcy) and new the arrangements with the private sector turned out to be better.

If the Swedish experience before the reforms that headed off an economic collapse seem familiar to our own experiences of the last 20 years, you are right.

We too insisted on establishing a welfare system the country cannot afford at the present snail pace of economic growth.

We too are ruled by the principle that government with immense regulatory power is the best way to run an economy. We too have a massive bureaucracy that operates at all levels of government. And we too have state-owned enterprises that are overmanned, over-paid, and bankrupt.

The question is whether we will follow Sweden's example (ironically, it's a country that was one of the strongest supporters of the ANC) or continue to follow a socialist path that can only lead to an economic meltdown such that Venezuela is experiencing.

There is one more thing that is common to all previous and still exiting socialist states. All of them develop an

elite immune from the privations their theories impose on other citizens. In the former Soviet Union, they were members of the Communist Party which gave them access to special shops that had goods unheard of in local supermarkets for ordinary folk.

The extra special people in Communist Party ranks never suffered travelling in the same road lanes as lesser beings. They had their very own. Their justification was that they were the Vanguard of the Revolution charged with building the future communist utopia.

And that was a tough job after all. Indeed, it always is, and what's more it's a target than no one has ever reached. Probably because the socialist theory is based on what was crafted by one Karl Marx, who spent most of his life his life in a library.

Computer crash causes chaos at DHA

The editor's tale of woe and frustrations

RECENT IT systems failures at the Department of Home Affairs (DHA) caused chaos and misery for thousands, including me.

My wife needed to renew her passport but no problem as DHA has a handy eServices web site, designed to alleviate standing in queues getting a suntan outside their dreary '60's style offices.

After registering my wife's details, the next thing was to enter a one-time pin (OTP) which was sent to my cell phone, only it wasn't sent.

A call to the 0800 60 11 90 'helpline' and an email requesting assistance to hacc@dha.gov.za, met with no response – I gave up holding on after 20 minutes and to date, no reply to my email after more than ten weeks...

A couple of days later, I logged in with ID and password and bingo! I received a OTP! Now really excited, I trembled at the prospect of the next step, the verification email. Despite numerous tries, no email was forthcoming.

I tried the help line again and doggedly held on for 21minutes this time and spoke to a human female who advised that the website was "down" but I should try again 'tomorrow' as it will be back up again.

Now I'm gatvol – this and having endured about three days of load shedding for 2.5h twice/day. I have a standby generator and while I wasn't inconvenienced by Eskom I was seriously out of pocket to the tune of R1 500+ on petrol for the generator.

I repeated the eServices scenario a few days later and again no verification email. Back to the helpline and 20+minutes later I was told "you can bypass the verification process altogether by clicking on the ..."click – I was cut off! (Subsequent calls to this number have resulted in the same action – cut off in mid-sentence after holding on for an eternity.)

Back to the website and now I'm looking for the magic button to click. Going through 'cancel' and 'update your details' I stumbled upon a window I hadn't seen before and was able to complete the application form, pay and get a response. Great, now I have options of where my wife can get her biometrics done – Standard Bank or FNB or the dreaded DHA offices. My wife is a FNB customer but... they only offer this service in Johannesburg or Pretoria, not where we live in Cape Town...

We drove the 30 km to arrive at DHA Barrack Street and joined the pavement queue of about 120 sun tanners – I had time to do a count as the queue wasn't moving. After a static 40 minutes an official stated "we're off-line, systems down', try another office".

We drove a further 30 km to Stellenbosch, and yes, they were off line there

Home to Melkbosstrand, another 70



km and now fuming.

Phones at Barrack Street go unanswered. A week passed and we tried Barrack Street again. No queue, because, yes they are off-line again. "Try another branch, perhaps Somerset West". We were reluctantly given the 'phone number to check whether they were on line but as nobody answered their 'phone, 40 km later we arrived at DHA Somerset West and yes, you guessed it 'off-line'. No apology.

After another few days of calming down, I again checked out the contact numbers of the various DHA offices and tried to give them a call. The main switchboard number of Barrack Street doesn't answer – just rings – so, pot luck, I tried one of the alternative numbers and it was answered by a polite lady who put me through to a supervisor who informed that Barrack Street had partial connectivity – as I had already paid online, they could perform biometrics and no, there wasn't a queue so I could come in.

Excited, I replied that we'd be there within the hour!

With heart in mouth, my wife and I arrived at Barrack Street, now for the third time, and gosh, no queue but... you guessed it again – systems off line – that's why there was no queue.

Infuriated I remonstrated with two officials who explained that their systems hadn't been operating for the past week.

Also worrying was the contents of the acknowledgment letter from DHA stating that the biometrics procedure has to be completed with 60 days, from in our case the 29 March. After that our application will expire, we will lose the R400 already paid and have to begin the process all over again. With 13 days passed, the clock is ticking. I started this process on 26 February and 35 working days have elapsed since I started...

Åpart from the trauma my wife has experienced and our joint stress and frustration, I alone have wasted at least 24h of fruitless time and it has cost, conservatively R750 in petrol on fools errands.

Work time lost would have amounted to more than R10 000.

Determined not to make any more fruitless and expensive trips to DHA, I phoned all the eight listed numbers for Barrack Street. Two were engaged and six just rang until disconnected. Calls to Stellenbosch and Somerset West DHA offices were also unanswered.

In desperation, I dropped an email to the acting head at Barrack Street and miraculously, a Ms Smit phoned me back and said that the systems were at last up!

The Awakening

April 9th: Arriving at Barrack Street for the fourth time we happily joined the sun tanners queue and were soon ushered into the hallowed halls. At the welcome desk our hopes were dashed again – off line.

We decided to wait and low and behold, 45 minutes later, systems were up and we were being processed. Like a breath of fresh air, Ms Smit phoned again to advise systems we now up again and I thanked her for the follow up.

Just thirty-five minutes later we were out in the sunshine and the job was at last completed!

It is sickening to think that we were just two of many, probably thousands of affected customers. Kindred spirits whom we met in the sun tanner's lines had taken a day's leave to get this simple procedure done and wasted their precious time. One lady we met had taken four days of unpaid leave...

Effective communication could have alleviated much of this chaos. Listing seemly unmanned phone numbers is a no-brainer and make one think that no-body cares. Why does it take 20+ minutes for someone to answer a "help line" and why does one get cut off after about 90 seconds?

Lose, lose - poor public perception of government departments and certainly not good for DHA employees who have to deal with irate and abusive vitriol from frustrated customers.

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Evidence? Who needs it?

7ell well," declared Big Ben while rubbing his hands like a gambler whose horse had just won the Met, "I am quite happy with the way things are in South Africa now. The new government suits me fine."

"New government!" exclaimed Luke the Dude, "what are you prattling on about? What's new about it; look at them: the same old rogues' gallery."

"I do not agree," disagreed Big Ben. "The ANC is fixing things. President Ramaphosa appointed competent commissions of enquiry to expose all the bad guys and they're doing a great job. Be fair. Those bent bosses at the National Prosecution Authority got themselves fired and advocate Shamila Batohi is the new broom who'll sweep out whoever else is making the place dirty.'

"Rubbish!" exploded Jon the Joker in his usual offended manner. "The same party is running the show; how can you expect them to fix a country teetering on the brink of collapse when they themselves have broken it? Useless!'

"Now, now, Jonathan old boy," intervened The Prof, "we need not exaggerate, do we? Isn't 'teetering on the brink of collapse' somewhat hyperbolic, not to mention dramatic?

"Not at all, Prof, not at all," retorted Jon the Joker in a deceptively calm voice. "To give you but one example: how far do you think Eskom is from collapse? Throughout the election period they kept the lights on and thus pacified voters by burning diesel by the tanker load. That is not sustainable, as we are bound to find out now that the votes are in the ANC's pocket ...'

The customary contingent of cordial conversationalists had gathered in the local pub & grill for our regular confabulation on the affairs of the country and the world. And as usual the Great White Dog and I observed this meeting of minds without too much interference, having learned in the expensive way what happens when one rings the bell or shouts "Order!" in an establishment such as this.

"As I was saying before I was so impudently interrupted," continued Jon the Joker as if the floor was his, "what do you think will happen in South Africa when Eskom shorts out with a bang? Not only no lights, also no power to pump fuel for your generator, your car and your delivery truck; no groceries delivered to the dark stores; food rotting in freezers, no power for the water pumps at the reservoirs; no work getting done; no wages being earned; no economy to keep the country going; etc etc I don't want to make you anxious.'

No more politics!" decreed The Governor, fearing that some of his customers will take offense and huff off.

"If we cannot talk politics, are we allowed to discuss justice?" questioned Stevie the Poet, who moonlights as a lawyer.

"I suppose justice is alright-like," agreed The Governor suspiciously.

"Good!" beamed Stevie, "because, while the apocalypse described by Jolly Jonny is, mercifully, a matter of conjecture, a very real perversion of justice is happening in front of our eyes. I believe we should all take note and do something, speak to our newly elected public representatives, write to the newspapers, energise our churches, write on Facebook, whatever we can."

"Good heavens, Steven, I have never seen you so animated," worried The Prof. "Serious it must be, but what on earth is this travesty?"

"It is the fact," replied Stevie the Poet seriously, "that two young men are sitting in a South African prison for what might become the best part of their lives on account of a crime I believe they did not commit. Yet the media here and elsewhere call them murderers. And to make emotions run higher, they call them white farmers who murdered a black child."

"But that is horrendous!" gasped Irene the Queen. "They should rot in prison!"

"Indeed," nodded Stevie darkly, "that is the general reaction, and it is understandable. But such is the understandable condemnation, that one important fact is overlooked. There is no credible evidence that they have done anything of the kind. On the contrary, the credible evidence proves their innocence."

"You are talking about the Coligny case, are you not?" frowned Bob the Book.

"Please explain," asked The Prof.
"Keep it simple," added Luke the Dude, "no legal mumbo-jumbo."

That would be difficult in a legal matter," continued Stevie, "but in this case it can be done in journalistic language, thanks to the excellent work done by a team of top investigative reporters - Rian Malan, James Myburgh and Gabriel Crouse. They reported their results on Politicsweb.

"In short, there are two versions and a set of independent evidence.

"The convicted men, two farm workers - not farmers - are Phillip Schutte and Pieter Doorewaard, respectively sentenced to 18 and 23 years by Judge Ronald Hendricks in the Mmabatho High Court. The deceased was Mathlomola Moshoeu, 16. The State's only witness was Bonakele Pakisi. The farm workers both affirmed under oath that they had never seen him before. He repeatedly changed his story and later reportedly confessed to a preacher and an attorney that he had lied.

"The accused testified that they were travelling towards Coligny at about 9.35 a.m. in April 2017 when they saw two people stealing sunflowers in their employer's field. They caught one and put him on the back of their bakkie for a ride to the police station. As they slowed down at a turn in the road, the teenager presumably jumped off. When they noticed he was missing, they turned back and found him injured in the road.

"Afraid of aggravating his injuries by moving him, they asked passers-by to watch over the boy while they fetched help. They rushed to the police station where they reported the matter and summoned an ambulance.

"In Pakisi's first statement to the police he had bought liquor that morning and was walking next to the sunflower field at about 9.10, when he heard a shot and saw three men repeatedly throwing a black vouth off a bakkie. They kidnapped Pakisi, forced him onto the back off the bakkie with the unconscious youth and took an elliptical drive of about 50 km through Coligny to just short of Lichtenburg, then back to Coligny. They stopped five times to interrogate and torture him, once at the Henwill abattoir and lastly to steal his cellphone, knock him out and leave him where he came to hours later.

"Then, after the accused's version was heard at their bail hearing, Pakisi made a second statement, claiming that these events did not start at 9.10, but instead at

"In court Pakisi denied knowing where Henwill was and that part of the journey was simply disavowed. Judge Hendricks filled in the gap himself. He ruled that Pakisi was a truthful and honest witness and declared that 'the only reasonable inference' was that the two accused (the third man was by then missing) drove on to Coligny, dropping the dying Moshoeu off where he was found.

"Then came the cellphone evidence, which identified the times and locations from which the parties made calls. Myburgh, Malan and Crouse investigated the evidence in painstaking detail and concluded that the Vodacom records 'support Doorewaard & Schutte's account of what happened that morning, and completely contradict Pakisi's version'. They added: 'This data, in other words, is completely discrediting of Pakisi as a witness, and his account.'

"Yet, Judge Hendricks chose to reject the mutually corroborating evidence of the two accused and totally accept the uncorroborated and fully discredited version of the only 'eyewitness' the prosecution could produce.



"The conviction was in October, when the men were locked up. The sentences were in March. As I speak, it is not known whether Judge Hendricks will grant them leave to appeal. Afriforum stated that it would provide legal assistance."

The article by Myburgh, Malan and Crouse, with graphics, can be read here:

https://www.politicsweb.co.za/opinion/ coligny-a-murder-mystery

E-mail: noag@maxitec.co.za

Sorry, but Sweden is not where socialism worked

THE Dracula-like emergence worldwide of the idea that socialism is the ultimate solution to all social problems is bizarre to anyone with a modicum of historical knowledge: in particular knowledge of the last 150 years when socialism was tried and always failed.

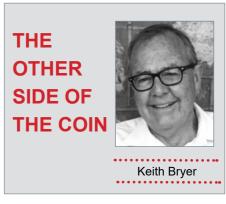
Alas the teaching of propaganda in schools and universities, rather than rational history, has swept the western world making the young once again susceptible to socialism's siren song - that is that with socialism everyone will be equal in every way: equal in wealth in particular. I suppose that for the young waiting for Utopia beats passing exams, and working hard so is it's no surprise. And of course, at a stroke there will be no professional beggars in the streets.

For older and wiser people It is difficult not to laugh at socialist believers. But it is also wrong not to take them seriously. They really do think they are on the side of the angels. Even the obvious failure of their theory when put in practice does not faze them.

To repeat for the record here they are:

The collapse of the Soviet Union after 70 years of trying to make socialism work; the slight-of-hand abandonment of communism by China and Vietnam, when both countries kept the scaffolding but tore down the bricks; the desperation of Cuba to do the same without their citizens realizing that they have been thoroughly conned by the Castro family for a generation; and lastly the spectacular collapse of Venezuela. North Korea is a dystopian nightmare.

In truth, it has become difficult for socialist sages to cling to the idea that their beliefs are the answer to everything. Many



of them have stopped saying that socialism has never been tried properly. Instead they point to what they say is the obvious success of Sweden where "socialism works".

Sweden embarked on their socialist experiment 40 years ago without a revolution. They actually voted it in, picking up on the virtuous promises and setting about implementing them.

The result? Ask the Swedes. They will tell you. It was an economic disaster.

The Swedish historian Johan Norberg says, "We did have a period in the 1970s and 1980s when we had something that resembled socialism: a big government that taxed and spent heavily. And that's the period in Swedish history when our economy was going south."

Aha! Could this mean more socialism equals a lousy economy?

Yes indeed. The figures don't lie.

When Swedish socialism was at its height, the economy produced less, with inflation and taxes rising so high that even socialists complained. Just how absurd the taxation system became is demonstrated by what happened to Swedish authors. Any book they published was taxed at 102 per cent.

Facing the obvious, Sweden then reduced the government's role. Public spending was cut. The rail network was sold. Government monopolies were abolished -- the one on Vodka production being the most famous. Inheritance taxes were abolished too. State pensions were reduced.

Since then Sweden's free market has not been tied down by regulations, subsidies or large welfare programmes. Where they ex-

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