

R98m invested into Sturrock Dry Dock

Energy boat floats in.



Sturrock Dry Dock with caisson in position. Photo credit: SA Shipping News.

he Department of Economic Development and Tourism (DEDAT) and Wesgro welcome the R98 million floating caisson that is to be constructed for the Sturrock Dry Dock in the Port of Cape Town.

Think before you buy.

The announcement comes following intensive conversations between DEDAT, Wesgro, industry and strategic partners with Transnet National Port Authority (TNPA) around discussions for improving the ports infrastructure.

The new caisson forms part of a multimillion rand overhaul of the port's ship repair facilities over a three year period (2019-2022) under South Africa's Operation Phakisa Programme, which has identified ship building and repairs as a strategic industry for the port.

A caisson - which is a large steel gate structure that acts as a secondary seal and subdivides the dock allows for simultaneous docking of multiple commercial vessels within the facility - is expected to double the productivity of Sturrock, which is celebrated as one of the biggest dry docks in the Southern Hemisphere.

transported to and from its ports, with 3 of the 8 major commercial ports based in the Western Cape. Further to this, the Province is the production hub of the South African ship building industry and is home to the country's largest luxury yacht builders, Robertson and Caine and Southern Wind.

In addition to this, it is estimated that around 68% of commercial boat yards are located in the Western Cape. Although the majority of marine manufacturing capacity is located in and around Cape Town, boat yards have also been established in St. Helena Bay, Velddrif, Saldana Bay, Swellendam, George and Knysna.

Employing 4 000 people, contributing R1.5 billion to the provincial economy in 2017 - 95% of manufactured products in the sector are exported with Cape Town identified as the 2nd biggest exporter of Catamarans.

"The introduction of a caisson that can now allow for multiple docking of commercial vessels allows for Sturrock Dry Dock to significantly increase ship repairing capacity, which will facilitate job creation. The South Africa ranks among the world's top total value of turnover of provincial ship re-

Carnarvon Castle in the Sturrock Dry Dock in 1950. Photo credit: CapeTown.photos-Johannes.

billion, revealing the potential for significant economic gain to the province through investment of updating the dock facilities,' said Wesgro CEO Tim Harris.

Minister of Economic Opportunities, commented: "The Western Cape's boat building and repairs industry has the potential for tremendous growth, job creation and skill development and the construction of the new caisson will assist in making our port more productive and efficient. The investment into our port infrastructure to ensure that we are able to take advantage of all opportunities in this sector is welcomed."

Mr Solly Fourie, Head of Department Economic Development and Tourism further explained: "Trade is the life blood of the economy. R 1.73 billion of goods enters and leaves South African ports every year. About 30 000 ships passes South Africa's coastline annually and 12 000 of them make calls into our ports. Many of these vessels require services like repairs and maintenance which represents a significant opportunity for jobs. The marine vessel fabrication, repairs and maintenance em-

Cultivating maths and physical sciences

for plastic pipes.



OUTH unemployment in South Africa is dire, with one in three young people without a job in 2018. At the Tomorrow Trust, a non-profit organisation founded in 2005, orphaned and vulnerable children from across the country are given all the necessary tools and skills to complete their schooling through a holistic approach to teaching and fostering a love for maths and physical sciences. The Datatec Foundation sponsored sixty Grade 9 and 12 orphaned and vulnerable learners to participate in the Trust's senior holiday and Saturday school programme in 2018.

"Every child should have the same opportunities, and the Tomorrow Trust recognises that every child has the potential to succeed if given the chance," says Wilna de Villiers, Marketing and Communications Manager for Datatec.

Taryn Rae, Business Development Manager at the Tomorrow Trust, says, "The percentage of Grade 4 learners who can't read in any language is as high as 78%, according to the Progress in International Reading Literacy Study, which is exactly why we also place emphasis on literacy," says Rae. The Tomorrow Trust's junior holiday school programme helps learners from Grades R to 7.

Datatec will be funding an information communication technology



15 shipping nations, based on the tonnage pairs in 2016 was estimated at around R2.2

Continued on P2

Continued on P2



IN THIS ISSUE

- 10 Alternative Energy Biogas
- 11 Building & Construction
- 15 Civil Engineering
- 16 Food, Beverage & Wine Supply Chain
- 19 Agri-Processing Industry & Supply Chain
- 21 Corrosion, Abrasion Control & Specialised Coatings
- 23 Pipes/Tubes/Hoses & Fittings
- Instrumentation & Process 25 Control Management
- On the Contrary 32
- 32 The Other Side of the Coin

R98m invested into Sturrock Dry Dock Continued from P1

ployed 10 280 people in 2017. A constraint to job growth in this sector is a dearth of suitable infrastructure to service these vessels. Western Cape The Government welcomes and appreciates the R98 million budgeted by the Transnet National Ports Authority (TNPA) for the construction of the floating caisson in the Sturrock Dry Dock at the Port of Cape Town. This investment by the TNPA will facilitate the creation of hundreds of direct and indirect jobs required to service vessels in the port."

Mayoral Committee Member for Economic Opportunities and Asset Management, Alderman James Vos, commented: "The boat building industry was severely hit by the global recession in 2012, with traders in this sector having to seek employment in other manufacturing industries. The City of Cape Town welcomes all steps taken to boost the revival of this key economic sector. This will undoubtedly contribute towards our current 40 plus boatyards and 3 500 specialist staff who produce award-winning craft."

"I am proud to build on our track record of being one of the top catamaran producing countries in the world. Seeking to expand the boat building foot print of Cape Town, our team, in partnership with Wesgro, recently participated in the world renown Miami Boat Show event," added Vos.

A feather in the KAP

STELLENBOSCH-based industrial conglomerate KAP has bucked the dour trend in the domestic economy with sprightly performances from its traditional operational engines in the six months to end December.

KAP - its name derived from the German translation of the Cape of Good Hope (Kap der Guten Hoffnung) - has also come through the Steinhoff saga largely unscathed. Steinhoff, the disgraced corporate still in the throes of an accounting scandal, was until recently the dominant shareholder in KAP. Steinhoff drastically reduced its shareholding in KAP last year as it desperately looked for ways to cull debt.

The interim performance confirms that KAP remains a plucky industrial contender.

KAP's well stablished automotive components niche drove up revenues 16% to almost R1.2billion with operating profits lifting 3% to R149 million for the six months.

KAP CEO Gary Chaplin said the performance of the automotive components division was stable for the period.

He said a 10% increase in industry new vehicle assembly volumes over the prior comparative period supported volume growth for the division.

But Chaplin noted that margins during the period were negatively impacted by certain continuous improvement projects and new technologies that took longer than expected to implement.

He said the aftermarket accessories business was stable in spite of subdued industry new vehicle sales volumes. Chaplin believed an improved performance was expected from the automotive division during the second half of the financial year as continuous improvement projects and new technologies become fully implemented. "The extension of the Automotive Production and Development Programme (APDP) to 2035 provides much needed clarity and stability to the automotive sector, which management believes will lead to growth opportunities for the division."

In the interim period KAP's Integrated Bedding division was a real sleeper lifting revenue 13% to R854 million with operating profit up 5% to R151 million.

Chaplin said the Bedding division's performance was pleasing in the context of the currently depressed retail environment.

He said the division continued to implement a strategy of technology investments to reduce its cost of manufacturing and to integrate into the manufacture of its primary raw materials as well as drive brand development and market share growth.

KAP's Bedding division manufactures its own knitted, woven and non-woven fabrics, foam, springs, thermo-bonded insulation pads, bed bases, plastic bedding components and mattresses.

Chaplin said the division was able to grow volumes - but margins were negatively impacted by increased raw material prices and the increased scale of 'Black Friday' sales.

KAP's Timber division - comprising forestry, sawmilling, pole manufacture and panel manufacture and upgrading operations along with resin manufacturing and paper impregnation – saw a 15% jump in revenue to almost R2 billion and a 2% rise in operating profits to R423 million.

Chaplin said the division's panel products operation performed well for the period, showing revenue and operating profit growth as it continued to pursue its strategy of technology investments to reduce its cost of manufacturing, increase the proportion of value-added products and push for market share growth.

He noted that the resin and paper impregnation operations also performed well as a result of increased volumes.

But the division's forestry, sawmilling and pole operations in the southern Cape were negatively impacted by the extensive fires experienced in the region during 2017 and 2018, which had a material impact on the division's operating results.

Chaplin reckoned the Timber segment was expected to trade well for the remainder of the year with strong demand for its product at stable margins.

He added that the division had initiated new projects to expand particleboard capacity and improve efficiencies at a cost of R200 million.

Corporate governance – like climbing the highest mountain

A book needs to be written around the parallels of high mountaineering and corporate governance

THERE are the no-brainers like fitness, preparation, training and the right equipment but there are more subtle inflections though that I discovered.

Whilst your own two legs and the rest gets you to the top, there is much to be said about individuals in a group and the importance of inter-dependency. This can be technical as well as more abstract - like encouragement and selflessness and even a sense of humour. And putting one sure foot in front of the other again and again and keep going. And then sometimes stop and look back down when the summit seems so far away and reflect on where you have come from and celebrate progress.

I for example recall the early morning on Aconcagua, highest mountain in South America and highest in the world outside of the Himalayas. I had on all the recommended high-altitude equipment including my silk thinsulates inside my heavy mittens. Just below the canaletta, the final vertical push to the 7 000 metres summit, I sat on a rock and wondered about the hard ice in the fingertips of my mitts so I took them off. The hard ice was actually my finger-tips, a similar colour to ice and of similar texture. I had not prepared as well as I thought I

had, my inners were too compressed into the mitts, thus not allowing the essential air in between to warm up and my compressed grip on my ski sticks into a cold wind had frozen them solid.

At the top I showed the still white fingers to the guide who instructed me to descend immediately to the base camp hospital tent and not remove my gloves until then, even sleeping with them on. Back in the hospital tent the medic took one look at the fingers and without a word opened his tin truck, took out a large knife, and said "Bring them here!" I took the liberty to exercise my rights and get a second opinion and a few days later a good Cape Town neurologist inspected the now blackened fingers and told me that his previous mountaineering patient had to have some parts amputated and these were proudly presented in a glass jar to his motivational speech attendees. What he exactly was motivating about that escaped me.

The principle of the story is that things can go wrong but if you can you muscle on and find your own solution and not cramp up the whole group. And prepare better!

A subsequent attempt on Everest was cut short by contracting Guillain Barré that

021 551-5076

required a helicopter having to be called up from Kathmandu to carry a useless paralytic body back down to ICU and the end of that attempt. So, some crises are manageable and one can muddle through, but in severe cases one needs assistance.

One final truth though – more climbers are killed on Everest climbing down from the summit than ascending. I surmise this is because the mindset is to get to the top, almost at all costs. Perhaps some climbers use up all their bottled oxygen going up, forgetting to keep some for the descent, or perhaps they give their all on the summit climb and burn up the reserves required to get back to Base Camp. I suspect that total concentration is on-going up and climbers don't concentrate on the descent, imagining they have already succeeded.

Or perhaps the reason is a bit of all of that and more.

Many businesses fail when they think they have summited and the job is done. Ask Steiner.

Howard Cooke BCom (UCT), CA (SA) topmanage@live.com cell no. 084 436 1099





(ICT) focused Maths and Science Computer Programme for Grade 10s in 2019. "We are very excited to be able to introduce ICT and improve social inclusion by giving young people the skills and tools they need to safely engage in the digital world and prepare to participate in the digital economy," says Rae.

The Tomorrow Trust has seen huge improvements in their learners' performances, and their 2018 Matric results were particularly impressive, with their pupils achieving a collective 72 distinctions.

Trans Hex polishing up new opportunities

ture improvements were

further expand the op-

The most encourag-

ing aspect of the interim

report was the improved

performance at the 33%

owned Somiluana Mine

from Somiluana topped

66 000 carats - slightly

lower than the 67 000

recorded in the previous

But total sales came

in at \$35,8 million at an

average price of US\$520

per carat compared with

the \$27,7 million at an

average price of US\$531

per carat achieved in the

previous interim period.

ana Mine was pursuing

an aggressive drilling

programme to identify

new resources in calo-

nda formation gravels

as well as terraces and

Delport said Somilu-

production

in Angola.

Total

year.

erational footprint.

PAROW-based diamond miner Trans Hex Group is "actively evaluating" potential new diamond properties and pursuing opportunities to expand its diamondmarketing activities.

The company offered this little gem of a comment at the end of its interim report, which was released in December. But Trans Hex offered no further colour' on this important statement – remembering that the market is no longer taking a shine to the diamond miner

Currently Trans Hex carries a market value on the JSE of less than R100m. This time in 2017 the company was worth around R550m - underlining a contention that the market is seeing major flaws in the diamond miner's strategy and operations.

Initial speculation is that Trans Hex might look outside South Africa for new diamond ventures - possibly even seeking an offshore listing on a mining friendly bourse.

At this delicate juncture, Trans Hex looks in desperate need of new profit clusters.

The interim report showed that the company is still struggling for traction at its West Coast Mining investment - the Namaqualand based operations formerly owned by gem giant De Beers.

Readers may remember Trans Hex has disposed of its traditional LOR (Lower Orange River) operations (where mining was halted in late 2017), and sold these off in April 2018 at a profit of R77,8 million.

Sales revenue for new look Trans Hex came in markedly higher at R136 million for the six

months to end September. But South African

production reduced to 55 950 carats (September 2017: 76 261 carats. In its operational review, Trans Hex CEO

Llewellyn Delport said production at West Coast Resources where the company was 51 681 carats compared to 60 344 carats in September 2017.

He said sales amounted to R110,3 million at an average price of \$135 per carat (September 2017: sales of R118,5 million at an average price of US\$156 per

carat). Delport noted that the average grade had decreased by 15,4% to 17,26 carats/100 tons compared to 20,41 carats/100 tons in September 2017.

The average stone size remained the same at 0,24 carats per stone.

Delport said operafloodplains. tional and infrastruc-

Whether encouraging developments in Angocontinuing in order to la increase Trans Hex's appetite for other African diamond ventures remains to be seen. Industry sources, however, reckon that with retail tycoon Christo Wiese as a major shareholder Trans Hex could look offshore or to marine diamond mining for new opportunities.

Looking ahead, Delport said prospecting at West Coast Resources would continue to target high-priority areas that might identify additional resources for mining.

He said mining activities will remain focused on the Langklip area and on other sections of the Koingnaas area.

Delport estimated that production for the 2019 financial year was expected to be in the order of 140 000 car-



er at Nzagi (in the south-west at Lulau) and at other areas currently being evaluated.

"Production results and geological work through drilling and bulk sampling indicate that carat production for the 2019 financial year is expected to be in the order of 133 000 carats, compared to 2018 financial year actual production of 136 402 carats."

Curro – 2018 results boost

CURRO Holdings, South Africa's largest JSE-listed independent school education provider, has released its results for the year ended 31 December 2018. Headline earnings from continuing operations saw an increase of 23% (from R201 million to R248 million). Revenue increased by 19% from R2 099 million in 2017 to R2 496 million in 2018.

Group EBITDA (earnings before interest, taxation, depreciation and amortisation) increased by 33% from R473 million to R627 million, while the schools' EBITDA increased by 30% from R594 million in 2017 to R772 million for the period under review.

"We are very pleased with a set of solid results, as well as with the progress made in widening access to quality independent school education in South Africa and beyond. The major improvement in the EBITDA margin from 23% to 25% is due to increased efficiencies utilisation capacity and lower bad debt expenses," says Andries Greyling, chief executive officer of Curro Holdings.



Growth and expansion

According to Greyling, organic as well as acquisitive growth contributed to more than 57 000 learners across 68 campuses (164 schools) attending a Curro school at the start of 2019. This Town). represents an increase of 12, compared to 2018. During this period, Cur-

ro extended its offering by: Opening Curro Foreshore (Cape Town), a new tech-focused schooling model.

Opening Curro Private College - Rivonia (Gauteng). This educational facility is the first in Curro's stable to offer the National Certificate Vocational (NCV) as an alternative

ro Vanderbijlpark and Edenvale (both in Gauteng), Curro Academies in Parkdene (Boksburg), Protea Glen (Soweto) and Savanna City (Johannesburg), as well as a Curro Castle in Burgundy Estate (Cape

Acquiring Cooper College, Northriding and Sagewood in Gauteng, Creston College in KwaZulu-Natal and Baobab Primary in Botswana.

Investing in significant expansions across existing campuses to the value of R588 million. Prospects to be con-

cluded early in 2019 include two schools in the Free State with a total of 2 100 learners and two Select schools in Gaut-

Matric results

Curro Holdings' IEB schools experienced a pass rate of 99.7% for its grade 12 learners. "2018 was an exceptional year for Curro's IEB schools, with results showing an

increase in the number of students with university exemption, growing from 85% to 88%. The number of A candidates, also improved from 9.8% to 11.5%; and candidates with an average higher than a C, rising from 70.3% to 73.2%, says Santie Botha, chairperson of Curro Holdings.

The pass rate for all Curro Holdings' NSC schools in 2018 stood at 94.3%. Complimenting this was a growth in the number of learners with university exemption, increasing from 42% to 52%. A total of 94% of the learners obtained access to tertiary education - including a degree, diploma or certificate qualification.

"We commend our learners for their hard work and dedication, alongside praising the impact of our excellent eng. In addition, we are teachers and supportive at this stage planning parents," adds Botha. Greyling four Greenfield operaadds "During 2018, R1.7 tions primarily focussed on the expansion of our billion was invested in the business, while the

group plans to invest up to R1.8 billion in 2019. Our learners deserve the best and with that

comes the responsibility to continue expanding our reach, improving our facilities, as well

ats compared to 2018

financial year's actual

production of 173 920

Trans Hex's small shal-

low water operations

would be around 10

000 carats compared

with the 2018 financial

year's actual produc-

In Angola, Delport

said operations would

continue on the east

bank of the Luana Riv-

tion of 9 012 carats.

from

Production

carats.

as offering a variety of relevant and innovative educational curriculum options."

Conveyor Component & Engineering Plastics Solutions



With over 30 years in business, IRP Engineering Plastics is South Africa's leading Conveyor Components and Engineering Plastics solutions providers to the food,

A strong commitment to local manufacturing with unrivaled quality and service makes IRP Engineering Plastics the only company of choice to partner with in providing you with all your Conveyor Component and Engineering Plastics needs.









WEAR LINERS/ CHUTE LINERS



SIFTING SCREENS/ SIEVE CLEANERS

beverage and packaging industries.

to the National Senior Certificate.

Constructing six new campuses to the value of R416 million. These campuses include Curnew models.

	nit 6, Aero Park, Corner Thunderbolt Lane & Amelia Drive, orporate Estate, Pelindaba Road Ⅰ PO Box 2666, Honeydew, 2040
Tel	: 010 020 7156 jhb@irp.co.za WWW .irp.co.za

FireDos foam dosing pumps and systems • Monitors and water cannons • Portable dosing and monitor systems • Bund and tank top pourers special risk fire protection +27 (0) 861 111 544 sales@dosetech.co.za mgf@dosetech.co.za FireDos **NKRON** www.dosetech.co.za Hand line nozzles • Mueller gate valves, indicator posts and fire protection control valves • Jones hydrants • Foam concentrate

A state of the state of the

SUBMIT YOUR WORKPLACE SKILLS PLANS & ANNUAL TRAINING REPORTS

All Employers with staff registered for PAYE and with a salary bill of R500 000 or more per annum are required by law to register with SARS to pay a Skills Development Levy with a SETA. They must also submit their WSPs and ATRs in order to comply to Skills Development legislation and to access Mandatory and Discretionary Grants.

Taking on apprentices just got simpler.

With the Apprenticeship Game Changer, the Western Cape Government aims to make it easier for employers to take on an apprentice. We have a specialist team standing by to guide you through the process.

The Western Cape Government is working closely with Employers to tackle youth unemployment and grow skills through the Apprenticeship Game Changer.

Apprenticeships under the Game Changer refer to all work place based learner opportunities including internships, learnerships and apprenticeships in our priority sectors namely: Oil & Gas, Tourism, Agri-Processing, Renewable Energy and Information Communication Technology.

Our target is to introduce 11 300 qualified apprentices into the labour market, within these priority sectors, by 2019. This will place you ahead of your competitors when it comes to your B-BBEE scorecards and access to skills levy funding.

CONTACT THE RED TAPE REDUCTION UNIT ON **0861 888 126** OR EMAIL **REDTAPE@WESTERNCAPE.GOV.ZA WWW.WESTERNCAPE.GOV.ZA/APPRENTICESHIP-FOR-EMPLOYERS**



Making things simpler **BETTER TOGETHER.**

Leased solar energy projects take off with Decentral Energy,"

SUN Exchange (www. thesunexchange.com), a global solar micro-leasing marketplace, has signed an agreement with Decentral Energy (http:// decentralenergy.capital), a boutique clean energy fund manager based in Johannesburg.

The agreement gives Decentral Energy's Grovest Energy, a Section 12J fund, first right of refusal to fund 51-100% of selected Sun Exchange off-taker projects, and to fund any balances after Sun Exchange solar cell crowd sales are completed.

Decentral Energy has already provided equity and debt financing for the largest Sun Exchange project to date, the 473kW Cape Town-based Nioro Plastics, which came online early January this year.

dent about their business

model that we've already

bought into the Nioro

Plastics project, and our

goal is to fund 20 MWp

of Sun Exchange projects

about the partnership

"We are delighted

by 2020."

demonstrate

Abe Cambridge, said "We invest in small scale energy assets that predictable, inflation-linked cash flows, because we believe that the energy future will be decentralized and built upon similar financing systems", said Christian Bode, Fund Manager at Decentral Energy. "For that reason, we support Sun Exchange in their vision to create a thriving, inclusive and decentralized solar-powered economy. We're so confi-

CEO & Founder, Sun Exchange. "Their confidence in our projects demonstrates that our solar cell leasing marketplace offers a reliable, lucrative and socially responsible source of income for anyone."

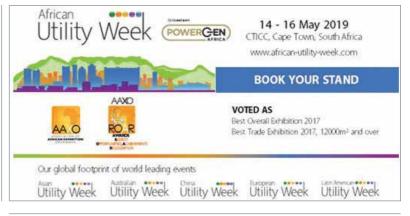
The agreement increases the ability of the Sun Exchange to host larger projects with less risk. For Sun Exchange users, this means that they can be part of large or small projects and there is greater reliability around the completion dates of crowd sales and subsequently quicker time scales to having their solar cells rented out. This is also good news for

off-takers, such as Nioro Plastics, as the agreement

highlights the increasing availability of equity and debt financing for viable small projects, which large financiers are traditionally not interested in funding.

"We turn recycled PET into everyday household items that last a very long time and which continue to be 100% recyclable," said Simeon Penev, Nioro Plastics Managing Director. "We are committed to recycling and producing these products in a cleaner and more cost-efficient way, using renewable energy. The solar project was easy to justify, because we will be saving on our energy bill moving forward."

Decentral purchased nearly 59% of the Nioro Plastics solar cells, which will yield an IRR of



14.5% per year. Over 20 years, Nioro Plastics will produce 14.12GWh of clean electricity, which is equivalent to over 10 million kilograms of coal burned.

Sun Exchange has successfully hosted crowdsales for seven other solar projects in South Africa through its solar micro-leasing platform. The projects, which focus on commercial, industrial and community installations, provide an income stream for Sun

Exchange members, who lease their cells to the projects through the Sun Exchange platform. The platform provides cell owners access to realtime information on how solar cells are performing and tracks rental income

generation. The company's most recent crowd sale was for a project that will solar power Sacred Heart College in Johannesburg, a historic educational institution renowned for its social justice leadership.

With an ever increasing ability to get larger projects off the ground, Sun Exchange is already expanding their footprint into the rest of Africa, which lacks traditional grid-tied and centralised infrastructure. Last year, the company announced a partnership with Leonardo DiCaprio-backed Powerhive, aiming to leverage the Sun Exchange platform to deliver electricity for up to 175 000 people in Kenya currently living without power.

New CEO looks to grow Africa footprint

AS part of its ongoing growth plans, Zest WEG Group will continue to focus on opportunities in more African countries, according to its new chief executive officer, Siegfried Kreutzfeld.

With 40 years of service in the global WEG Group, Kreutzfeld brings a wealth of industry experience to the top job at the South African business, which he joined in January 2019. He was most recently the managing director of WEG China.

Botswana, Zimbabwe, DRC and Zambia. Today, the Zest WEG Group ranks among the top five operations in the global WEG Group.

"Many of our products are well established across the continent," he says. "However, we believe there is growth potential with both mature products - such as low voltage motors, high voltage motors, and drives and switchgear - as well as with other products we manufacture locally such as

transformers, motor control centres, panels and generators.'

Kreutzfeld highlights that major opportunities exist with premium efficiency products across the range, including WEG IE3 motor and WEG CFW drives.

"Also key to the Zest WEG Group's growth potential is our ability to offer a fit-for-purpose integrated solution," says Kreutzfeld. "This is available across all sectors, but especially in power generation, electrical infrastructure and mobile power and energy solutions. We will also be introducing WEG solutions for renewable energy applications." The wide range

of products in Zest WEG Group's market offering are relevant across a broad sector of industries including mining; petrochemical; agriculture; water and wastewater; paper and pulp; sugar; and energy – including traditional coal fire power plants and renewable energy.



A 20MVA 132kV WEG power transformer installed on the Eskom grid.

"Many of our products are well established across the continent."

"WEG has a very simple strategy: we believe in continued growth on all continents," he says. "This is achieved by maintaining close relationships with all our customers



RELIABLE PRODUCTS and SOLUTIONS

for the heating, ventilation and air conditioning industry.

An in-depth understanding of the requirements for HVAC applications, access to quality product solutions and years of experience have ensured that the Zest WEG Group service offering is fit-for purpose. From single product installations to individually customised solutions, the latest technology is used ensure optimum performance and reliability without compromising on energy efficiency.

and ensuring that we deliver quality products. We underpin all this by our high levels of service and support."

Established in South Africa to create a strong national footprint, the Zest WEG Group has grown steadily into other Africa countries. With its responsibility for the sub-Saharan market, it operates branches in Ghana, Tanzania, Mozambique and Namibia. The group also has competent partners in countries like Angola, 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 for operations.



Coal still has a place in the power mix

Wayne Lindecke, Director: Power Generation, WSP in Africa

DURING the recent Investing in African Mining Indaba, concerns were noted on the impact that the move towards a 'greener economy' would have on coal mining - and, for base-load production. power However, coal mining and power production will remain two key industrial activities in the local economy.

An optimal energy mix – for any country - relies on a variety of generation technologies. In South Africa there is certainly a drive towards alternative and 'greener' sources, like gas or renewables, which all form part of the country's Integrated Resource Plan (IRP) – and are in line with the country's carbon reduction target commitments. That being said. South Africa - with its vast coal resources and large fleet of power stations – is still setting the benchmark on the continent in terms of coal-fired power generation. Where there is perhaps more pressure on adopting interventions and new approaches to ensure that coal can be mined and combusted for power generation in the most eco-efficient way possible.

Shifting the balance in state vs. investor priorities

As much of the developed world has or is in the process of moving away from coal base-load power, this has made it more challenging to secure financing for such projects. However, there is significant investor and developer interest in the country's alternative and renewable power plans and projects. The focus therefore should be on continuing to open opportunities for investment and development through the Renewable Energy Independent Power Producer pro-(REIPPP) gramme and gas-to-power programme, where the

state's available funds for proposer re-investment may be focused on maintaining and re-investing in wind cleaner coal base-load of power infrastructure, for the

Innovating to support more sustainable coal base-load power

example.

While there are several simultaneous conversations around the REIPPP, the gas-to-power programme, coal baseload IPP programme – even the future of the proposed nuclear programme – amongst this mix the importance of the coal base-load power programme should not be underrated.

The fact is that even with the new builds of Medupi and Kusile, there is still a need to replace the aging fleet of existing coal-fired power plants that were built in South Africa in the 1980s. With this in mind and based on our experience, meeting the onerous environmental demands on these plants promises to add the most value to South Africa's coal generation aspirations.

For example, Medupi and Kusile feature supercritical boilers and turbines that improve their

efficiencies and use of coal and scares water resources. Meanwhile, flue-gas desulphurisation technology, which will be retro-fitted on all six of Medupi's generation units, will significantly reduce their sulphur-dioxide emissions. Additionally, ongoing research into cleaner technologies - including, coal-gasification, carbon sequestration and storage and fluidised-bed technology - all point to cleaner coal solutions for South

edly remain part of the country's base-load generation plans for the foreseeable future. But, we can adapt the way we mine, produce and process it - towards re-Africa's future; which ducing carbon emissions is in keeping with the and to transition to more futureproofed and suscountry's carbon emission reduction target tainable energy schemes.

commitments.

As demand for power

rises the South Afri-

can government, like

its counterparts in de-

veloped and emerging

economies, is faced

with the trilemma of

providing affordable,

decarbonised and se-

cure electricity. Coal

will therefore undoubt-

SOME SITUATIONS ARE HARD TO TURN AROUND

Every business at some point in time is threatened... it's natural & just part of life.

Those that charge on make smart moves, and this does not have to involve one of the BIG 5 either.



With successes in different continents, cultures, & from listed businesses to small, manufacture to services, we worked with them to reverse the charge.

Give us a call on **084 4361099** or **topmanage@live.com** Howard Cooke (Bcom, CA, Business Rescue) & Associates



KSB expands its aftermarket services

KSB Pumps and Valves are intensifying its focus on aftermarket services that add value to customer operations far beyond the supply and maintenance of its own products.

In future the company will also extend its services and engineering expertise to include maintenance of entire systems, reverse engineering of rotating equipment and system optimisations.

This includes maintenance of third-party peripheral equipment in order to ensure its clients systems perform optimally at all times.

"Our aftermarket engineering teams can also remanufacture or reverse engineer equipment that is no longer available but necessary to meet client's requirements," says KSB Pumps and Valves Supreme-Serv division manager, Grant Glennistor.



KSB Pumps and Valves SupremeServ division manager, Grant Glennistor.

related

success.

African, as well as glob-

al infrastructure and

expertise is available to

support customers' flu-

id transfer projects, in-

cluding equipment and

to ensure its long-term

"It includes a faster

supply chain with a move

towards fully automated

logistics functions for

faster spare parts turna-

rounds, upgraded high-

tech service centres at all

KSB branches, special-

ised repair services on

infrastructure

Supreme service

He continues that all aftermarket services globally fall under the new KSB SupremeServ banner which encompasses existing and new maintenance, logistics and engineering infrastructure and is entirely focused on elevating customer assistance to new heights within the pump industry.

"SupremeServ is a safety net that ensures KSB's extensive South

 all makes of pumps and related equipment, specialised welding, as well as installations, commissioning, performance testing on site, decommissioning and other advanced field service and engineering services."

World-class

Local pump users are in good hands when they deal with the company which has a history spanning more than 60 years in South Africa. The local operation also ranks as one of the top service centres within the "KSB World" of 16 000 employees in more than 60 countries.

Its resident engineers are regarded as among the best undertaking all kinds of projects in the remediation and repairs of equipment in projects as diverse as power generation plants, petrochemical, bulk water supply projects, as well as being equally eager to assist small-scale industrial and agricultural projects. This ensures KSB SupremeServ services are available for the widest possible range of clients whether for basic or large-scale or complex services.

Simultaneously, the company has ongoing programmes to continuously improve services through constant upskilling and development of its staff in line with market requirements. This level of commitment has also led to the company qualifying as a Level 1 BBBEE provider.

EP-50 MANUAL HAND PUMP

- Pressure: 0 50 Bar
- Flow Volume: 3.0 L/min
- Reservoir: Steel

USE Valves and Engineering Supplies





Contact our sales team on tel: +27 (0)21 510 3076 Prices excluding

YOUR MOST VALUABLE ASSET...

Discover intelligent solutions for intelligent warehousing with a customisable, GSM-based forklift fleet management system that provides dynamic data and real-time information on your fleet performance.



Head Office

Tel: 086 100 0342 • Int: Tel: +27 31 702 2368 • Fax: 086 555 2740 • Int: Fax: +27 31 701 9245 Unit 8, Wareing Park, 2 Wareing Rd, Pinetown, 3600 P.O. Box 1564, Pinetown, 3600, KZN, South Africa www.realtelematics.com

Well situated

KSB SupremeServ centres are situated at all local branches with spares and standard parts available within 24 hours to service all 22 000 variants of its own pump. The centres also dedicated walk-in-centres for on-the-go-services.

Fast food – not as much relish

THE fast food sector - that for so long has generated fat returns - looks set for a profit diet for the foreseeable future.

Town-based Cape Spur Corporation last month set the leaner tone with a trading update that showed franchised restaurant sales increasing 6.5% to R3.9 billion in the six months to December 2018.

In South Africa, while franchised restaurant sales increased by 5.7%, from interrestaurants national increased by 12.7%, in Rand terms.

eponymous The Spur Steak Ranches performed satisfactorily with sales up 6.1% and 5.1% on an existing store base measure. The recently acquired Hussar Grill - a brand well known to Capetonians - also showed some flavour with sales up 13.8% and almost 9% on an existing store basis.

The remaining brands, however, were undercooked.

Existing store sales presumably as the intense competition in this over-traded niche took its toll.

specialist Seafood John Dory's Fish Grill Sushi limited sawcits total sales decline to less than 1% - but existing store sales were down 5.4%.

The biggest shock came with the fast growing RocoMamas gourmet burger restaurant brand - which saw a 6% gain in total sales but an unexpected 6.7% drop in existing store sales.

Spur chief executive, Pierre van Tonder, said that local franchised restaurant sales increased by 11.3% in the first quarter to September 2018 - supported by



the continued recovery in the Spur Steak Ranches brand and a strong performance in The Hussar Grill.

"While the second

quarter performance

was disappointing, it

is generally consistent

with sales trends in

the local retail sector.

consumer is taking sig-

nificant strain due to

the sombre state of the

economy, although the

performance of The

Hussar Grill indicates

consumers continue to

be more resilient to the

that sales from existing

restaurants in the Ro-

coMamas chain reflect

a period of consolida-

tion following the un-

precedented increase

in restaurant numbers

since acquisition in

He confirmed turn-

over for the Panarottis

chain was impacted by

aggressive discounting

by competitors in the

takeaway pizza market.

news, then some heart

should be taken that

Spur is still confidently

expanding its store

Van Tonder reported

that locally 25 outlets

were opened and six

closed during the in-

footprint.

If there is some good

March 2015.

Van Tonder noted

weakening economy."

The

that

South African

higher-income

tion, Spur acquired the Nikos Coalgrill Greek chain, which comprised six restaurants But he noted sales as at August last year. growth in the second Two more outlets have quarter slowed to 1.2%. since been opened.

At the end of 2018 Spur's restaurant base totalled 616 (June 2018: 575).

In another significant development, Cape Town-based empowerment company Grand Parade Investments (GPI) has opted to exit its poor performing assets Dunkin Donuts (coffee and doughnuts) and Baskin Robbins (ice cream) filing for the voluntary liquidation of these businesses.

GPI said the decision to exit Dunkin Donuts and Baskin Robbins was made following sustained losses in these businesses and an unsuccessful process to dispose of these businesses.

The company added that the decision is in line with its value based strategy, which aims at improving the group's capital allocation by channelling capital to high value potential assets - such as its Burger King

franchise. Fast food franchisor Taste Holdings - which has a sizeable presence in the Cape Town pizza market - also appears to be hungry for capital in these lean times.

Last month Taste which owns the local rights to Starbucks coffee outlets and Domino's Pizza - proposed raising R132m in fresh capital scarcely a year after raising R398 million in a similar rights offer to shareholders.

Last year's rights offer raised capital to settle debt - with the balance of the funds mobilised to the continued roll-out of Domino's and Starbucks Coffee stores.

Basically the R92 million was enough to fund Taste's operations, but not enough to fund the expansion effort. So the expansion of Dominos and Starbucks ceased.

Taste reported that it had become evident that the centralised structure of the food division was both inefficient and costly - and was a primary contributor to the underperformance of the division.

The company has now restructured to move all the functional responsibility into the underlying brands - removing the executive layer which was sitting above the brands.

Taste added that the key takeaway (excuse the pun) for Dominos and Starbucks was that in order for the business to be profitable in the future, store level capital expenditures would need to be greatly reduced and brand, product and operating standards would need to be consistently implemented.

In essence, the new capital raise off R138 million will really be needed to stabilise the business...before expansion plans are resumed again.

Essentially between R76 million and R83 million will be needed to fund the anticipated operating losses, another R40 million to R43 million to fund expansion expenditure to open between four and six new Starbucks cafés and between eight to 12 new Domino's restaurant. The balance (between R9 million and R13 million) will be needed for maintenance and technology infrastructure.

Taste said it aimed to reach break-even at a store level for Domino's within a 24-month period via a combination of entrenching the revised store operating models, expanding the existing store networks and maintaining and relocating certain existing Domino's restaurants.

The company's long-term objective for Starbucks and Domino's was to reach break-even across both brands within a 36 to 40 month period after the commencement of the expansion plan and to attain positive free cash flows across both brands within seven to eight years.

The bad news is that management expects the company will need R700m in funding to reach positive free cash flow...and that is on a base of between 150 and 200 Starbuck cafés and 220 and 280 Domino's restaurants. The bottom line?

Capetonians - who are now familiar with the Domino's chain - should perhaps not hold their breath for a Starbucks outlet in every trendy suburb. In fact, it will be interesting to see how quickly Taste moves in bringing the first Starbucks to Cape Town ..

Advertorial **One decision that will** save you money

Have you ever considered how much are actually vou spending on your companies marketing printing costs. Whether its business cards, brochures, flyers or posters. Ensuring, you get the best quality and cost verses lead times, can be a real nightmare or an absolute walk in the park. There are basically two major solutions for printing on paper. Litho and digital printing.

LITHO PRINTING Makes use of water based inks that get transferred onto the paper and soaks into the page. The colour spectrum is made up of four colours Cyan (C), Magenta (M), Yellow (Y) and Black (K). Not so long ago, litho printers made use of litho positive film to create printing plates. Now days the system is computer driven (straight to plate) with the basic concept staying the same. It has also brought the cost down. This process offers the best print quality available with crisp, clear and accurate printing. Typically lead times

between

working days.

are

DIGITAL PRINTING Is basically colour laser printing in a nut shell. Using wax based inks that are fused (some say baked) onto the paper using a laser imaging unit. Digital printing is traditionally used for smaller print runs. It is essentially on-demand printing. Just print what you need at the click of a button. Over the years the print quality and standard has improved dramatically, but can never compare to a litho job. There are pitfalls one must consider when going this route. And yes, you can keep your costs low, as you only need to print what you need at any given time. But the unit price does not come down as quickly as litho can and generally remains the same the more you print. Typically lead times are between 3-5 working days.

IN ENDING

There are a lot more processes to consider when choosing the correct printing process for your business. So having a print professional with the necessary experience to guide



5-7

Litho printing is generally suited for larger print runs, which mean you have to print thousands of copies to justify the

you through the many options on both, will make things much easier on your pocket. Printing costs make up a large portion



cost. The more you print the smaller the unit cost becomes. However the modern day printing press incredibly fast is and requires a far smaller print run,

is

printings biggest claim

to fame. With short

runs printed more

frequently becoming

a huge trend in the

market, which makes

litho printing very

competitive, going up

against digital.

quality

of any business. So make use of someone that knows what they are talking about and can advise you on the best way forward, that meets your budget, deadline and quality

High speed doors beats the birds

THIRTEEN Apex speed Traffic high



traffic and the doors automatically open and close to allow forklifts in and out of the facility. Each door's opening and closing action is controlled using a sensing system installed above the doorway. "Ensuring smooth traffic flow is one of the key requirements in any warehouse operation and the doors achieve an opening and closing speed of 1 m/s, thus minimising bottlenecking," Candy

warehouse operation erage of such large with high volumes of doorways, it is not only essential to ensure optimum reliability but also to ensure that incidental damage does not occur to the tarpaulin material. While the Apex Traffic Door offers a sturdy and dependable solution for medium to large entrances it is also particularly suited to conditions where wind could be a factor. Made from strong self-extinguishing Class 2 fabric with excellent thermal insulation properties, this door has been designed to resist a wind loading of up to 50 km/h.

doors have been installed at Bayer's Nigel manufacturing plant, where a diverse range of agricultural products are manufactured. James Candy, pro-duction manager at Apex Strip Curtains & Doors, explains that one of the primary requirements was to provide a solution that would prevent birds from entering the facility and this was accomplished by installing these high speed doors on the outside of all exterior openings.

The majority of the

One of the Apex Traffic high speed doors installed at Bayer's Nigel manufacturing facility.

Apex Traffic doors are 3 m wide by 3,5 m high and have been installed

against the exterior face of the structure. says This is a very busy

With the area cov-

when compared with a requirements. few years ago. Print

litho

Make an informed decision. It may just end up saving you money or simply making you stand out from the rest.

Christian Jaggers RSA Litho



Plastic alternatives – blessing or curse?

A viewpoint from Plastics SA

NEVER before has the issue of plastic pollution and, specifically plastics in our oceans received so much attention on a global scale. Consumers are encouraged to "choose or refuse" single-use plastics.

Recognizing an opportunity to gain significant marketing and PR mileage a local retailer and brand-owner was quick to respond to these public outcries by piloting a compostable bag made from starches, cellulose, vegetable oils and combinations as an "environmentally friendly alternative to plastic bags" to replace all plastic carrier bags, barrier bags and fruit and vegetable bags.

To the uninformed, this might seem an excellent and practical solution to solve an irritating problem. The reality, unfortunately, is far from the truth. Many of the so-called "plastic alternatives" that are now flooding the market have not been properly evaluated.

According to the internationally accepted standard for compostability (EN 13432), the packaging must be mixed with organic waste and maintained under test scale composting conditions for 12 weeks. If not kept under ideal conditions, these bags will not biodegrade and are most likely to end up in one of the country's landfills (also not ideal composting environment) or worse -in the recycling stream where it will contaminate the entire stream and render more material unrecyclable.

Is recycling the answer?

South Africa has a robust and welldeveloped plastics recycling industry that provided jobs to more than 52 000 employees who manually recycled more than 313 700 tons of plastic material into



new raw materials in 2017 alone. Thanks to their dedicated efforts and the South Africans committed to recycling, 214 220 tons of CO2 and enough landfill space to fill 714 Olympic sized swimming pools were saved in one year - this is the equivalent weight of 560 Airbus A380 aeroplanes, saving enough fuel to keep 178 000 cars on the road for one year! Unfortunately, the

same cannot be said of these replacement materials. All of these products will eventually reach the end of life and will need to be discarded. A non-woven plastic re-usable plastic bag, for example, is not

currently recycled in South Africa owing to the fact that the stitching and webbing used in the manufacture of the bag are made of different materials to the bulk of the bag. Likewise, drinking straws made from alternate materials such as glass or bamboo tubing are currently not being recycled in South Africa, and they are not picked by waste pickers due to their low value.

On the other hand, when combined with a responsible, wellmanaged waste management system, a recyclable product not only underwrites and supports a circular economy, but also ensures that precious resources are protected and reused for as long as possible.

Rejecting a "fit for purpose" plastic packaging material with a low carbon footprint, in favour of an alternative material that is imported, expensive, has a high carbon footprint and uses scarce food resources as raw material could creating an even bigger problem, rather than solve this one.

Plastics don't litter – people do. Opting for biodegradable packaging is not going to change the human behaviour of littering.

Consumers need to commit to protecting our environment and the future of our children and educate themselves on the facts around packaging alternatives, and the benefits of effective plastic recycling and correct disposal of materials they no longer need. The marketing jargon promoting these replacement materials should be researched before boldly switching to alternative materials.

Date	Time	Торіс	Venue	Type of Event
12-Mar-19	08:30 - 15:45	Email Marketing with MailChimp	Cape Chamber of Commerce & Industry, 4th Floor, 33 Martin Hammerschlag Way, Foreshore	Workshop Members R1, 450 Non-Members R2,000
13-Mar-19	13:00 - 15:00	Company Amendments & Shareholder Changes	-	Webinar Members R600 Non-Members R850
20-Mar-19	13:00 - 15:00	VAT Administration Process	-	Webinar Members R600 Non-Members R850
02-Apr-19	08:30 - 15:45	Everything you want to know about LinkedIn	Cape Chamber of Commerce & Industry, 4th Floor, 33 Martin Hammerschlag Way, Foreshore	Workshop Members R1, 450 Non-Members R2,000
09-Apr-19	09:00 - 15:30	VAT Basic	Bell Rosen Conference Centre, 16 Kommissaris Street Welgemoed	Workshop Members R1, 500 Non-Members R2, 750
11-Apr-19	08:30 - 15:45	Everything you want to know about YouTube & SoundCloud	Cape Chamber of Commerce & Industry, 4th Floor, 33 Martin Hammerschlag Way, Foreshore	Workshop Members R1, 450 Non-Members R2,000
11-Apr-19	09:00 - 15:30	Advanced Understanding of Financial Statements	Bell Rosen Conference Centre, 16 Kommissaris Street Welgemoed	Workshop Members R1, 500 Non-Members R2,750
14-May-19	09:00 - 15:30	Basic Accounting to Trial Balance	Bell Rosen Conference Centre, 16 Kommissaris Street Welgemoed	Workshop Members R1, 500 Non-Members R2,750
16-May-19	08:30 - 15:00	How to make money with an online shop	Cape Chamber of Commerce & Industry, 4th Floor, 33 Martin Hammerschlag Way, Foreshore	Workshop Members R1, 450 Non-Members R2,000
16-May-19	09:00 - 15:30	Practical Approach to Financial Administration	Bell Rosen Conference Centre, 16 Kommissaris Street Welgemoed	Workshop Members R1, 500 Non-Members R2,750
22+23 May 19	09:00-15:30	VAT Masterclass 2-Day	Bell Rosen Conference Centre, 16 Kommissaris Street	Workshop Members R4, 865



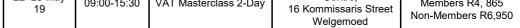
Cape Chamber events/workshops/webinars

Buy more for less.

Save 10% on equipment and software to set up or expand your temperature calibration lab.

All rights reserved. Specifications are subject to change without notice. All actions are valid until June 28th, 2019.





All confirmed events are available on the Cape Chamber website http://capechamber.co.za Events are loaded weekly as events are approved.

CAPE BUSINESS NEWS

Cape Business News, founded in 1980, is primarily a promotional vehicle for companies that have the Cape Business community as a primary target market.

ADVERTISING

For all your advertising requirements, contact our Sales Team on 021 250 0400

Job creation through local manufacturing

APPROXIMATELY 50-70% local content in products would be considered acceptable to the future growth and sustainability of the local manufacturing sector. This is according to Eric Bruggeman, CEO at the South African Capital Equipment Export Council (SACEEC).

In a presentation at the Electra Mining Africa exhibition in September 2018, Bruggeman said that the local manufacturing sector had experienced its highest turnover in some time during the third quarter of 2017. Capturing 32% of the local pie, the sector proved that it is a serious contender, running a close second to general trade.

SACEEC currently has 240 members and over the past three years these members have contributed over R43billion per annum to the local economy.

Bruggeman cited Transnet's delayed pipeline project as a great example of how manufacturers local could help to build the country's economy and reduce unemployment. The project, which has been plagued by numerous delays, was finally completed in early 2018. A local manufacturer of valves received a substantial order to replace the existing valves after products from two different sources had failed to produce a positive outcome.

"This is especially relevant given the fact that local procurement specialists still insist on sourcing products from overseas when local alternatives have in fact proven to be superior in terms of both performance and reliability. In a nutshell, the unnecessary importation of goods, which are available from local manufacturers, is costing South Africa innumerable jobs and needs to be urgently addressed," says Bruggeman.

Determined to drive inclusion for local manufacturers as part of both the local and international supply chains, SACEEC has partnered with Specialised Exhibitions Montgomery, to launch the Local Southern African Manufacturing Expo (LME). The exhibition, which is endorsed by the Premier of Gauteng, David Makhura, will be held at the Expo Centre, Nasrec from 21 to 23 May 2019. In addition to the exhibition, SAIMechE will be hosting the freeto-attend seminars. There will also be an arei (Association of Representatives for the Electronics Industry) Pavilion and the Artisan Training Institute (ATI) is hosting the Development Skills Zone. Other Association partners include International Steel Fabricators (ISF) and the Lifting Equipment Engineering Association of South Africa (LEEASA).

In a recent coup, the organisers signed an agreement with the Mandela Mining Precinct and the Mining

Equipment Manufacturers of South Africa (MEMSA) to host the SA Mining Supply Chain Conference and Workshop alongside the Expo on 22 and 23 May. "We are very excited at the potential that the Local Southern African Manufacturing Expo will provide for manufacturers local to market themselves

audience. The exhibition will not only allow them to showcase their products and services in an interactive manner, but will furthermore equip them with the skills needed to drive entrepreneurial innovation and aftersales service. It will also create a fertile environment for visitors to find the right to a captive extended BBBEE and technology partners," says Bruggeman.

to customise a pack-

age that will build their

brand quickly and effectively," says Char-lene Hefer, portfolio

director for Specialised

Exhibitions Montgom-

LME 2019 or to find

out more information

about the exhibition

visit the website at

www.localmanufac-

turingexpo.co.za

To book a stand at

ery.

"The industry has shown great interest in the exhibition and stand sales have been brisk. We do still have a few stands available and urge local manufacturers to seize this strategic opportunity to engage with a captive buying audience. Interested parties can contact our sales team



Eric Bruggeman, CEO at the South African Capital Equipment Export Council (SACEEC).



Bio-gas – the orphan of the renewable energy mix?

THE widespread adoption of bio-gas as a reliable alternative energy source seems like a no brainer. Capturing energy rich methane produced from decaying materials is a proven technology, yet its adoption as part of the renewable energy mix appears to have been overshadowed by wind and solar.

CBN posed a series of questions to the Southern African Biogas Industry Association to clarify the position of this underrated fuel, and its chairperson Jason Gifford provides extensive insight.

Q: The generation of alternative energy from bio fuels is not new and the technology is well tested around the world. The extraction of methane from the landfill sites around Durban hit the headlines more than 10 years ago but apart from these projects, there has been a slow up-take of the technology. Why is this?

A: The growth of the biogas industry (including landfill gas extraction for beneficial use) has been left largely to the private sector without any form of national support. The Renewable Energy Independent Power Producer Programme (REIPPP) was a major success for the likes of Wind and Solar but excluded biogas as most biogas projects are below 1 MWe - the minimum REIPPP project size – the lone exception was a landfill gas project which was accepted and is now generating power into the national grid. When the Department of Energy (DOE) Independent Power Producer (IPP) office introduced the small scale REIPPP the ceiling tariff offered to the biogas sector was too low to provide an economical return on investment. SABIA met with the IPP office and negotiated an increased tariff which resulted in the immediate submission of a multi-megawatt project. To date the PPA has not been signed and, as a result, the project has not been developed.

Besides the REIPPP.

there are no other state underwritten schemes that would provide the security that investors (both local and international) require to make

investments in the industry. Despite the lack of investment security, the private sector has developed several biogas projects in the agricultural, industrial and waste management sectors. In a bid to encourage the state to get involved in subsidising the development of the industry, the Southern African Biogas Industry Association (SABIA) is shifting the focus to the greater environmental benefit that the biogas industry provides as opposed to focusing solely on the energy production. Over the last two years SABIA has been working with the various government departments and NGOs to create value for the environmental benefit that biogas offers thereby unlocking economic potential of the biogas sector. Without state support, the development of the biogas sector will be stifled however we will continue to see a few commercial scale projects being developed every year.

Q: How much of a 'threat' is solar and wind power to the bio-energy industry?

A: Quite the opposite, Biogas for power generation is complementary to solar and wind as it is dispatchable (available on demand) and can produce either baseload or peaking power.

It is important to note that biogas is much more than just a renewable fuel to generate electricity, as an energy rich gas its application ranges from a household cooking gas through to the displacement of diesel in trucks. Common uses include, power generation, heating (industrial and domestic), displacement of liquid fuels and replacement of piped natural gas.

Q: It would appear that successful landfill methane extraction only becomes feasible if a)

large regional sites are involved – scale - b) Carbon credits can be obtained for the project and c) subsidies from amongst others, The World Bank are obtained. Does this not call into question the long term viability of such projects?

A: Subsidies come and go and as result, so do projects. To overcome this, a sustainable pricing model must be developed. For example; if the cost of coal-based electricity took into account all of the harmful environmental and health impacts of burning coal, the cost of electricity would be substantially higher than what we pay now. Technologies that are environmentally positive should be compensated for the mitigation of the dirty power generation emissions. It is not a technology problem it is an accountancy problem, as on one side of the balance sheet only some of the costs are allocated. Once the books are balanced there is no need for subsidies.

With respect to scale, in power generation bigger is normally cheaper. The number of people required to operate a ½ MW biogas combined heat and power plant is the same as it is for a 1MW power plant, however the labour cost/ kWh in the one megawatt plant is half that of the half megawatt plant.

Q: In the past, a few wastewater treatment plants in South Africa had utilized the biogas produced by the digesters, feeding gas engines that generated power for the facility or that used the gas to run the vehicles on the plant. A number of these have fallen into disuse and don't appear to be a priority for new plants or extensions to existing. Is this true and why would it be the case?

A: The wastewater sector changed over the years. With the advent of the biological nutrient removal (BNR) process to treat wastewater the use of digesters fell away over the course of about 20 years. With the change in legislation the disposal of sludge requires that it is stabilised and pathogen free. For larger treatment works this is only feasible through anaerobic digestion. As these plants are upgraded and their water use licenses amended, digesters are being refurbished and sludge digested once again. As more of these plants are upgraded and digestion capacity brought online, there should be an uptake in this technology on site. However, the only way to guarantee that this application is rolled out across the country is



SOUTHERN AFRICAN BIOGAS INDUSTRY ASSOCIATION

through a government directive.

It makes absolute sense, financially and process wise, for biogas combined heat and power plants to be added to wastewater treatment works. As a starting point it should be made mandatory for all municipal wastewater treatment plants that have a treatment capacity of 50 mega litres per day and more.

Q: Has new wastewater technologies made methane extraction for power purposes obsolete?

A: Not at all.

The utilization of sludge as an asset should be priority for wastewater treatment works regardless of water treatment technology as all works should be able to achieve 80% of their electrical requirement from an onsite biogas combined heat and power plant. Only once sludge is viewed as a resource and government enforces the implementation of these plants will this become a reality.

Q: The paper and sugar producers have been converting their waste products into localised energy production that supplement or replace Eskom power in product production. Can you comment on the success of such schemes?

A: Both industries that you cite are examples of embedded generation. Embedded generation is common across all renewable technologies. It is unfortunate that sectors such as sugar, paper and pulp, food processing, etc. do not have an enabling environment to sell excess power to the national grid.

This lack of an enabling environment comes across as a dearth of commitment from national government to reducing the national dependence on coal and reducing greenhouse oas emiss ons, not only in the power generation sector, but also in other sectors that produce organic waste that could be used to off-set greenhouse gas emissions. **Q**: In some enlightened countries, biogas is upgraded, and the isolated methane is used to fuel municipal transport fleets. Is there any likelihood that we might see something similar in SA? A: This topic has been on the agenda for years however a lack of market certainty prevents developers from investing in

these plants without firm offtake agreements.

For example, all metropolitan municipalities (Metros) have public transport fleets, landfills that are running out of air space, and some degree of source separation making them prime sites for biogas plants. None of the Metros have the will to implement biogas plants as a solution to organic waste material, so it is simply landfilled. Implementation of this simple model is complicated by municipal entities that simply do not want to find a solution and would rather state the same barriers again and again. If there is a will there is a way.

O: The current dilemma facing Eskom as a primary producer of electricity has turned attention to the energy 'mix' which includes renewables and bio-gas. Discoveries of a possible large-scale natural gas deposit offshore and an abundance of natural gas in Mozambique suggest a swing to gas fired power stations in the future. Can bio-gas compete in this new energy mix?

A: The recent discovery is very exciting news as it will accelerate the transition from coal to cleaner fuels. This should not be seen as direct competition to the biogas sector but as an enabler for the sector. The use of natural gas in South Africa is very limited and there has been very little development of gas infrastructure to end users. The current pipe lines are at capacity and the cost of building new pipelines is extremely high. A more realistic model may be the development of mini gas grids which are supplied with liquified natural gas from central processing facilities. The ability to inject upgraded biogas into these mini girds is



Bio energy

Arup believes bio-energy offers a unique opportunity to diversify the energy supply mix whilst addressing energy supply and waste management challenges in society.

With quality people and a passion for a holistic design approach, we provide solutions for today's energy challenges.

ARUP

THINUS VAN AS Associate **t:** +27 21 409 3500 a very exciting prospect for our industry.

The South African market must for our own sake de-carbonise; natural gas is a good start however it should only be viewed as an interim step. Denmark is a great example of where natural gas has been used as an interim fuel, partly because their reserves are in decline, but mainly because the value of biogas is seen as a renewable replacement for natural gas (a fossil fuel), with the potential to replace all natural gas in their network by 2035.

More of the same at Century City



RABIE Property Group's newest office development, Sable Park, is fully let. Completed towards the end of 2018, this 5-star Green Star development has attracted prime tenants. Discovery occupies the larger of the two buildings – 8 300 m², against the other, an inverse, near-repeat design of 8 000 m². Discovery, committing to the project early on, relocated their regional office mid-2018 from Century Boulevard. Of the adjacent 8 000 m², MTN will also be relocating their regional office from elsewhere in Century City, taking up just under 4 000m² across the ground and first floors. The second and third floors have been committed to ICLEI, Byte Orbit, Sasfin and TAL. Situated on the

prime gateway to the south of Century City's Bridgeways green zone, with iconic views of Table Mountain and the city, Sable Park's futuristic design and location, combined with first-class ameni-

ties, was seen as the desired location for these businesses. Century Square, which houses restaurants, deli's, Century Hotel and Century City Conference Centre in a superbly designed setting, creates convenience and sophistication. A few hundred metres from Sable Park, Virgin Active offers a daily workout in addition to the landscaped walkways and canals throughout Century City, providing an opportunity to exercise safely within the secure precinct.

Sable Park's location encourages the use of public transport to cut carbon emissions: bus, MyCiTi bus and minibus taxi routes leave from a public transport hub less than 500m away and Century City station is a mere 10 minutes' walk away.

Designed by dhk Architects to optimise natural lighting, each building has two wings off a central core and a light-filled quadruple-volume atrium, spanned by a series of bridges at the edge of the main core.

Water for the ablutions, air conditioning & cooling systems and landscaping is drawn from the recycled Potsdam municipal wastewater treatment facility, treated to safe levels.

In much the same way as the design of the building, landscaping has played a crucial role in the development of Sable Park, with each building appearing to be embedded in a green platform. A series of terraces on all four sides of both buildings works as outdoor lounges.

Rabie have commenced with the earthworks for the construction of another state of the art commercial building, Sable Corner which is just across the road, with the appointment of WBHO.

With a gross lettable area measuring approximately 7 $000m^2$ of premium grade office space, Sable Corner is set for completion in the first half of 2020.





Modern flooring products save time

THE difference between the success and failure of a floor lies both in the selection of the right flooring products as well as the correct application of these products.

This is particularly relevant in today's modern building environment where a myriad of new floor types has been introduced, each with its own requirements and all-new fixing and finishing products that are required to correctly lay them. Although the prospect of seeking different solutions for each type of floor may sound daunting to contractors that are used to installing traditional floor surfaces, it should not be, as modern systems are usually custom designed to ensure quicker and easier installation and high-quality finishes.

This is according to Tracy Harris, commercial manager of Mapei, one of the best-known suppliers of construction chemicals and flooring solutions in the world.



The Mapefloor system being applied.

She says specifiers and installers should take the time to investigate new systems rather than relying on traditional ways and simply trying to adapt them to suit new floor surfaces. "Where specially developed solutions do exist, it will usually be considerably more cost effective and safer than simply modifying traditional methods, as well negating the risk of floors failing, either aesthetically or mechanically," she says.

Making the change

Mapei is building relationships with key applicators and encourages installers and all business professionals to speak to its technical representatives to find solutions for individual flooring requirements. "We are eager to assist

the local industry to improve efficiency and ensure that we provide installers with the most suitable products and techniques to undertake any flooring. As new flooring systems become available on the market, we make it our business to develop and constantly update and change our offerings to suit new requirements," concludes Tracy.

Reinforcing Mazor

MAZOR, one of the best known construction companies in the Western Cape, is determined to withstand the ravages of a rapidly deteriorating economy.

In the half-year to end August Mazor - which comprises cladding operations in aluminium, steel structures and glass - reported a R14 million loss off markedly reduced turnover of R199 million (previously R229 million).

All three divisions operated in the red during the interim period with aluminium notching up a R4.5 million loss, steel a R7.6 million and glass losing R5.7 million.

CEO Ronnie Mazor noted that macro conditions in the period continued to deteriorate.

But he maintained Mazor's resilience in adapting quickly to market conditions saw it limit the potential downside in direct contrast to most of its peers. "We are optimistic looking ahead as we



have done all we need to do to ensure Mazor's sustainability, and more than that, have positioned the group to take advantage of certain market opportunities. We anticipate better market prospects over the medium to long term.'

Mazor said the company continued to control costs and seek improved efficiencies to position it strongly for a market upturn. But he admitted

that market conditions showed no let-up and remained very challenging for all business segments. "The devalu-

FASHION retailer Rex True-

form looks set to become a diver-

sified investment company with the cash flush company finalis-

ing the acquisition of a 33.78%

stake in SA Water Works Hold-

Rextru reported last month

ing Company (SAWW).

ation in the rand compounded the situation by adding to already high levels of uncertainty in the market. However, we believe that the political leadership is taking the first steps in the right direction for the South African economy, provided that the rand devaluation does not lead to uncontrolled inflation.'

though, Mazor, pointed out that both the aluminium and glass divisions saw continued investment in equipment and technology as well as new products.

He said this helped Mazor sustain margins,

Rextru takes a swig

but conceded that challenge was securing top line and volume growth.

Overall, Mazor still expected a difficult year ahead and expect a possible uptick in business activity only after the national elections. "Even then, improved political and policy certainty may take time to translate into business and market gains."

He stressed Mazor would continue to focus on protecting margins in pursuit of a long-term objective of sustainable profitability - "irrespective of the immediate to mid-term economic landscape".

struction sector has been met with

some surprise. But observers have pointed out that Rextru could

'be in the right place at the right

time" in terms of picking up more

specialised construction and engi-

The next move by Rextru -

neering assets at good prices.

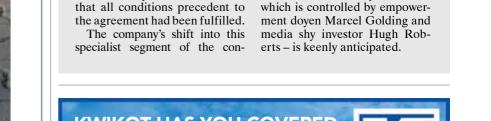


PAVE THE WAY

Technicrete Double Zig-Zag inter-locking pavers form a continuous and hard-wearing surface overlay. Both economical and aesthetically appealing, any project using Technicrete Double Zig-Zag allows you to achieve an elegant and highly functional result, with cost-effective budgeting being met.

Available in:

Construction of heavy duty areas Variety of colours







- Roadwavs
- Depots

PiSG

Suitable for:

Various commercial applications

Technicrete is a subsidiary of ISG, a leading supplier of innovative infrastructure products to the construction and mining markets in Southern Africa





Technicrete is a subsidiary of ISG, a leading supplier of innovative infrastructure products to the construction and mining markets in Southern Africa. Tel: 011 674 6900 Maxi call: 0861 266 267 SABS

TECHNICRETE



Standard 48 blocks p/m²







11-1



LOCALLY ENGINEERED FOR OVERALL SAFETY



TRIPLE STITCHED SEAMS ensuring enhanced durability against wear and tear.

1

BAR TACKED POCKETS for added strength and improved storage capabilities.

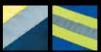
INTERNATIONALLY ACCLAIMED YKK ZIPS, used to provide longevity and superior protection, as well as enhanced durability and resilience.



GENEROUS FIT with wider back yoke tailored to suit South African users.

VIZLITE™ REFLECTIVE TAPE, a leading brand of reflective tapes used to ensure added visibility in low or no light conditions, charged in minutes by daylight or artificial light.





Our locally manufactured range of conti suits are engineered with superior quality materials and world-renowned finishes, such as YKK Zippers and VizLite[™] Reflective Tapes. Triple stitched seams and bar tacked pockets offer added durability and improved storage space respectively, while a generous fit ensures that the anatomy of the South African wearer is taken into account.





THE PERFECT PAIRING

As a LEADING BRAND, we've earned a reputation in Africa for delivering quality engineering in the SAFETY FOOTWEAR INDUSTRY. We understand that different personnel require DIFFERENT SPECIFICATIONS and LEVELS OF PROTECTION when it comes to safety wear. Our cutting-edge, SPECIALISED RANGES of work wear and footwear ensure that you don't under-spec on some employees, compromising on safety, or over-spec on others, compromising on cost-effectiveness of shoes and garments.

So, whether you are a first-time home builder, a professional contractor or an engineer, we at **BOVA** have surveyed the inherent dangers within these and various other sectors, engineering a **RANGE OF WORK WEAR** and **FOOTWEAR** purposed for your **ENVIRONMENT** and **INDUSTRY-SPECIFIC NEEDS**.

To find the perfect pair, visit www.bova.co.za

100 🗗 🏏 😽

Hybriflex-540 The expansion joint sealant

This is a specific sealant for expansion joints in building structures and has excellent adhesion to most substrates such as concrete, stone, bricks and tiles, steel and aluminium Use inside and outside.



Fix-0-Chem The chemical anchoring fastener

For fast and secure fixing of bolts, steel bars, threaded rods, prop base and screws into masonry, concrete, rock and stone. Ideal for applications such as fixing down dynamic machinery in factories, base plates, balustrades and safety barriers



Artistic flooring reflects building architecture

MORE and more often, cities can be identified by their skyline alone thanks to the interesting and unique architecture of build-Examples inings. clude the Empire State building in New York, the Gherkin in London and the Bank of China in Hong Kong. The Arte S build-

ings were set to alter the skyline of Penang in Malaysia forever. With the rippling exterior design and unique glass-fronted PODs set into the construction, these buildings surely stand out and provide a talking point all on their own.

What makes these buildings even more impressive is the designer's choice to continue the ripple aesthetic within the interior as well.

With the aim of replacing reality with fan-

tasy, curves and ripples can be seen everywhere in the lobby from the rounded chairs and stools to the demarcation used in the flooring. As well as looking visually attractive, the line markings, created using Deckshield UV Linemarker from Flowcrete also work to separate the light and dark grey hues, as well as the hot pink colour that spreads from the floor to the stairways of the building.

For further continuation, the same flooring systems and colours used in the lobby were used in the PODs, as these areas provide residents with a communal area to entertain guests. In similar а

vein, Hackney Town Hall undertook an innovative flooring refurbishment in its atrium area in order to create



Hackney Town Hall atrium refurbishment reflects 1930s art deco style.

a space for entertainto achieve this. ment and events. The This Grade II listed buildflooring design neatly disguised the modern ing required a modern flooring system that reunderfloor heating sysflected the heritage of tem Isowarm, which was applied along with the building, and used the highly decorative the early drying heavy seamless terrazzo sysduty Isocrete Fast tem Mondéco Classic K-Screed layer from

Cast in stone

traditional

Whereas the Arte S and Hackney Town Hall have utilised grey hues and demarcation to mirror the respective constructions, textures can also be experimented with to bring a little of the outdoors inside.

Flowcrete.

of Anglesey in North Wales, UK has taken this approach by specifying textured flooring for the reception area that mimics the building's exterior. As well as look-

The Menai Science

Park, based on the isle

ing just like the stone walkways in the external landscape, Rustik Natural Stone from Flowcrete provides added slip resistance thanks to its texture, as well as noise reduction, helping to keep visitors safe and also minimising sounds that could distract those working in the space.

In addition to its attractive aesthetic, Rustik Natural Stone is hard wearing and extremely versatile, meaning that it can be laid in bespoke patterns and styles in areas that need extra durability.

ucts are becoming more expensive and

less environmentally

friendly, and are gen-

erally imported," says

products are produced

using 95% of local

raw materials located

within 100km from our

factory. In addition all

our moulds are 100%

almost indistinguisha-

ble from natural stone

and we use traditional

masonry skills com-

bined with a modern

moulding technique to

painstakingly repro-

"Our products are

"By contrast our

Andrew.

recyclable.

REVELSTONE, manufacturers of cast stone products, recently celebrated its 25th year by launching a new showroom in Lansdowne, Cape Town.

Designed as a landscaping ideas hub for architects, landscapers, interior designers, building contractors and the homeowner, the showroom showcases a wide range of Revelstone paving, cladding and coping for both outdoor landscaping and various applications. indoor In addition to a double-volume exhibition space, the showroom

boasts a boardroom for

meetings and demon-

strations on a large screen, an outdoor garden area and a coffee bar.

Revelstone managing director, Alex Cyprianos, said the facility is aimed at inspiring design creativity in the built environment.

"We are encouraging all our clients, be they the homeowner or landscape architect, to use this space to meet and collaborate in a relaxed atmosphere."

Revelstone was founded by Andrew Cyprianos in 1993 and initially operated from an underground cellar in Muizenberg. A reputation for product development, innovation,

Adrien Desmarais of Progressive Paving, Revelstone founder and director Andrew Cyprianos, Mike Reynolds of Cape Flora Landscaping, and managing director of Revelstone, Alex Cyprianos, at the launch of Revelstone's new showroom.

quality personalised service spread rapidly catapulting the company to the pre-eminent

position it commands today. Cast stone products are durable, recyclable,

cost-effective, versatile, energy- efficient and innovative. "Natural stone prod-

duce an original master which is then used to create a mould.'

Complete solution in roadwork projects

A well-known civils company has utilised Bobcat machines for a cold-asphalt walkway and road-patching repairs. This consisted of a S650 and S850 skidsteer loader, a Pavijet MG7, a 610 mm to 1 m planer attachment, and a sweeper attachment with a collector bucket. "Whether you are building new walkways, parking lots, or carrying out reconstruction/maintenance work, we have a comprehensive range of Bobcat machines and attachments to transform any job site into a hive of productivity," KwaZulu-Natal GM Brian Rachman explains. "A complete solution from Bobcat not only skidsteer loader is a ensures that clients vertical lift path modhave the toughest and el in the 600 series

most innovative equipment on hand, but that they also have access to our renowned service support and technical back-up," Rachman comments.

"What makes these solutions so cost-ef-



can efficiently handle gravel, sand, stone, hot or cold asphalt, and concrete fills. The same machine can even be used to spread the fill, and later to pave as well. The paving width ranges from

Bobcat equipment, the planer attachment is durable, versatile, and easy-to-operate. Every aspect of a project can be controlled, including the slope control, width, and depth, all from the comfort of

Please contact us for further product, technical information & technical assistance

021 552 9674 sales@denbraven.co.za www.denbraven.co.za



fective and productive for our construction clients, in particular, is the wide range of different attachments available, combined with the fact that we have specialised machines such as asphalt pavers. In addition, a full array of roadwork applications can be catered for by seamlessly combining different machines into a comprehensive fleet," Rachman highlights. The Bobcat S650

The Pavijet MG7 is ideal for patching roads, sidewalks, curbing, pavements, and parking lots.

The

frame size. It offers increased lifting capacity, and provides greater forward reach works. at full lift height for loading trucks. The Tier 3 four-cylinder turbo diesel engine delivers excellent power and performance. The Bobcat S850HF is the largest skidsteer loadwhile the Pavijet MG7 0.2 m to 1.9 m.

The Bobcat planer attachment makes easy work of cutting through difficult materials such as concrete and milling asphalt. A major advantage is the optimum manoeuer in the line-up, and vrability offered, at a much lower total cost is ideal for largescale projects such as roadthan other dedicated planers on the market. internation-Features include preally-patented Pavijet cision planer skis, op-MG7 is ideal for tough tional cutting drums, and depth gauges. maintenance jobs such as patching roads, side-In addition, roadway walks, curbing, paveedges can be tapered and drainage channels ments, and parking lots

cut in concrete. Like all

the operator's seat.

The Bobcat sweeper attachment can collect, dump, and sweep up any dirt and debris lying around before or after any project. From roadways and driveways to docks and warehouses, these are by far the most versatile sweeping attachments available. Featuring a heavy-dusmooth-running ty, hydraulic motor, it uses durable poly bristles. A sweeper bucket collects all the dirt and debris from the project area for easy disposal.

Watertight concrete with crackhealing properties

AN entire concrete structure can be transformed into an internationally accepted watertight barrier, with the use of the crystalline permeability-reducing admixture CHRYSO® CWA 10, from CHRY-SO Southern Africa.

This is according to Brenton Brouard, technical manager: concrete at CHRYSO Southern Africa, who says that internationally accepted penetration depths are used to describe the degree of watertightness – or impermeability – of concrete.

"The test method described in the European standard EN 12390-8 for testing hardened concrete is arguably the most practical test method available in South Africa," he says.

The standard stipulates the depth of penetration of water under pressure, to evaluate the watertightness of concrete to liquid. A 50 mm penetration depth is classified as being "impermeable with respect to potable water" and a 30 mm depth as being impermeable with respect to water containing aggressive substances. In some parts of the world, the 30 mm depth applied to water containing aggressive substances is lowered to 20 mm.

Brouard says this test been frequently has used in South Africa to evaluate the effectiveness of crystalline permeability-reducing admixtures. He cautions that it should be noted that these products do not waterproof concrete, but rather reduce the concrete's level of permeability and watertightness to the internationally accepted levels; some penetration of the liquid under pressure is possible.

On the other hand, waterproofing of concrete eliminates any penetration of water into the concrete. This is effected using various 100% waterproof membranes, which are applied in the form of surface coatings of vari-

The Temba Waterworks site is situated within the most northern portion of the municipal area of the City of Tshwane Metropolitan Municipality. The Phase 5 extension of the Temba Water Treatment Works comprised the addition of a 30 Ml/day module to the existing four phases.

CHRYSO® CWA 10, the greater the level of discontinuity induced in the capillary network. This is because its active ingredients react in the presence of moisture, forming a dendritic crystalline structure throughout the entire concrete's pore - or capillary - network. This means less chance of carbonation, alkali-aggregate reaction or corrosion of the concrete and its reinforcing steel. Being protected in this way from waterborne soluble salts, enhances the durability of the concrete and the structure itself.

"Given the right conditions, CHRYSO® CWA 10 can even seal hairline cracks up to 0,4 mm wide in the

concrete," says. "This is because its active ingredients react in the presence of moisture." He adds that, in the absence of moisture, CHRY-SO® CWA 10 will lie dormant. However, it will reactivate as soon as it encounters moisture. As long as moisture is present, crystals continue to grow within the concrete.

Brouard highlights that watertight concrete – also called impermeable concrete – is vital for any structure that retains liquid under pressure. He emphasises that: "The value of CHRYSO® CWA 10 is that it can reduce the ingress of liquid under pressure, to internationally accepted levels. The concrete becomes a

watertight barrier, with lasting integral permeability-reducing properties."

The admixture is non-toxic and can be added to concrete at the time of batching, so there are no climatic restraints. This makes it process-friendly, allowing flexibility in construction scheduling. "When used as rec-

"When used as recommended, CHRY-SO® CWA 10 is compatible with all Portland cements and their commonly associated SCMs, as well as most CHRYSO admixtures and a.b.e. products," says Brouard. "In addition, it does not adversely affect the slump, strength, air entrainment or workability of the concrete."

Kommetjie Road Project in its final year

The Kommetjie Road Project is one of the City's biggest congestion relief projects with a total investment of R194 million over three years. The site covers an area of 20 000 m^2 or 20 hectares, and most of the work is taking place in trenches where new underground services - such as water mains, sewer pipelines, and electricity cables - are being installed to the benefit of the residents from the Far South.

THE Kommetjie Road Project is a major infrastructure project. At least a 100 people are working on this site - covering an area of over 20 hectares - each day. Visitors and those living in Noordhoek, Kommetjie, Masiphumelele, Ocean View, and Fish Hoek should regard this area as a huge construction site. The inconvenience that goes with a project of this scale is unavoidable because we're building new roads and replacing underground infrastructure while everything else above ground - from traffic, to water provision and the rest - must still carry on regardless,' said the City's Mayoral Committee Member for Transport, Alderman Felicity Purchase.

The City is investing R194 million in this project which will be completed by the end of this year, pending any unforeseen challenges or delays.

'To put it in perspective: we're spending on average of R6,4 million a month on this site, in-

clusive of the labour and material. The contractor is working strictly according to the project schedule, and is meeting the deadlines for milestones,' said Alderman Purchase. All in all, the Kommetjie Road Project entails roadworks covering a distance of approxi-

mately 3,5 km:
the upgrade of Kommetjie Road (M65) to a four-lane dual-carriageway between Capri Drive and Corsair Way, and the rehabilitation of the existing

- roadway
 the upgrade of Ou Kaapse Weg (M6) to a four-lane dual-carriageway between Noordhoek Main Road and Kommetjie Road, and the rehabilitation of the existing roadway
- the upgrade of the intersection at Ou Kaapse Weg and Silvermine Road to improve the sight distance for road users
 the upgrade of the

the upgrade of the four signalised intersections with additional turning lanes to improve the capacity and flow of traffic at Kommetjie Road and Capri Drive; Kommetjie Road and Ou Kaapse Weg; Ou Kaapse Weg; Ou Kaapse Weg; Ou Kaapse Weg and Buller Louw Boulevard; and at Ou Kaapse Weg and Noordhoek Main Road

"Some residents complain that they don't see workers on site. The irony is that most of the work is happening underground, in trenches in the road reserve, where labourers are replacing old water mains, stormwater pipelines, and electricity cables with new infrastructure that will last at least another 50 years. Residents must also bear in mind that we can only build the new lanes after we've installed the new underground services," said Alderman Purchase.

The following underground services are being replaced or relocated:

- three water mains
- one sewer main
- new stormwater infrastructure to support the existing and new lanes
- conduits for fibre optic telecommunication networks
- high and medium voltage electrical cables
- cabling for new streetlights

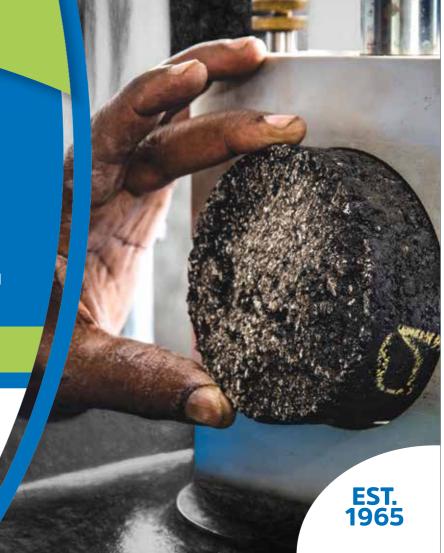
Community representatives are reminded of the community liaison meetings which take place every two months. These meetings serve to inform the communities of the project progress, and provide a forum to raise concerns. The project team is present at these meetings to jointly explore possible solutions. Residents wanting to attend these meetings should contact Claudette Muller at Chand Environmental Consultants at support@ chand.co.za



QUALITY

Much Asphalt is southern Africa's largest manufacturer of hot and cold asphalt products.

We don't just promise quality. We hold ourselves accountable for it. Process control laboratories at every plant and on site continually monitor and test our processes and products. Our customers can rest assured they are placing and compacting quality asphalt.



ous thicknesses.

Whether it is positive or negative permeability that needs to be reduced, this versatile admixture is ideal for concrete exposed to harsh conditions. By reducing the permeability of concrete, CHRY-SO® CWA 10 protects it against chemicals, chlorides, sea water and corrosive ground water. The permeability of a concrete is directly linked to the continuity of its capillary network. The greater the levels of watertightness effected in concrete using

17 static plants • 5 mobile plants • extensive product range • stringent quality control • bitumen storage • industry training

T: +27 21 900 4400 | F: +27 21 900 4468 E: info@muchasphalt.com | www.muchasphalt.com



A B-BBEE Level 1 Contributor

minds of our direct

target markets. As a

major player in the

forklift and materials handling industry, we

need to be supporting

and encouraging devel-

opment in all levels of

the supply chain indus-

try, from corporates to

young professionals,"

More than just an

association

says Marx.

SAPICS' supply chain awards

IN support of the supply chain industry, Goscor Lift Truck Company (GLTC) has again partnered with SAPICS - this time as sponsors of the 'Corporate Educator of the Year' award at the recently-ended Supply Chain Management Education Excellence Awards.

SAPICS' Supply Management Chain Education Excellence Awards (SCMEEA) event was established some 10 years ago to give recognition to individuals, organisations and learning institutions that have made a substantial contribution to skills development in the field of supply chain learning.

Debby Marx, Group Marketing Communications Manager at Goscor, says GLTC is very involved with the supply chain industry as it forms an integral part of its customer base. Thus, GLTC is closely affiliated to SAPICS to be able to add value to the supply chain management sector.



Norah Munvai from Imperial Logistics, winners of the Corporate Educator of the Year award flanked by Ronald Ryan GLTC Sales Manager (left) with Mungo Park from DSV SA.

Explaining the reason behind GLTC's sponsorship of this particular award, Marx says: "We chose to sponsor this award as it encompasses the heart of our business and is a true reflection of Goscor Lift Truck Company's commitment to the industry and appreciation to other corporates and their young emerg-ing talent," she says. Ronald Ryan, Sales

Manager Gauteng at GLTC, presented the award on behalf of GLTC. into the hearts and

Strong partnership GLTC has previously partnered with SAPICS on many of the association's sources. events. Last year it was the Bronze Sponsor of

SAPICS 2018 conference and this year it will be the Silver Sponsor of the SAPICS conference to be held in Cape Town, in June. 'Partnering with a large professional industry body like SAPICS has certainly leveraged our brand SAPICS, via its network of carefully selected education partners, offers exceptional training programmes, internationally recognised certifications and comprehensive re-

In addition to the world-class education on offer, SAPICS provides the supply chain community with a year round calendar of professional development events, as well as the impressive annual conference and exhibition which has become the leading event in Africa for supply chain professionals.





Doosan 7-Series Forklifts - the power to lift your dreams



The Doosan 7-Series offers high-powered, fuel-efficient performance, with a focus on true operator comfort.

In a nutshell:

- The 7-Series meets strict emission standards (EPA Tier-3)
- Powerful and market-proven Yanmar 3.3L diesel engine, combined with already proven

High purity welding application for the food and beverage industry

THE new ORBIMAT 180 SW, produced ORBITALUM bv TOOLS, is an intelligent welding power supply that is ideal for the food manufacturing and processing industry. It combines the best efficiencies of the high purity orbital welding process with state-of-the-art information and communication technology. Modelled after industry 4.0, this welding power supply delivers consistent quality welds, shorter welding cycles and improved safety. Here are a few benefits of the OR-BIMAT 180 SW:

Instant access to critical welding process data

This intelligent and intuitive power supply offers an integrated LAN interface, which integrates into your network. It also boasts a 100% data recording feature. This provides instant access to online projects, parameters and data at all times. Welding data and programs for each individual welding process can be called up and documented in full, enabling better production planning sequences and full transparency into the entire welding process. The power supply also offers a smooth reboot option, which means critical data won't be lost in case of a power outage or interruption.

Reduced costs and high purity welding results

The ORBIMAT 180 SW enables food manufacturers and processors



to perform welding with the highest level of purity and a low gas requirement, reducing the costs for each welding process and increasing the quality of the welds. The optionally activatable 'permanent gas' function prevents the penetration of oxygen in the welding head, resulting in nearly oxidation-free seams and more hygienic welds, as it prevents bacteria from manifesting where the pipes are joined. The gas quantity values can be saved with the welding program to enable easily reproducible welding results too. The power supply also allows automatic programming by entering

Shorter welding cycles and greater productivity

the tube diameter, wall

thickness, material and

welding gas.

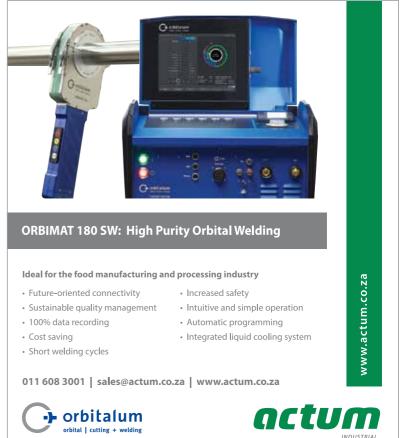
In order to minimize the gas pre-flow and postflow times, ORBITA-LUM has incorporated the unique Flow-Force function for closed weld heads. A digital gas control supplies inert gas at a very high volumetric flow rate directly from the pressure regulator to the welding head the unwanted residual oxygen is flushed out abruptly in the process. The reduced pre-flow and post-flow times make for much shorter processing times and thus a higher level of productivity and an increased duty cycle. Safer handling

For improved safety, the ORBIMAT 180 SW features an automatic rotor stop function and motor torque control. It also features an integrated liquid cooling system for constant low weld head temperatures - ideal for a high duty cycle. The benefits include a longer service life for the welding electrode and less maintenance costs.

Intuitive operation and a multilingual menu interface

The ORBIMAT 180 SW is operated using a 12.4" colour touch display screen, or multifunctional control dial. The multilingual menu interface and graphic support make operation and parametrization simple and intuitive. Soft keys provide direct access to important commands. The OR-BIMAT 180 SW comes in a practical housing with carrier handles integrated at the side for ultimate protection and easy transportation.

Actum Industrial, a division of Actum Group, is the exclusive distributor of the ORBITALUM brand in South Africa. To enquire about our cutting-edge orbital welding technology, contact us on 011 608 3001 or sales@actum.co.za



- transmission and **oil-cooled disc brakes (ODB)**, provides improved performance, better fuel efficiency and lower operating costs
- Unlimited hours warranty on brakes
- Doosan hydrostatic steer axle provides smooth steering control and durability
- Rigid steel engine hood with wide open angle provides greater accessibility to main compartment
- Designed with serviceability and simple maintenance in mind.

If you don't have a DOOSAN, you don't have a Forklift.



There's no business like fizzness | Bitter fruit for Crookes

THE story generating all the fizz in recent weeks is the R4.8 billion proposed takeover of beverages group Clover by the Central Bottling Co.

The deal represents a massive foreign investment in the South African beverages industry, and is viewed as a deal that should send further ripples through the sector.

While perhaps not grabbing al the headlines, the Western Cape beverages industry is also bubbling over with good news.

In this regard CBN notes some encouraging developments at Stellenbosch-based Chill Beverages since its takeover by deal-making doyen Brian Joffe's investment company Long4Life in March last year.

Chill offers a array of own brands, contract packaging and house (private) label production – most notably Fitch & Leedes mixers and Score Energy drink. Long4Life recently reported that its beverages segment - which also includes Gauteng-based Inhl - saw case volumes up a vibrant 24% with revenue growing 21% in the six months to end August.

Joffe reported that Score Energy and Fitch & Leedes reflected good growth. He said the interim period saw significant investment in upgrades and enhancements to the facilities infrastructure - increasing capacity and improving capability.

Joffe said the timing of these facility upgrades was advantageous as peak trading and capacity utilisation was traditionally weighted to the second half in the summer months. He pointed

out that around 60% of full year revenue was generated in the second half of the financial year. Joffe added that im-

proved operational and logistical efficiencies and sustained growth in market share boded well for the future.

Capital expenditure at Chill included a new labeller for the glass line as well as increases in glass capacity and canning capacity by 50% and 27% respectively.

Interestingly, Chill website Beverages's stresses that "disruption of the beverage industry through innovation is a key focus". The company said

Fitch & Leedes saw two new additions in form of Blue Tonic mixer and a Spicy Ginger Beer. There is also a shift

into alcoholic beverages with the launch of Chateau Del Rei - a naturally sweet sparkling wine

packaged in a can. The Score GT is a new sugar-free variation of the original Score Energy Drink. In close by Draken-

stein, Rhodes Food Group (RFG) recently claimed the number two spot in the fruit juice category.

This achievement follows the completion of major projects at TFG's fruit juice facility - most notably the installation of a juice concentrate plant at Groot Drakenstein to further vertically integrate the fruit juice operation.

Meanwhile, RFG's main rival Pioneer Foods – which owns the Liquifruit and Ceres fruit juice brands - reported juice volumes up 28% in the year to end September with Liqui-Fruit gaining 2 percentage points in market share growth.

Pioneer said the Ceres and Fruitree brands also gained market share.

Pioneer did report that summer pricing moved only 0.7% on 11 LiquiFruit packs - underlines the competitive nature of the fruit juice sector.

Pioneer recently reported that trading in the four months to end January showed the long-life fruit juice category performing well with "strong volume and value growth".

IT may be a while before KwaZulu-Natal agribusiness Crookes Brothers manages to pick juicy and sustainable profits from its determined investment into the Western Cape deciduous fruit industry.

Crookes admitted in its recent interim report to end September that the debilitating drought conditions in the Western Cape caused poor vields and crop quality in the deciduous operations.

sprawling Crookes' deciduous division consists of five farms - Ouwerf (125 hectares), Vyeboom (220 hectares), Dennebos (75 hectares) and High Noon (220 hectares). These operations – all located in the Gradouw-Elgin-Villiersdorp hub - are all 100% owned. The company also has a 45% stake in the Belleview (Bellcro Farming), which offers another 45 hectares via an empowerment partnership.

In total there are ap-



proximately 700ha of apple and pear orchards on these farms. Crookes' group's pro-

duction is marketed through the Two-A-Day

group (TAD), which is

owned by its grower sup-

pliers (including Crook-

es). TAD supplies fruit to

more than 60 countries

Crookes believes this

mitigates the risk posed

The company owns

a 19% shareholding

in TAD and supplies

approximately 25% of

In the interim period,

however, Crookes saw

revenue from its decid-

uous farms drop from

R42 million to R36

by market volatility.

TAD's throughput.

considerably

around the world.

diversity

the fruit segment won't come close to matching the R119m generated in sales in the full year to end March 2018.

million. This suggests

More of a problem is that the fruit segment slumped some R8.3 million into the red compared with the small profit of R1.7 million notched up in the previous interim period.

Crookes said the interim results reflected the tail-end of revenues from the 2018 crop and the cost of establishing the 2019 crop.

But the company was more hopeful for the longer term - pointing out that new young deciduous orchards were now coming into production.

Perfect blend of quality

MATTEI compressors have landed at the extremes of the southern hemisphere and contribute to the quality of one of South Africa's best coffees, those of the TriBeCa Coffee brand. The most appreciated aspect of rotary vane technology is the great reliability, which guarantees quality compressed air during very intensive work cycles and in harsh environmental conditions, such as high temperatures, typical of the coffee roasting process.

The history of this started company in 1996, when the American, Dale Mazon, opened the first TriBeCa coffee shop in Pretoria, with the idea of importing the New York coffee culture into South Africa, where it is possible to enjoy high quality products. His intuition proved successful and over time, the company expanded its business to include investments in Europe, with the opening of four cafes in Poland, and a partnership with the supermarket Woolworths, but most of all, the decision to become a coffee producer with the opening of the first small plant in Pretoria. "Thanks to continuous research into the best raw materials and an innovative industrial policy based on careful stock management, we guarantee our customers high quality blends and high

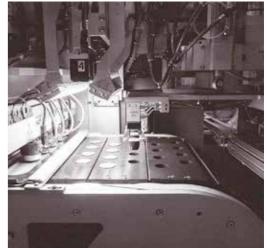
freshness standards" comments Surine Viljoen, Chief Operating Officer of TriBeCa. "Today the company produces conventional coffee and capsules, utilising raw materials from small South African producers, thus stimulating the economic development of local communities, of which it also supports different primary education projects. Since 2013, a few restaurants under the TriBeCa brand have also opened which focus on supplying natural products".

Today the TriBe-Ca network employs around 2 000 employees and the brand is the leader in South Africa for retails sales of ground coffee and beans. "We produce on average around 120-130 tons of roasted coffee per month and we are about to double our production capacity again with the opening of a new plant", says Vilioen. "In the coffee industry, and the food industry in general, the role of compressors is fundamental. Mattei enjoys an excellent reputation in this sector and that is why we rely on the technology to guarantee the high quality standards of our product", says Geoffrey Theart, Production Manager of TriBeCa.

compressors speed from the Optima Plus series (with integrated dryer) and two ERC series compressors. "90% of our systems are based around efficient pneumatics that need a steady supply of air. Of the Mattei compressors we appreciate their great reliability, with only periodic ordinary maintenance operations, managed by the local distributor, Rotorvane. "Furthermore, these compressors can work optimally even in extreme conditions, such as in the presence of high temperatures which, during the roasting process of the coffee beans, can reach 230°C".

TriBeCa will soon open another new plant for roasting, for which Mattei has already been contracted to supply the compressed air. "The new plant will receive one of the latest machines, aBlade 22i Plus", explains Cindy van der

Watt. Operations Manager of Rotorvane Compressor Sales, the official Mattei distributor for South Africa since 2011. "It will be equipped with an inverter and integrated dryer and this model has an excellent cost/ performance ratio. Thanks to the directdrive between the motor and the compressor, it ensures optimal operations even at low speeds, resulting in energy savings and quieter operations".





To cope with large amounts of compressed air required, TriBeCa roasting plant installed two variable

consistent, reliable efficiency and savings that food and beverage companies need.

Tel: +27 11 472 7279 - E-mail: info@rotorvane.co.za

Copeland Rum

By James Copeland

IT was while exploring a plantation in Mauritius that it all became clear. Seeing the fields of sugarcane transformed into an amazing product that possessed the same romance, elegance and terroir as the wine from the farms where I grew up made me realise that perhaps there was more to rum than pirates and pineapples.

Why didn't South Africa have a proud heritage of rum culture? Why did one of the world's largest producers of sugarcane, with a history going back to the 1800s not have a single local brand? Of course there are plenty of imported brands being blended and made in South Africa, but the fact remains: South Africa has no unique homegrown rum culture of its own.

That had to change! I started immediately. Calling up any-

body I could think of in the industry. Luckily I seemed to catch a burgeoning wave of interest both in rum and in home distilling, so the knowledge was out there if you were willing to wade through all the disinformation and dead ends.

Recipes

Molasses naturally contains a collection of flavors we humans love - spun sugar , cacao and caramel, as well as nuts and liquorice notes. Using special yeast strains isolated from the Caribbean cane fields further enhances the flavour spectrum by adding an entire palette of tropical fruit esters. These are metabolic by-products created by the yeast when it is slightly under stress, such as high fermentation temperatures like those found in the tropics. This will create pineapple, litchi and even jam like aromas

Manipulating the fer-



mentation to create an intense flavourful base to work with then allows you to sculpt the rum in the distillation process, cutting away what you don't want and focusing on what you do. For my white rum, these cuts are pushed to the edge to achieve a full yet balanced profile. Beyond this, the rum needs

barrel aging to smooth out-and we're putting barrels away regularly. Copeland Rum, you'll see it described as "Pure Single Rum", which indicates it's made from molasses. fermented and batch distilled at a single facility, and no blending or sweetening has taken place.

I've fully embraced the Cape Peninsula as Copeland Rum's home. It may not be tropical, but it sure is a paradise. The cane might be grown further north, but rum and molasses is intrinsically linked to trade and the seas, having been shipped and distilled through history far beyond the tropics. If I think of it's rugged beauty, rich history, and coastline scattered with shipwrecks I can't help but feel the Cape of Storms is a place that deserves a legendary rum to call its own.



Continuous level measurement and object detection of up to 8 meter

Long ranges

The new ifm ultrasonic sensors in M30 design are distinguished by their long range of up to 8 meter. This makes them particularly suited for the detection of objects far away or for continuous level monitoring, e.g. of bulk materials or liquids. As opposed to photoelectric sensors colour, transparency or the object's or medium's surface shine do not affect sensing.

Enter freaky fermenters – new highs for the beverage market

Ammon Righini describes how a chance gift set the stage for a new market segment in the beverage industry

MY introduction to the art of fermentation came through a friend in 2008, she was leaving for Israel and gifted me

what looked like a tiny white cabbage. She told me that this was a self-replicating organism would turn milk into a probiotic rich yogurt. I was super chuffed as she informed me it removed the lactose from the milk during the fermentation process.

Months later I had jars of fresh fizzy yogurt in the fridge and cup-

boards. I began selling my kefir on Gumtree to body builders and giving kefir grains to my family and friends encouraging

them to make their own yogurt.

I was learning more and more about the direct link between gut health and disease as well as the link to depression and nervous disorders

I wanted to share this amazing process and its health benefits with everyone so in 2010 I started a Facebook page based on exchange and gifting only. A community of freaky fermenters that could share their knowledge and starter cultures, without money changing hands.

The page was gaining traction, getting members who were mostly from places where fermentation and culturing has been a way of life for centuries.

It became my obsession which led me to making all sorts of ferments such as Kombucha, Kimchi, Fire Cider and Jun Tea.

I learned that the tiny living organisms that form during any fermentation or culturing process are vital to sustaining the intesti-



nal balance which aids in the digestion and absorption of essential nutrients.

Soon the Facebook Culture Exchange Page SA had grown to over 5 000 members within South Africa. A huge community had formed, and a culturing industry was forming at a rapid pace. Suddenly everyone was making kombucha and kefir.

I deviated and started making JUN a different version of kombucha, where green tea is fermented with honey sticking to the"no plastic when fermenting" rules and using only the finest fair trade and locally sourced ingredients. It was amazing to taste the difference between kombucha and JUN. It is the champagne of kombuchas.

Then amazingly within three months I landed a contract with the biggest national health food restaurant chain and many other health stores.

My current project is pushing the kombucha market to the next level, encouraging glass instead of plastic and keeping ingredients as organic as possible in moving with the authentic trends. I am also involved with farming of hemp and medical cannabis in Malawi so marrying the two seemed like the obvious next step and CannaBucha was born. All completely legal and highly beneficial to the body.

I use an ancient culturing process where we add our own cannabinoid and terpene extract using cutting edge nanotechnology to create a product, which embodies the essence of our age. This blend is then left to ferment until the perfect balance of flavour and effervescence is established.

Cannabucha is a fragrant and therapeutic aromatic blend that helps calm the nervous system and celebrated for its plethora of natural health benefits. The elixir is high in antioxidants that nourishes the body, boosts energy levels, strengthens the immune system, improves gut health and relaxes the nervous system.

Cannabucha is 100% vegan, has less than 0.5% alcohol and has no more than 4ml of sugar per 100ml.

Currently it comes in three flavours, namely Lemon Haze, Tangerine Dream and Pineapple Express.

Wine exports up despite drought

DESPITE a low-yield- creased by 3% and that added Thompson.

Adjustable sound beam

Due to limited space unwanted reflections at the inside of the tank may occur in level applications. This can lead to faulty measurement results. Thanks to IO-Link, the sound beam can be set individually according to the application. With IO-Link, the user is well prepared for Industry 4.0.



ifm - close to you! www.ifm.com International: +27 12 450 0400







ing harvest in 2018, thanks to the drought, South African wine exports were up 4% to bring in total revenue of R9.06 billion.

"The increase reflects the positive sentiments towards South African wine in international markets," said CEO of Wines South Africa (Wosa), Siobhan Thompson. This figure fitted into the organisation's strategy for "an increased value focus within packaged and bulk wine sales".

She said the value of packaged wine had inof bulk wine by "a very respectable 7%". According to Thompson while the United States remained flat as an export market, there had been a 7% increase in the value of packaged wine to China.

"In the European focus markets, which have seen very little value growth of packaged wine for a number of years, there was a notable value increase on all fronts: Netherlands 1%, Sweden 10% and the United Kingdom unchanged,'

The UK remains SA's top export market, realising a total value of R1.844m worth of exports. Germany held second place, at R1.3 million worth of wine bought, while the Netherlands was once again in third position at R693m.

On the African front, Thompson said Kenya, Tanzania and Zambia had shown strong growth with values of total exports growing by 73%, 35% and 33% respectively.

Source: FTWOnline

Summer crops down but better than expected

Comment by Paul Makube, Senior Agricultural economist at **FNB Agri-Business**

AFTER a slow start to the 2018/19 summer crop season with severe dryness during December 2018 in the growing areas particularly in parts of the North West and the Free State, conditions rebounded early in January 2019 as good rains provided the much-needed moisture for planting. Farmers proceeded to plant and although some have reportedly planted beyond the

planting window in the west which put them at risk of frost damage.

The latest National Crop Estimates Committee (CEC) report indicates that farmers have planted 2.27 million ha of maize this season, which is slightly down by 2.2% yearon-year (y/y). Of the three major producing provinces, the biggest decline is in the Free State (FS) with a 5% drop in planted area. Surprisingly, the North West (NW), which accounts for 21% of the total country area under maize, has surprisingly raised its area



planted by 1% year-onyear (y/y) to 487,000 ha. Both the FS and the NW experienced severe dryness during December 2018 which

raised fears of a significant drop in output for the 2019/18 production season.

As expected, the Mpumalanga (MP) planted area estimate came in 2% higher y/y mainly due to a 7% increase in white maize area. Yellow maize area for MP is up 1%

y/y and still accounts for the biggest share (70%) maize area in MP. Oilseed crops were however the biggest losers with soybeans and sunflower area falling by 5.5% y/y and 26% y/y respectively at 444,00 ha and 743,600 ha.

While the drop in maize area was expected given the bad conditions towards mid-season, the figures were much better than earlier market expectations. This might bring a total crop of closer to 12 million tons of maize, enough to meet the country's annual

consumption if conditions improve further in the near term. Considering the huge carryover maize stocks of 3.2 million tons, supplies will remain adequate for the year ahead. The implications are for a further limited upside for grain prices and positive for inflation outcomes in the months ahead.

The short to medium term weather outlook still calls for rains across the producing area which bodes well for the developing crops and a good finish to the 2018/19 summer crop season.

Pears & avos - exports to China?

SOUTH AFRICA's fruit export sector is on the verge of adding pears to the list of produce it will be shipping east, Fruit SA CEO Dr Konani Liphadzi said recently

She added that after recent bilateral trade negotiations between the two countries, China would in turn be looking at sending citrus exports to South Africa.

In addition, "there is a sense of renewed urgency for China to then move to our avocados because it's a crop they want".

that in 2019 access for Liphadzi emphasised that past impediments pears will be granted," to increasing exports of she said. South African fruit to She also stressed that "the recent change our biggest trade partner had been overcome in government has thanks to a recent trade brought an increased visit to Beijing. Chinese appreciation of the delegates also recently value of the fruit sector for the South African visited South Africa for talks with officials from economy". Liphadzi the Department of Ag-

more noted the imporriculture, Forestry, and Fisheries (Daff). tance of finding new

"The vibe that we got markets for South Afrifrom the Chinese side is can fruit. She qualified her that they're prioritising our issues and I hope

further-

view saying non-tariff barriers for South African citrus exported to the EU, such as citrus black spot regulations, had placed significant restriction-related revenue strain on exports to Europe.

This shows the need to diversify away from a reliance on the European market".

Source: FTWOnline.

Opti Agri now in the Country Bird Holdings stable

NWK's poultry and animal feed businesses, jointly known as Opti Agri, has become a part of the Country Bird Holdings (CBH) group since 1 November last year. This transaction completes NWK's divestment from various non-core business operations and gives momentum to the group's renewed focus on its core business.

Shareholders of NWK Limited and NWK Holdings Limited were informed via the 4 Africa Exchange (4AX) news service that the group had received an offer from CBH for the Opti Agri group as a going concern. NWK accepted the offer and

the transaction has in the meantime also been approved by the Competition authorities.

After both parties had complied with the conditions, CBH's acquisition of Opti Agri at an estimated cost of R296,4 million officially came into effect on 1 November 2018. The entire complement of existing Opti Agri staff was taken over with benefits by CBH, and no retrenchments occurred. The actuarial value of the staff's pension and provident fund was also transferred to the CBH pension fund. According to Theo

Rabe, chief executive officer of NWK, the sale of Opti Agri is in line

with the revised business strategy of NWK, with the emphasis on a greater customer centricity around the core business.

'NWK's core focus remains on the agricultural and food value chain, but the group also investigates opportunities that can utilise the seasonality in the value chain. Synergies within the group, as well as through partnerships, are optimised by making decisions that increase effectiveness,' Rabe says. 'Cooperation and integration with other role players provide opportunities for remaining relevant in a changing agricultural environment,' he said.

First floating solar PV installation unveiled

MARLENIQUE, a fruit farm and wedding venue just outside of Franschhoek has unveiled a state of the art, floating solar PV system.

The system has been installed by New South Energy on the farm's dam, helping to generate clean energy, while also minimising evaporation from the farm's dam and saving valuable agricultural land.

The system is the first commercially operated floating solar system on the continent, and at 60kWp, it is also the largest.

The first phase of the project, which also includes a land-based solar installation on the farm. will allow the farm to run 90% of its energy intensive cold storage, irrigation and wedding venue facilities off of the traditional electricity grid. A second phase which will see the installation of battery packs, will remove them from the grid completely. Speaking at a launch event on the farm, Minister Beverley Schäfer said: "This project has looked at some of the key issues sustainability issues we are facing in agriculture and the economy todaywater and energy- and



The floating solar PV system installed on a dam at Marlenique helps to prevent evaporation and saves land for agricultural use.

has attempted to find invest in solar. solutions. The system reduces the farm's reliance the highest energy user in our portfolio. We on the electricity grid, and provides clean, affordaare aiming to be 100% ble energy supply, while green through solar energy solutions across our at the same time also reentire portfolio in the ducing evaporation and saving water. The knock on effect is that the business will save money in the long run, and create a business that is not only environmentally sustainable, but financially sustainable as well." Boplaas 1743, which owns and operates the farm, is one of the oldest family owned businesses in the country. Financial director Carl van der Merwe said the installation would reduce their carbon footprint by half. With rising electricity prices, and uncertainty around Eskom, the family made the decision to commended Boplaas for

being innovators in the agricultural sector and said: "I would also like to thank the government for their interest in solutions that will inevitably encourage the sector to thrive. Without the support and encouragement from national and local government for industry to become more sustainable and independent in terms of power solutions, our business would not exist. We are honoured to take part in positive change happening across the public and private sector.'

GreenCape, the Western Cape Government>s partner in developing the green sector, has also just published a brief on the solar industry, highlighting the various financing and incentive options available to businesses who are considering solar PV as an option. The brief can be found on the website: https://www.greencape. co.za/content/financingsolar-pv/ Minister Schäfer said: "Investments into alternative energy can help to reduce shocks on our economy from events like energy and water shortages and help to protect our economy and valuable jobs."



Dexion offers efficient, cost effective solutions of all your storage requirements. Dexion racking is designed and manufactured in compliance with the S.E.M.A code of practice, providing you with a quality, fully adjustable storage solution.

- Static Racking
- Shelvina
- Mezzanine Floors
- Conveyors



near future. Minister Schäfer said: "As the Western Cape Government we have been urging businesses to take up solar PV as an alternative energy source. We've seen uptake grow from just 18MW in 2015 to 112 MW today, which reduces demand on the grid and helps to diversify our energy mix. We are pleased to see businesses like Marlenique responding to our call to invest in resilience in such an innovative way." CEO of New South Energy David Masureik

"Marlenique farm is

Mobile Racking

- Mobile Archive Shelving
- Small Parts Storage
- Lockers





Racking & Shelving Tel: 021 552 0220 Fax: 086 517 2949 E-mail: ron@dexioncape.co.za

Partnership offers Agri-Smart to farmers

BEARINGS International (BI) is extending its footprint in the agricultural industry by partnering with OVK of Ladybrand. The partnership will see BI's products and services for the sector available at the co-operative's 57 branches countrywide.

The partnership is the culmination of extensive negotiations with OVK, and was concluded successfully based on the focused approach, technical expertise, and back-up and customer support offered by BI, Agricultural Sector Manager Gerhard Pienaar explains.

"Our plan to target the agricultural industry following the launch of our Agrioffering at Smart NAMPO 2018 resulted in us approaching OVK about a potential partnership. This was enhanced by the fact that there are distinct synergies between us. We are looking forward to working to-



BI is collaborating with Jonnesway to offer a specialised Farmers' Toolbox.

gether, as together we will achieve so much more," Pienaar comments.

"We have also conducted product training with OVK personnel, so they are on the same page as us in implementing this partnership, and ensuring farmers receive the maximum benefit as a result," Pienaar highlights.

"We are working on strengthening our presence in the agricultural sector in the Free State, the Eastern

Cape, and the Northern Cape, as well as surrounding Southern African countries. The success of Agri-Smart has showcased our flexibility in adapting to both current market conditions and the specific requirements of its customers," BI Offer Manager Marketing Victor Strobel stresses. An example of BI's

customised products for the agricultural industry include its collaboration with Jonnesway on a specialised Farmers' Toolbox. Local farmers were consulted on the most essential tools required for routine maintenance on a typical farming operation. As a result, the tool-

box features spanners, screwdrivers, an electric current testing pen, pliers, punches, files, a hacksaw with spare blades, and a large hammer, all contained in a compact and sturdy case that can fit comfortably behind the seat of any bakkie.

THE Afrox Foodfresh® range is designed to enable providers of fresh produce to increase sales and reduce costs while satisfying the ever-growing demand for fresh and naturally preserved food. "Primarily, the role of modified atmospheric packaging is to extend the shelf life of fresh foods - without artificial additives, chemicals, freezing, preservatives or processing - while retaining those fresh food tastes, texture and appearances," begins Strydom.

For most food products, oxygen (O_2) levels in MAP package are kept as low as possible, typically by substituting the air surrounding the food with gases such as carbon dioxide (CO_2) and/or nitrogen (\dot{N}_{2}) .

"Red meat products, however, are an exception and oxygen is an important constituent of the packaging gas. Oxygen reacts with myoglobin in red meats to give it its rich red colour," continues Strydom.

"When fresh meat is first exposed to oxygen it 'blooms' to a bright red colour, making it look fresh and appetising on supermarket shelves. But oxygen eventually leads to browning of the meat surface and to the growth of spoilage bacteria, rendering it unacceptable to consumers after a few days, even when it is held near 0°C," Strydom explains.

MAP packaging for

"The main MAP gases used for red meat are oxygen, carbon dioxide and nitrogen. Oxygen and carbon dioxide are most significant and the relative proportions of each of them directly affect how the colour changes over time," Strydom reveals.

Three packaging approaches

The three generally adopted approaches for modifying the environment of packs of fresh meat include: high-O₂ MAP; low-O, MAP; and dual-layer processes, which combine the advantages of both techniques.

To retard metmyoglobin formation and browning and to preserve microbiological quality under high concentrations of O₂, MAP



gas mixtures of 60-80%

O₂ and 20-40% CO₂

are commonly used.

"Temperature control is

critical to the success of

this application, however, and poor cold-chain

control will lead to the

growth of spoilage or-

ganisms and premature

browning of the meat,"

Low O₂/high CO₂

MAP is a second option,

which fully exploits the

inhibitory effects of CO₂

on spoilage bacteria. It

is ideal for products that

have to be transported

long distances or stored

for several weeks. The

MAP gas used can be

CO₂ alone, although the

addition of N₂ to pre-

vent the pack collapsing

is more common. Gas

mixtures used in these

MAP solutions will

often contain greater

than 65% CO, with the

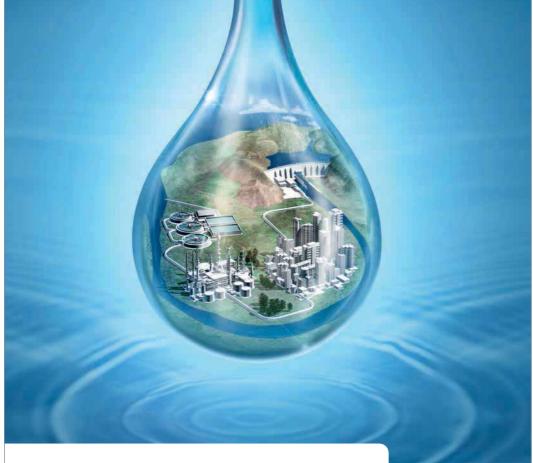
balance volume being

Strydom warns.

nitrogen.

Long storage life of, typically, over 12 weeks at 0°C is possible when using high CO, MAP mixture. As with vacuum-packed meat, however, the oxygen-free atmosphere keeps the meat purple and prevents it from blooming.

"Beef, lamb and pork all require different MAP gas mixtures and packaging solutions," says Strydom. "Over the years, we at Afrox have collected vast amounts of knowledge about what works best in terms of food science, gas mixtures and packaging materials and we pride ourselves on being able to find a Foodfresh® solution that can safely extend the shelf life of any meat product - the natural way," he concludes.



Four tech trends impacting agriculture in 2019

TECHNOLOGY continues to play a prominent role in the development of agriculture globally while helping the industry to break into new frontiers.

Dawie Maree, Head of Information and Marketing for FNB Agriculture, says agricultural technology innovation is evolving at an unprecedented pace, leaving farmers with no choice but to adapt and reinvent themselves in order to compete, grow and sus-

tain their businesses. "The agricultural industry globally is successfully overcoming some of its prominent environmental and food production challenges through the use of new and advanced technologies, and South Africa is no exception," says Maree.

combined with data on weather patterns, soil conditions as well as crops to be planted, to develop a formula to determine the best time and place to plant and

harvest. Big data is also useful for forecasting demand for crops, yield on crops, as well as potential land size and usage of land.

Drip Irrigation - given the recent drought conditions which cost South African farmers billions of Rands in losses, there's a lot of investment in the development

number of farmers in South Africa are already successfully using this technology as part of their farming practices.

Mobile apps - smartphones are no longer just used for multimedia purposes and accessing information through the internet. Farmers are now actively using apps to monitor their crops via GPS, calculate feed, save water, get access to networks and markets, etc.

Maree says mobile apps have become a major disruptor in the

The cycle of solutions water technology by KSB

Water is crucial for our survival - for every one of us, for all nations and peoples. Clean water supplies and efficient sewage treatment have never been more important. Prosperity and well-being depend on it, worldwide. KSB's know-how and extensive pumps and valves product range help you meet all water supply and treatment requirements, efficiently and affordably. We are one of the few suppliers worldwide with endto-end solutions addressing all stages of the water cycle - from water extraction to sewage treatment.

KSB Pumps and Valves (Pty) Ltd www.ksbpumps.co.za Tel: +27 11 876-5600

Our technology. Your success. Pumps • Valves • Service





He points out key tech trends to shape agriculture in 2019:

Big Data - the industry is increasingly using data analytics to improve operational efficiency and yield prediction. Farmers are now able to implement complex systems that assist them with equipment management. This is also

of advanced drip irrigation technology, which allows farmers to limit wastage by efficiently delivering the exact amount of water to the soil, needed by their crops to grow.

Vertical farming – this modern form of farming used to produce food in a smaller controlled environment through vertically stacked layers to save on water and fertilizer - is no longer just a 'buzz word', but reality. A

agricultural industry. Developers globally are working around the clock to introduce app innovations that were once unimaginable – there are now apps that are able to spot over 430 weed species and identify their characteristics, at a click of a button.

"Farmers are urged to regularly research and educate themselves on new technological developments in the industry to avoid being left behind. Those who are still pessimistic do so at their peril," concludes Maree.

Aluzinc is a game changer for MCCs

THE replacement of steel by aluzinc in the manufacture of Shaw Controls motor control centres (MCCs) is giving a range of benefits to the company's customers, according to the company's senior manager operations, Anderson Kohler.

"Traditionally, we used only steel for our MCCs, which needs to be powder coated in order to protect it from corrosion," says Kohler. "This made it necessary to follow quite a long process in completing our products – a process which aluzinc can now simplify and speed up."

The usual process of preparing the MCC panels includes welding, grinding and prewashing before the powder coating painting process can take place. These phases can now be bypassed by using aluzinc which is a material that effectively resists corrosion without a protective coating being applied.

Kohler highlights the extended lifespan of aluzinc, which comprises 55% aluminium, 43,5% zinc and 1,5% silicon. Manufacturers of the product guarantee that it will last for about 35 years before any major maintenance is required.

"The powder coating of steel panels complicates the earthing requirement on an MCC, as the paint layer insulates the panel and prevents conductivity," he says. "This means that technicians and installers must take special care to ensure that proper contact is made between the unit and the earth connection."

There is also the possibility of painted parts being scratched or damaged during transport and installation. When this occurs, it leads to the time consuming task of being returned to the factory for proper powder-coating, further

ing process. Indeed, if there is a need to weld again for any reason, then there is a repeat process of grinding and pre-washing before painting again. Kohler highlights

Kohler highlights that the corrosionresistant properties of aluzinc allows parts to be kept in stock, ready for quick assembly. He notes that this is not

possible with mild steel due to corrosion.

"By introducing the use of aluzinc in the manufacture of our MCCs, we can reduce the lead time on components to customers by as much as two to three weeks," he says.

There are also environmental benefits to using aluzinc as a replacement, says Kohler. No welding means a saving on gas and electricity, for instance, while no prewashing obviates the need for harsh chemicals. In the painting process, there is invariably waste created through surplus paint that must be carefully disposed of in terms of environmental regulations.



A live control voltage 110 Vac door being installed on a Shaw Controls aluzinc motor control centre.



At KAEFER, we support our clients' success by delivering highly professional plant integrity services and solutions for industry.

To help meet your energy efficiency needs KAEFER South Africa provides specialist solutions in:

- > Thermal/ Acoustic Insulation
- > Access Scaffolding/ Swing Scaffolding/ Mechanical Lifts/ Rope Access
- > Surface Protection/ Corrosion Protection/ Concrete Protection

delaying the installation and commission-

We value your input

Only through your input can we continue to improve.

- CommentsSuggestionsWhat would
- you like to hear about

editor@cbn.co.za

- > Passive Fire Protection
- > Industrial Sheeting
- > Asbestos Removal Solution
- > Industrial Cleaning

Tel: 011 974 8123 | Fax: 011 974 4628 Email: Sales@kaefer.co.za | Website: www.kaefer.co.za

Safe flooring adhesive

SUSTAINABLE and safe flooring has become an important component of 'green building' with increasing emphasis now on eliminating the health risks of adhesives to both flooring installers and occupants of premises.

Because the problem of hazardous adhesives is exacerbated when old carpeting is recycled, flooring manufacturers globally are now developing carpet adhesives already attached to the carpet backing. These "peeland-stick" adhesives have relatively low VOC (volatile organic compound) gas emissions and are available in various brands stocked by leading South African flooring suppliers, KBAC Flooring.

Flooring produced by companies such as Interface and Bolon are notable examples of corporates striving to develop safer adhesive methods.

Swedish Leading flooring producer, Bolon, for which KBAC

Flooring is the sole South African distributor, recently unveiled Bolon NoGlue, a tape adhesive system that allows Bolon's tiles and planks to be easily and sustainably removed, re-installed and recycled.

TacTiles have an exceptionally low odour and "zero" VOC reading,...

Bolon spent two years developing No-Glue, a sustainable tape that can be used for wall-to-wall installations. NoGlue is particularly useful when flooring needs to be moved within a short period of time, such as at retail spaces or exhibition stands.

The world's largest modular flooring producer, Interface, also represented in SA by KBAC Flooring, some years ago already developed a glue-free installation system for its carpet tiles and LVTs. Interface's TacTiles system connect tiles and plants horizontally, creating a float-

ing floor that does not shrink or expand. The TacTiles are 75mm by 75mm clear PET squares, provided in boxes of 500.

TacTiles have an exceptionally low odour and "zero" VOC reading, which makes the installation system ideal for use in schools, healthcare facilities, public and private buildings and any premises where odour is a concern.

TacTiles use a small quantity of a pressuresensitive adhesive, applied on one side of a polyester film, to connect Interface commercial carpet modules together to form a stable surface over almost any hard surface. Surface preparation requirements for installations with Tac-Tiles are the same as those for installations where adhesives would

be used. An added benefit of linking carpet tiles with TacTiles is the creation of personally

designed rugs which can be lifted or altered whenever required.

A special a.b.e. Construction Chemicals waterproofing coating was selected for wide-spread sealing of surfaces at the new ultra-luxurious Royal Palace in Maseru.

Noel Abendroth, a.b.e. Polyurea Performance Coatings Manager, says VIP Polyurea Quick Spray Industrial pure polyurea coating has so far been applied to over 2 400m² of diverse surfaces at the Royal Palace now being constructed by LSP Construction of Maseru. The VIP polyurea sealant was specified by LSP which is carrying out the large-scaled contract for the Government of Lesotho.

Among the many areas of the palace sealed with the pure polyurea coating were:

exceptionally

high-pressure

equipment, managed

to complete the project

in just under a month,"

Abendroth states. "It

is expected that fur-

ther applications of the polyurea sealant will

be needed for the ex-

or other surfaces and

within seconds, builds

a rubber-like elastic

SINCE the launch of

the Elcometer 224

Digital Profile Gauge

in 2012, many ques-

tions and queries have

been received regard-

ing the correct use of

The correct mea-

surement technique is

for the user to usually

take 10 or more read-

ings on the profiled

surface and record

the mean/average (\bar{x})

the gauge.

exotic gardens."

· Palace roofs; • Roof gardens;

- Tanking for
- ground-level exotic gardens;
- Guest house roof; and
- Tennis Clubhouse roof.



Work in progress at the palace at Maseru.

"The design of the to heat distortion and palace called for wasagging as it maintains its flexibility and shape. terproofing that was guaranteed not to leak, The coating, once particularly as part of cured, is also not affected by moisture and the roof gardens are copes with fluctuations on the roofs of the living quarters of King of temperature with its high elongation and su-Letsie Ill. Despite perior tensile strength," warm and humid weather, he adds. a.b.e.'s approved pol-VIP Polyurea coatyurea applicators, Diings – containing no amond Linings, using VOCs and solvent-free plural component spray

- are designed to perform for around 25 years which substantially cuts the costs of repairs and maintenance.

Some of the advantages of the VIP Polvurea Quick Spray coating include: Extremely fast re-

tensive and spectacular action and curing times He says VIP Quick - different systems offer Spray Polyurea can between 6 to 90 secafter proper prepaonds gel times; ration be applied to * Exceptional adheconcrete, metal, foam

sion to concrete, steel, aluminium, plastics, fibreglass, wood and foam;

less flexible coating; * Capacity to trans-

New surface profile gauge

Offers fast and reliable, peak-to-valley

surface profile measurement

other hand has deter-

mined the average of

5 readings is sufficient

for a surface profile

taken all of the above

into consideration and

amended the Elcom-

eter 224 now has a

choice of measurement

the users to take single

measurements which

Immediate: Allows

have

reading.

modes:

Elcometer

gress multiple substrates in one application;

* Application in any thickness is possible in a single application;

* Strong sound insulation; * Resistance to ul-

tra-violet radiation. saltwater, and aggressive atmospheric conditions; and

* Coverage of large areas at a rapid rate.

a be Construction Chemicals holds an exclusive agreement with VIP (Voelkel Industrie Produkte) in Germany for the local sale and distribution of the German company's respected range of protective coatings and joint fillers.

Produced in Munich, VIP Polyurea coatings have been internationally hailed as a "new revolution in coating technology" and have set new benchmarks in terms of durability, protection, ease of application, and turnaround times.

user can select to take

measurements in ac-

cordance with AS

3894.5, ASTM 4417-B

taken this opportunity

to review, modify and

simplify the calibra-

tion methods available

on the Elcometer 224.

The Model T now has

a choice of calibration

methods as detailed

have

or SANS 5772.

Elcometer

skin that will not only * Seamless and jointresist punctures but has excellent resistance



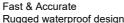
Low Cost Units to Moisture Measurement Systems Popular for · Building Materials including Concrete and Screeds, Wood, Paper,

of coatings on concrete or

- similar substrates (eg plasterboard, drywall, concrete block, brick) - non destructively



Fast & Accurate





• Used by Plascon, Dulux & industry leaders

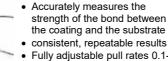
Grain & Baling

Elcometer MTG Ultrasonic Material Thickness Gauges

- · Accurately take readings on a wide range of coated & uncoated materials
- Pulsed-Echo (P-E), Echo-Echo ThruPaint™ & Velocity (VM) measurement modes 2-Point, 1-Point, Material, Velocity, Thickness Set and
- Factory calibration options Readings, Selected Statistics,
- Bar Graph, Run Chart, B-Scan & Differential Mode
- Compatible with ElcoMaster®

• Compatible with ElcoMaster®

Elcometer 510 Automatic Pull Off Adhesion Tester



- the coating and the substrate consistent, repeatable results
- Fully adjustable pull rates 0.1-1.4MPa/s
- Can be used with 10,14.2,20 & 50mm dollies
- Accuracy ±1%
- Rugged waterproof design
- Compatible with ElcoMaster®

value which gives the peak-to-valley height. It is often wrongly assumed that a single measurement will provide the surface profile value.

Surface profile has become a hot topic within the Standards Committees and within ASTM and AS in particular where it has been determined that 10 readings are required. ASTM has also been persuaded that the user can use either the mean/average (\bar{x}) or simply the highest reading. SANS on the

are displayed on the gauge and saved into the batch memory (Model T only). This mode allows gauges to

be used and measurements to be taken in the same way as older Elcometer 224 models. Custom: The user can choose to take either 5 or 10 readings and can choose to display on the gauge and save into the batch memory (Model T only), the mean/average, highest or lowest measurement of each set of readings. The Standards:

Zero Calibration

below.

- 2 Point Calibration
- Tip Change Calibration

Any Elcometer 224C gauge can be updated with the firmware version.

These improvements enhance the performance of the Elcometer 224, making it more user friendly and easy to use but more importantly, alleviate some of the confusion surrounding the correct measurement technique!

Lolly stick bins help reduce beach pollution

A joint collaboration between Seadog Sport, Plastics SA and DPI Plastics has led to the creation of a new retrieval project aimed at reducing the amount of plastics sticks and straws found on the beaches of South Africa.

According to John Kieser, Sustain-Manager at ability plastic Plastics | SA, sticks such as those typically used for earbuds, sucker/lollypops and straws, continue to be one of the biggest pollutants on our country's urban beaches.

"We've had great success with removing discarded fishing line from beaches with our Fishing Line Bins which are made from PVC pipes donated by DPI Plastics. These bins were installed at beaches along



South Africa's coastline and encourage anglers to properly discard their fishing line instead of leaving it on the beach where it could entangle birds and sea life. Building on the success of this project, close to 400 'lolly bins' (made from PVC pipe off-cuts that were again donated by

DPI Plastics) are being installed at selected Blue Flag beaches as well as other coastal areas throughout South Africa," Kieser says.

The white lolly bins are easily visible and the black and brightly coloured labels highlight their usage. According to Kieser, members of the public are urged to help pick up any of these sticks they see lying on the beaches and throw them into the bins.

"These sticks are made from High Density Polyethylene (HDPE) and Polypropylene (PP), polymers which are both recycled in South Africa. If enough of these sticks are collected, they can be used to create a wide range of different products, such as nonfood grade packaging, rope, toys, piping, recycling bins and other household items," he explains.

"Seadog Sport is a company with community interests close to our heart, and we work closely with charities and organisations to improve lives through

surfing rehabilitation and marine conservation activities. Reducing plastic waste on our beaches and in oceans is a major focus for us and we are excited collaborating about with Plastics | SA and other partners on this project which offers a very practical solution to a growing problem," says Simon Brooker, co-founder of Seadog Sport.

"This collaboration represents another step towards helping in the conservation and safety of our marine and coastal life, which goes hand in hand with cleaner beaches. If the material can be collected on a large scale, it can be recycled instead of ending on a landfill and in the environment as at present," he says.



700 bar hose

HAW now supplies lightweight 700 bar hose with high abrasion resistant covers. They have a 4:1 safety factor and burst pressure rating of 2 800 bar.

and 700 bar. Commonly HYDRAULIC used with rescue and Ware-Automation house (HAW), a member of the Hytec Group of Companies, now supplies 700 bar hose, mainly used on hydraulic tooling. These hoses are lightweight and have high abrasion resistant covers. A significant step up from the standard hydraulic hose imported by HAW, the company now manufactures hose assemblies with this niche hose, which has a 4:1 safety factor and burst pressure rat-

ing of 2 800 bar. The hose core is constructed from thermoplastic elastomer and has a polyurethane covering, consisting of one or more braids of aramid fibre and one braid of steel wire. The hose can be used in environments ranging from -40° C to 100° C, although, 70° C should not be exceeded when transferring air and water based fluids.

The hose is ideal for very high pressure lines in compact hydraulic systems operating at 300 to safety equipment, the low change in length means that the hose can be used to transfer petroleum, synthetic or water based fluids in hydraulic systems. Available in both 6.4mm and 9.5mm diameter sizes, the hose

comes in a range of colour options including black, red and light blue hose covers. There is no difference in specifications between the various colours.

HAW also boast its own test facilities, meaning that all hose assemblies can be subjected to static hold pressure tests upon request.

HAW prides itself in its high stockholding of this hose range, which is accompanied by hose fittings and protective springs for this hose. All fittings stocked are 1/4" and 3/8" NPT male and HAW also stock 700 bar quick release couplings that work handin-hand with the hose assemblies.

Foam barrier system for pipes and cabling

FIRE installation specialists now have access to a single easy-touse product in the form of the fischer FireStop Foam Barrier System, available from Upat.

The new product is a two-component polyurethane expanding sound, smoke and firestopping seal that expands to five times its volume. It can be used on metallic pipes, insulated metallic pipes, conduits, cables and cable bunches, and even mixed multiple penetrations.

The latter makes the product ideal for data cabling contractors, allowing them to insert additional cables if need be without breaking the seal, Upat National Product Specialist Charl Weber highlights. "What makes this product unique on the market is that a single product can be used for mixed multiple penetrations. It is not limited to either pipes or cables, as a single product can be used for both." The fischer FireStop foam is available in a handy dispenser, with a single 380 ml cartridge yielding 2.5 litres, which cures in 90 minutes. The foam can even be used to create fire bricks with a tenyear life expectancy. Additional benefits include the fact that it is age-and smoke-resistant, and re-enterable and repairable, with excellent adhesion, and requiring no backing material for added effectiveness.

The new foam product is part of the fischer FireStop range, which aids in the compartmentalisation of fire, smoke, and toxic gases, ensuring the safety of building occupants and protecting properties in the event of any fire incidents.

"Health and safety regulations are becoming more stringent. Architects, builders, specifiers and structural engineers now have to look beyond the aesthetic look and structural soundness of a building in order to be able to pass building inspections. Fire protection considerations are a critical part of all new building projects,

whereby systems such as the FireStop range can ensure the safe evacuation of building occupants," Weber explains. Unlike traditional

foam products, the new FireStop foam expands rather than burns, which means it is highly effective in preventing any fire

from spreading. For example, if inserted around a pipe, it will expand and seal that pipe in the event of a fire.

The fact that the FireStop foam is a single product also means that multiple approvals are not required for fire protection, unlike other products.





A Bosch Rexroth Company



A Bosch Company

Moving specialist hydraulic components from the world's leading manufacturers to your shop floor.

We bring premium hydraulic hose and fittings, mobile components and accessories to your operation, so you enjoy maximum hydraulic performance, every day.

That's why HAW is now a Bosch Rexroth Company.

Call us: 27 (0) 11 281 3800 or Visit our website at: www.hytecgroup.co.za

Doing more with less

100 years," Venter says.

operation and mainte-

nance of plastic pipes,"

Benefits of using plastic

pipe vis-à-vissteel or con-

High recyclability

and recovery: Plastic

pipe is being recycled

on a relatively large

scale because of the

used in the manu-

facturing process.

high value of polymer

Although ductile iron

and steel pipes can

also be recycled, the

energy cost to do so

is makes the process

considerably more

expensive than with

tions show that the

power consumption

pipe is approximately

R0.09/kg compared to R0,23 – R0,45 for

steel, bearing in mind

that many steel pipe-

lines are internally

lined with material

stripped from the

steel.

that first needs to be

to recycle plastic

plastics. Basic calcula-

crete pipes include:.

he said

RECENT advances in the production and manufacturing of thermoplastic pipes are not only leading to substantial financial savings, but it also making significant strides to help save the environment and reduce the environmental impact of piping systems.

According to Jan Venter, CEO of the Southern African Plastic Pipe Manufacturers Association (SAPPMA), the local plastic pipes body and its international counterparts have been researching and documenting the environmental impact of plastic pipes, and compared these figures with pipes manufactured from other materials. Results from these studies have proven unequivocally that pipe systems made from thermoplastic pipes have much lower manufacturing and transportation costs, better longterm maintenance and higher recyclability than pipes made from other materials.

"From an environmental and economic point of view, engineers are recognising that investing in plastic pipes make sense because it allows them to do a lot more with the same amount of energy or money they would have spent on traditional materials, because as they offer a design lifespan of



27 & 28 AUGUST 2019 lock C, Altron Business Park • 241 Third Road, Halfway Gardens, Midrand

SAPPMA has reserved two full days for PIPES XII in order to once again bring the South African plastic pipe industry a world-class line-up of local and international presenters. The SAPPMA pipe conference only takes place every second year; therefore you should not miss out on this unique opportunity

Submit your details, topic, abstract (max 400 words) and CV (max 100 words) to admin@ za by 1 March evaluated by the SAPPMA Conference Advisory Committee and presenters will be informed on or before 16th March 2019. The conference programme will be published on 1 April 2019.



Low amount of energy used to manufacture plastic pipes: The results of the tests performed

on various different pipes showed that even though the material energy of ductile iron is a lot less than that of plastics in terms of mass (MJ/kg), the picture reverses when the wall thickness and mass per meter are taken into consideration (MJ/m). Similarly, the amount of carbon dioxide that is emitted by the production of plastic pipe is far below that of ductile iron.

 Lower pumping costs: Considering that approximately 60 % of the world's electricity is used by electric motors, of which 20 % of this is used for pumping, it has become vitally important to consider the amount of electricity needed to pump fluids through pipelines. Here again plastic pipes have proven to save costs owing to the fact that their walls offer very limited resistance to flow (low friction) and even more importantly, remain virtually unchanged throughout its design life. All of this helps

to keep pumping costs to a minimum and saves money on maintenance in the long run.

Lower transportation costs: Because plastic pipes weigh much less than steel or concrete, it costs considerably less to transport plastic pipes. As a result, it also has a much smaller carbon footprint and less CO₂ emissions.

Bigger application thanks to new sizes: Plastic pipes are being manufactured in much larger diameters and higher pressure ranges than ever known before. This is an exciting development that is opening up new markets and possibilities plastic pipes that were traditionally occupied by steel pipe market.

Through its association with international bodies and fellow plastic pipe associations, SAPPMA is offering the benefits of being linked to best practices in Europe, the Americas and Australia to its members and the rest of the industry. "Globally the plastic pipe industry is in a strong position and continues to grow its market share and influence", Venter concludes.

GARNETT CROSS

HYDRAULIC COURSES CC

Registered 1974 : CK 90/38797/23

Training in the Design and Maintenance of Hydraulic Systems

Dewatering bags for desludging wastewater ponds

FIBERTEX geotextile bags (geobags) for use in on-site desludging wastewater projects have advantages over conventional methods, which are often unaffordable to authorities and contractors with limited budgets.

Benefits include ease of operation, efficient retention of solids, compliance with environmental regulations and cost optimisation. A further advantage is this dewatering system is passive and does not require constant monitoring and maintenance of equipment. The filtration prop-

erties of geotextiles which are effective in retaining the fine-grained materials found in sewage sludge, while allowing the water to filter through - make these materials suitable in desludging wastewater ponds. The effluent that passes through the woven fabric can then be transferred to a des-

ignated safe disposal site, given that it meets the regulations set by the Department of Water Affairs (Policy and Strategy for Groundwater Quality Management in South Africa).

"When wastewater treatment ponds reach their capacity, the options available are to either build new facilities or to empty the existing ones to make additional space available for waste. Traditional methods of waste containment, which usually require large amounts of space, stringent environmental permits and frequent dredging, are normally unaffordable to municipalities," explains Johnny Oriokot, geotechnical engineer, Fibertex SA. "A feasible solution needed to be found to dispose of extracted material through the desludging process, which is not restricted by budget constraints and the limited space available at existing wastewater facilities.

"The use of geotextile dewatering bags is recognised globally as the most efficient and economical method to achieve the required desludging process, to improve the functionality and safety of wastewater treatment works."

Fibertex geobags, manufactured from UV-stabilised woven Polypropylene (PP) geotextile materials, are incorporated in the desludging process in wastewater treatment - the process used to convert wastewater into an effluent that can be returned to the water cycle with minimal environmental impact.

particles Solid (sludge) are then separated from the effluent and transported to a designated safe disposal site, or stored in a tailings storage facility at the wastewater treatment plant.

Call for papers

Pipes XII conference 27-28 August 2019, Midrand

THE Southern African Plastic Pipes Manufacturers Association (SAPPMA) is issued an invitation to professionals interested in presenting at their PIPES XII Conference, to submit their abstracts as soon as possible.



Topics covered at this bi-annual event centre around issues relating to HDPE and PVC pipe qualproduction ity, manufacturing and trends, installation standards, challenges and new international application trends. Speakers from a wide variety of different industries and countries present in order to present delegates as wide a range of different viewpoints on topics that directly affect their professions. "We had 300 delegates attend our previous PIPES XI Conference that took place in 2017, and we are hoping to repeat the success and impact with this year's conference," Venter said. Highlights of the previ-

ous PIPES conference include presentations that were delivered by international speakers such as Tony Radoszewski (PPI, USA), Bruce Hollands (PVC Pipe Association, USA), Dr Andreas Frank (Polymer Competence Centre, Austria) and Zoran Davidovski (PPCA) who shared the stage with 17 local experts.

"We are looking for presentations that are non-commercial, but relevant to the plastic pipe industry. Topics may include pipeline design, installation, pipe quality (standards, testing, certification) innovation, water and sanitation, infrastructure, raw materials, pipe rehabilitation, trenchless technologies," Venter stresses. Abstracts consisting of no more than 400 words must be submitted to SAPPMA, along with a brief biography / Curriculum Vitae of the presenter. Abstracts will be evaluated by the SAPPMA Conference Advisory Committee and presenters will be informed on or before 16th March 2019. The conference programme will be published 1 April 2019. CPD points will apply.

Content, must be non-commercial and relevant to the plastic pipe industry. Topics may include pipeline design, installation, pipe quality (standards, testing, certification) innovation, water and sanitation, infrastructure, raw materials, pipe rehabilitation and trenchless technologies.

Speakers are responsible for their own travel and accommodation arrangements and expense Accommodation available at the Premier Hotel, which is situated next door to the conference centre. The hotel is easily accessed via a pedestrian gate. Premier Hotel reservations 010-161-0000 ask for the Bytes Conference Centre rate.

CONTACT LOUISE MÜLLER Conference Organiser • admin@sappma.co.za



Accredited by SAIMechE / Engineering Council of South . Africa in respect of Continuing Professional Development

Regular Courses are conducted at

Johannesburg • Durban • Cape Town • Port Elizabeth

For further details please contact **Joanne** at + 27 11 453-8063 or Email: garnett@cross.co.za

www.garnettcross.com

We do not sell or repair Hydraulic equipment. Neither are we affiliated to any such company. We have been dedicated to Hydraulic training since 1974.

New railway condition monitoring solution

THE drive in the rail sector is towards extending maintenance intervals. This is an area where digitalization is making a major difference. With this in mind, SKF has launched an entirely rail-focused version of its highly successful Multilog IMx platform, rolling combining stock and track condition monitoring in a single, easily customised solution.

SKF's latest offering for the railway industry, Multilog IMx-Rail, is a multi-channel, on-line condition monitoring system based on new rail approved components. It is the next step in train digitalization, allowing operators to implement condition based maintenance that can help achieve goals such as TCO reduction, higher availability, the avoidance of unplanned stoppages and longer maintenance intervals.

Available for OEM installation and as a reftrofit solution, the Multilog IMx-Rail offers advance warning of rolling stock ro-

EMERSON has re-

leased AMS Inspec-

tion Rounds, a new ap-

plication for the AMS

Trex Device Commu-



tating part issues on wheel bearings, gearboxes and motors, as well as data collection from many other components. The system can also provide a track health map with line faults located, identified and recorded with market-leading accuracy.

The Multilog IMx-Rail system can also be integrated easily with SKF's Cloud services for data storage, data sharing and for SKF Remote Diagnostic Services. Its versatility, combined with SKF's expertise at monitoring rotating components across many industries, enables the quick analysis and prioritisation of any planned rolling stock maintenance.

Filip Rosengren, manager of the railway segment at SKF

App automates workflow

for the industry, due to aging train fleets and the increasing need for train availability. With IMx-Rail, operators can reduce life cycle costs, prevent on track failures and better plan maintenance. As rail traffic increases, the role of digitalization and condition monitoring solutions, such as the Multilog IMx-Rail, will become increasingly more important to extend maintenance intervals and boost rolling stock efficien-

comments: "Mainte-

nance costs are the

single biggest concern

SKF also has a range of additional condition monitoring solutions for the rail sector, including systems to monitor wheel bearings, traction motors and gearboxes.

cy."

Optical sensors offer high tolerance

ENGINEERED with a high tolerance to different materials, the Leuze 10 Series optical sensors detects objects and measures distances with an incredible accuracy of +/-30 mm. Available from Countapulse Controls, these high performance sensors have an operating range of up to eight metres.

The high tolerance of the Leuze 10 Series sensors further extends to the angle of incidence, the colour, surface structure and brightness of reflective material. This enables the sensor to detect different materials, such as wood or matt as well as glossy metal, and this is possible even under varying environmental conditions.

The Leuze 10 Series is also suitable for sensing applications where deep black materials are found or where objects are not ideally aligned or where they are moving rapidly.

The highly visible status indicators on the devices makes for ease of use and the sensors also have large control buttons. The LED display has been designed to facilitate step-bycommissioning step and diagnosis at the press of a button.

The compact housing, with integrated recesses for M4 screws or nuts, means installation is possible in applications where space restrictions exist. However, its small size



Engineered with a high tolerance to different materials, the Leuze 10 Series optical sensors are able to detect objects and measure distances with an accuracy of +/-30 mm.

does not impact on the overall performance of the Leuze 10 Series. A comprehensive range of Leuze sensing solutions is available from Johannesburg-based Countapulse Controls. The company can assess any sensing application and

provide a fit-for-purpose solution to meet the specific needs of an operation. A 24/7 hotline is available to assist end users with technical challenges that may be experienced due to lack of knowledge or experience.

Optimum dosage and fluid media monitoring

INSTROTECH is ofdosage output, anothfering Kobold's ZEDer switch output and D electronic dosage devices, ideally suited for dosing and monitoring fluid media. They process the sigpump for nals from separately flow installed flow sensors and are mostly freelyconfigurable. The devices are suitable not only for panel mounting, but also robust aluminium field housing (IP 65) for wall mounting or pipe mounting and for direct fitting on the are available. For integration into operating standard industrial automation and monitoring systems, the intelligent electronics have two control inputs, one

one analogue output. Two relays are provided for dosage and monitoring. Whether control, monitoring or filling and fine dosages, a large variety of possible settings provides the best possible adjustment for the task in hand. This includes free scaling and a choice of engineering units. A password protects any settings made against errors. A well-arranged, easily readable two-line display indicates the current flow and the dosage quantity. The



devices are operated by using menus and 4 keys. A Start/Stop button can be used to interrupt the dosage process.

- Key features of the ZED-D electronic dos-
- age devices: 2 x 8-digit LC-Display, backlit
- Frequency input: 0.2 - 2000 Hz
- 2 x relay outputs
- Analogue output
- Sensor supply
- Free scaling MIN/MAX mem-
- ory Switchboard instal-
- lation or field casing

nicator that will make it easier for operations teams to capture, report, and respond to abnormal plant conditions that pose risks to reliability, safety, and performance. The new application allows personnel to accurately record field condition data and automatically deliver that data to other plant systems where decision makers can drive effective action.

Most plants rely on manual inspection rounds to detect abnormal plant conditions not identified by sensors. With AMS Inspection Rounds, operators on rounds can electronically record any abnormal or hazardous conditions immediately, such as unusual equipment noise, spills, smells, excessive corrosion, or safety hazards. Condition data can be entered on the ruggedized AMS Trex in real-timetimestamped for compliance and audit requirements. AMS

Inspection Rounds delivers condition data to other plant systems via a wired or secure wi-fi connection, eliminating the need for manual entry. It also provides automated workflows to operations and maintenance personnel while they are in the field, complete, ensuring consistent, and repeatable collection of condition data.

"Route-based inspections are a key line of defence for identifying abnormal and unsafe conditions that nance teams can also may reduce efficiency or put personnel in danger," said Mani Janardhanan, vice presi-

dent of product management, Plantweb and reliability solutions, Emerson Automation Solutions. "AMS Inspection Rounds helps ensure that issues impacting safety and reliability are detected, reported, and resolved earlier."

With clear dash-

boards of routes, status, alerts, and action items, users can identify, schedule, and coordinate steps for resolving issues more quickly. Electronic recording of route data saves hours of time typically lost in transcribing paper notes to electronic media and simplifies the generation of audit trails - freeing personnel to focus on more important tasks. Operations and mainte**Proximity switch for Ex zone 0/20 for** direct connection to 24 V

THE IGEX20a inductive proximity switch, EGE provides a very compact sensor for zone 0/20 hazardous areas that can be used without additional amplifiers. IGEX20a is certified according to ATEX and IECEx. The IECEx certification simpli-



EGE supplies ATEX- and IECEx-compliant inductive proximity switches for zone 0/20 gas and

function is indicated by an LED on the back of the device. The sensors are available in an M12, M18, or M30 design. Flush installation provided, the nominal switching distances are 2 mm, 5 mm, and 10 mm, depending on the design. The proximity switches are connected via a 2 m PUR cable. EGE supplies the sensors with different cable lengths on request.

ties worldwide use of access historical data the sensors. Certified to identify and elimifor use in Ex zones 0 nate root causes of reand 20, the proximity curring problems. switches can be em-

dust hazardous areas

ployed in hazardous arin gas stations and facileas with gas or dust atities with gas-conveying mospheres, for example parts. The switching



Thin clients help increase flexibility



VersaView 5200 thin client portfolio helps simplify management of devices and users

WITH many applications on multiple displays throughout a plant floor, manufacturers struggle to manage numerous sources of content. VersaView 5200 from Rockwell Automation uses Thin-Manager software to manufacturers help more easily manage their applications.

"The latest additions to the VersaView 5200 portfolio allow end-users to choose a single display or multiple displays with a variety of resolution options," said Christo Buys, Business Manager, Rockwell Automation. "Customers leveraging ThinManager software can now match the right thin client hardware to their specific application needs." The VersaView 5200 thin client portfolio from Rockwell Automation helps simplify management of devices and users.

The expanded VersaView 5200 portfolio includes five thin clients: single display, dual display, dual 4K display, multi 4K display and integrated display. The multi 4K is the first in the industry to offer seven displays and is exclusively supported by ThinManager software. The new thin clients each offer unique benefits. The single display offers a compact design,

with a single Display-Port video output. The dual 4K display includes high-performance quad core Intel Atom CPU for more demanding applications. The multi 4K display offers a high-performance quad core Intel i5 CPU for applications requiring multiple displays.

а

The VersaView 5200 non-display thin client options are ideal for use with VersaView 5100 monitors. This twopiece solution separates the monitor and thin client, so either can be replaced independently. The VersaView

5200 thin clients are designed to be used exclusively with Thin-Manager software. The software centrally manages content and visualisation for every aspect of modern industrial operations. It can help reduce downtime and maintenance by simplifying the management of all devices and users. The location-based Relevance technology from Rockwell Automation can deliver targeted content based on role and location. When used with the ThinManager soft-

ware, the VersaView 5200 thin clients can start receiving information as soon as they are plugged in. Device configuration is not needed, resulting in faster device replacement. Information is stored on a server to help protect sensitive information. The ThinManager software also provides multifactor user authentication, including biometric authentication using fingerprint scanning.

Process values at a glance

A display is an excellent choice for showing process values for sensors which do not have a display, which are difficult to access or are not visible after installation caused by the application. This means that ideal measuring points can be used irrespective of the visualization.

Plug & play

The E30443 IO-Link master display is simply connected to one port of an ifm IO-Link master with 4 or

8 ports. The display detects sensors which are connected to the same master and automatically indicates the main process value of the first four ports. Each sensor and its process values can also be visualized individually by pushing a button. Furthermore a favorite view with the requested process values can be created.

In addition the user can easily and reliably configure the display and the IP address of the master.



Wireless gas detectors and IoT

Vendors with solutions that can generate critical business information will find greater growth opportunities, say Frost & Sullivan

THE rising interconnectivity among devices in industries is opening up the market for wireless gas sensors. These sensors can be installed in smartphones and are designed to support Bluetooth, Wi-Fi, near-field communication, and other wireless connections. Their portability, low power requirements, and high-performance potential make them ideal for Internet of Things (IoT) applications, especially in critical and hard-to-reach areas in mining and oil & gas. With further improvements in battery life, ruggedness, form factor, and standardization, wireless gas sensors

will find a wider application and revenue-generation potential.

"Wireless gas detectors reduce initial implementation costs and save on maintenance through better asset allocation, workforce management, faster resources workflow, and improved safety, giving them a significant competitive edge," said Nandini Bhattacharya, Industry Manager, Industrial team at Frost & Sullivan. "They aid real-time and easy data transfer and communication on plant floors, which allows plant staff to be more mobile and flexible when performing operations. Importantly, these detectors

monitor both personnel as well as machine health."

Frost & Sullivan's recent analysis, Global Gas Sensors, Detectors, and Analysers Market, Forecast to 2025, covers the key product segments of gas sensors, fixed gas detectors, portable gas detectors, and gas analysers. It provides revenue breakdown by vertical markets and a market breakdown by types of gases, including hydrogen sulphide, carbon monoxide, methane, oxygen, carbon dioxide, and nitrogen oxide. This study also discusses various macroeconomic factors and trends in the main global regions of North America, Latin America, Europe, Middle East & Africa, and Asia-Pacific.

"Fatal accidents in the industries due to gas leakages have intensified the need for safety devices like gas sensors and detectors. Additionally, the demand for analysing multiple gases in industries has had a huge impact on the market for gas analysers," noted Bhattacharva. "Shale gas and tight oil exploration, as well as the stringent enforcement of occupational health and safety regulations by government bodies across the world, are further boosting the sales volume of gas sensors, detectors, and analysers."

Overall, market participants need to deliver innovative solutions that not only fulfil customers' gas sensing and detection needs but also provide them with complete visibility and critical business information. Additional revenue opportunities can be tapped by:

- Presenting solutions such as real-time visibility, two-way communications, automated notifications, and predictive maintenance of devices.
- · Packaging high-qual-





Loadtech instruments have a range of localy developed process and load cell instruments from panel mour din rails and wall mount type instruments.

Our Digital Indicator range can display process parameters such as: mA, millivolts, frequency, counting, potentiometer, even timer, real-time clock, manual analog out station and load cell applications.

We also have a range of remote displays and extra-large displays

Call us now for quality, locally manufactured solutions that work!



Leaders in quality load cells &

weighing technology

Tel: +27 (0)12 661 0830 email: sales@loadtech.co.za www.loadtech.co.za

Getting a replacement tapered roller bearing can sometimes be a challenge, especially if it's needed in a remote location. Machines can be out of action. Productivity can slow and costs quickly escalate

With SKF you'll get the right support and the best tapered roller bearing solution for your needs, wherever the application. With 17 000 distribution locations in over 130 countries around the globe and a continually extending range of standard metric and imperial sizes, we'll get the part to you, no matter what.

SKF South Africa (Pty) Limited Tel: +27 11 821 3591, Fax: +27 il: sales.za@skf.com, Web: w **SKF**

ity products with smart solutions and on-time maintenance and support.

- Partnering with cross-industry participants to innovate and stay relevant.
- Focusing on wearable sensors, as their small form factor will make it possible to integrate them into badges or similar small accessories.
- Employing a combination of direct and indirect sales with greater focus one Commerce.

OPINION

Is plastic really such a problem?

Continued from back page

Harvesting plastic waste is not as farfetched as it may seem. It is perfectly possible to use it as raw material for making petrol and diesel through a process of pyrolysis. There is an inventor in Somerset West who does this. Whenever he needs fuel for his diesel bakkies he sends one of his staff to collect plastic refuse from the nearest watercourse.

So plastic is so horrible that the industrial world is supposed to dump the production of plastic and substitute its remarkable properties that make life easier and safer for us all with-paper. The irony of this seems to be lost on the Greens.

There are other things about plastic usage that the anti-campaign brushes under the carpet.

For example:

Plastic bags require much less energy to make than paper ones. Think growing trees, then turning them into pulp and then paper. Making a plastic bag uses a tiny fraction of water needed to make a paper one. Paper bags also emit more carbon dioxide and other gases in their making.

Cotton bags are better? What a joke. Growing, and harvesting cotton, spinning it and weaving it is horrendous. Even in Green terms, cotton bags are much worse than paper.

Then there is the small (ahem) matter of transport costs, another factor the Greens ignore through ignorance or malice. It takes seven trucks to haul paper backs compared to the same number of plastic ones that need only one. Guess what fuel the trucks use, let alone their lubrication needs?

Ah, but plastic bags don't degrade, say the Greens. Really? How about paper bags? Are they better on this score?

Not really. Paper bags placed in airless landfills take years to decompose as well. Reusable bags to carry your groceries, whether made from heavier plastic or cotton, have to be used 100s of times before they make less of an environmental impact than an old style plastic bag.

And there are health aspects of re-usable grocery carrier bags. Hardly anyone wash them regularly. The result is a bacterial paradise where E. coli. flourishes.

Never mind these inconvenient truths. Let's ban plastic straws, plastic forks, spoons, knives, Styrofoam cups. And while we are at it let's replace plastic insulation of electric wires with the cotton mesh we used before plastic. That should increase the fire risks. Oh, and do the same to motorcars - even the Prius and the Tesla. That should make them even more prone to fire.

It is all so silly. We took to plastic bags because we were told it helped to save trees. Now we are urged to use paper bags regardless of the slaughter of trees it will mean.

What about drip irrigation that is helping to green deserts? Cheap plastic water barrels that save rain water?

Ban the lot and usher in a new Green world that will take us back to the Victorian era. Maybe then the Green lunacy will end.

Living in Victorian times was fun. London was feet deep in horse manure every day. Streets were not tarred and stank of urine even when the dung had been cleared. Pea soup fogs in winter caused by coal fires killed thousands every year, and snowflakes were seldom white for long. Public buildings with marble facings became black and stayed that way for the next hundred and fifty years.

Yes, indeed, we had better ban plastic straws worldwide to hasten the arrival of the Green utopia.

How can Eskom be saved?

Fanie Brink, Independent Agricultural Economist

"THE only way to restore and improve power supply of Eskom over the long term is to restore the profitability and sustainability of the various processes of how electricity is supplied," says Fanie Brink, independent agricultural economist.

This process will require the thorough application and management of the basic economic and technological principles, as Eskom's profitability and sustainability to provide electrical power over the long-term is driven and created by two basic principles.

Firstly, by the price ratio between the changes in the price that Eskom pays for its coal and the changes in the price changes it receives for its electricity, which is the single biggest factor which determines its profitability.

Secondly, the efficiency with which coal can be converted into electricity that needs to be improved by the application of the best and latest available technological processes. In other words, how many tons of coal is needed to produce, for example, 1 000 kW of electricity and how can the efficiency be improved to produce more electricity with the same amount of coal or the same amount of electricity with less coal.

The announcement by the Public En-

terprises Minister, Mr Pravin Gordhan, that external engineers will be appointed to look at Eskom's manufacturing, transmission and distribution processes separately should be welcomed.

"However, there is no other long-term solution to providing sufficient electrical power than to improve Eskom's profitability and sustainability. If these two basic drivers of profitability are not properly applied and managed, all the other factors involved in supplying electrical power are in fact irrelevant.

The same economic and scientific principles are equally valid and applicable to all other business enterprises in the primary, secondary and tertiary sectors of the economy," according to Brink.

Drastic measures needed to counter current steel industry crisis

CURRENTLY, the South African downstream steel sector is beset by numerous severely challenging issues which - if the situation continues unabated will be severely detrimental to the ongoing viability of the entire steel sector in this country.

One of the primary issues to be addressed is the 'stalemate' industry has been experiencing for some time with South Africa's primary steel producer. It is strongly recommended that careful scrutiny of the short, medium and longterm viability of the mill be undertaken urgently.

be imported duty-free and warehoused locally - so that the industry could have accessible and affordable steel readily available.

Rippon estimates that this would stimulate the downstream sector - currently totally in the doldrums - and result in consumers paying up to 30% less per kilogram of steel.

"This would, in turn, stimulate a broad spectrum of steel-consuming industries; and would ultimately see increased tax revenues flowing into our fiscus, which is not the case with the current loss-making raw steel producer," he explains.

The downstream steel sector has to contend with various very thorny and troublesome issues at present: most notably, the erratic and unpredictable fluctuations in the primary pricing of steel.

ers such as the automotive sector; or, for example, to produce hard-wearing steel in coil plate such as MC 700 material and many other popular products which industry requires. This is really impacting on the downstream sector's ability to be competitive," he emphasises.

In addition, Rippon echoes an overarching concern expressed by many companies in the downstream steel sector, about the fact that protective government tariffs appear to be to the sole benefit of the steel mill - and afford no protection to other steel industry participants.

The resulting lack of competitiveness has seen South Africa's steel industry. which used to be Africa's 'go to' source for project steel, being supplanted by Chinese and European suppliers, which are able to supply steel at quality and prices that are highly competitive. The current crisis in South Africa's steel industry is being exacerbated the current dearth of infrastructure projects; which does not look set to change any time soon, despite the recent economic stimulus package announcements. "The steel industry and the CEO task force – of which we as Allied Steelrode are inaugural and driving members - are urgently seeking the engagement and co-operation of government in mapping out a realistic recovery plan which will breathe new life into the downstream steel sector - and ultimately also South Africa's economy," Rippon concludes.

IN THE NEXT ISSUE:

- · Cutting, Welding and Specialised Coatings
- Electrical Industry / Manufacturers/ Contractors/ Suppliers
- Freight Forwarding
- · Maritime: Port Operations and Harbour Services
- · Materials Handling and Equipment
- Metals Industry / Processing / Fabrication
- Packaging Industry
- Plant Equipment / Generators / Compressors / Machinery Hire
- Power Solutions / Energy Efficiency & Renewables
- PPE / Work Apparel / Safety at Height
- Safety & Security/ Surveillance/ Access Control / Fire Detection
- Skills Training and Development : FET & TVET Colleges: Degrees / Diplomas / Certificates / Short Skills Programmes / **Distance Learning**
- Warehousing and Storage Management
- Water Engineering / Waste Water / Water Purification / Sustainability

Cape Business News is always on the lookout for stories of companies that are shaping the Cape business landscape. If your company has a story to share, in these, or any other business sector, send your story to editor@cbn.co.za for consideration.

CAPE **Business News**

Chairman: Rudi Leitner rudi.leitner@hypenica.com **Publisher:** Pieter Meiring pieter.meiring@cbn.co.za Editor: **Robin Hayes**

editor@cbn.co.za **Production Manager:**

Elise Jacobs

elise.jacobs@cbn.co.za

Online Editor:

Jadine Gracie jadine.gracie@cbn.co.za

Sales Team:

Heather Ferreira

heather.ferreira@cbn.co.za

Robin Dunbar robin.dunbar@cbn.co.za

Shaun Austin

shaun.austin@cbn.co.za

Subscriptions:

subscriptions@cbn.co.za **Cape Business News** Tel: 021 2500400

This is according to Warne Rippon, Executive Director of Allied Steelrode.

"The local downstream steel sector has been placed in an untenable position with an outdated mill producing expensive steel - the quality of which leaves much to be desired – in a total monopoly with no competitor since the closure of Highveld Steel.

For these reasons – and if it is established that the primary steel producer is not able to either operate fairly or indeed to the benefit of South Africa's steel industry – due to the lack of technological or financial investment - closure of the facility could potentially become an unfortunate reality," Rippon asserts.

He adds that, should this eventuality transpire, the alternative would be to invite selected foreign steel mills to export to South Africa – which would need to

"These fluctuations make quoting even three months ahead exceptionally challenging," continues Rippon.

A further issue is the lack of structured discounts from the primary raw steel producer to leading tier 1 steel suppliers. Rippon points out that this lack of procurement incentive is compelling local steel suppliers to consider importing more of their requirements from foreign steel suppliers.

"The drive to import is gaining more impetus on a daily basis, as there is serious doubt in the industry about the ability of the local raw steel to produce the level of quality required by manufactur-

Printed by: **RSA** Litho

Cape Business News has taken all reasonable care to ensure that the information contained in this publication is accurate on the stated date of publication. It is possible that the information may be out of date, incomplete or the opinion of the author. It is therefore advisable that you verify any information before relying on it. Cape Business News accepts no responsibility for the consequences of error, or for any loss or damage suffered by users of any of the information and material contained in this publication.

Materials published in this newspaper are subject to copyright and other proprietary rights.



As Donald Trump says, believe me!

▼ ENERAL chaos reigns in Ameri-Jca," declared Luke the Dude with disdain.

"You can call Donald Trump a general if you like," snorted Bob the Book in agreement, "if you add that, in general, he is also a liar, a con artist and a fraud."

"But luckily General Chaos knows more than all the American generals together," smiled Irene the Queen slyly. "He told us so himself!'

"That he would," nodded Stevie the Poet. "His military expertise is not only rooted in his vast experience as a serial draft dodger, he was also the drum major at the military school he attended."

"Whiff," said the Big White Dog dismissively.

The usual congregation of concerned conversationalists was present and accounted for in the local Pub & Grill, dealing with the pressing issues of the day. That day was the first of March, at the end of the week that saw President Trump incapable of putting together a deal in his muchtouted second summit with North Korea's Kim Jong Un, much less putting any kind of art into it - in contrast to his boasts in that book he did not actually write even though his name is on the cover. The artful dealmaker was again duped by Little Rocket Man (Trump's description, before they became best buddies). Trump gained nothing while the formerly obscure dictator of North Korea further cemented his standing among the big boys on the world stage.

Never mind, explained Trump afterwards, no need to rush. You have to know when to walk away.

"As the song also says," remembered Stevie, "you've got to know when to run. All the food was prepared and the tables were beautifully set with name plates and whatever, but he did not even stay for lunch."

That song was called The Gambler," Big Ben enlightened the pub. "Kenny Rogers sang it."

"Thanks Ben," said Stevie sweetly, "well here's something not many people know, as Trump likes to say when he learns something that is general knowledge, such as that England is part of the United Kingdom - The Gambler was first offered to Willie Nelson, as Willie once told Kenny and Dolly Parton in a show they did together."

"Interesting," complimented Luke the Dude coyly, "what does that have to do with Trump?"

"I'll answer that," volunteered Big Ben, "when Trump took up gambling, he did it the clever way; the only way guaranteed to win a fortune instead of losing your shirt. All his casinos went bust. Down the drain. Bankrupt. So much for the billionaire business genius (you have his word for it).'

"But he is a billionaire businessman," protested Big Ben loudly, "he is on the Forbes list of the richest billionaires!'

"That he is," grunted Bob the Book, "but he does not tell Forbes how much he owes on his properties, does he? And he won't let anybody but the taxman see his tax returns. Why do you think that is? Because he is so humble about all the taxes he pays on his immense wealth? Think again, big man."

Bob really does not like Trump. The Big White Dog gave him a friendly leg rub.

Big Ben gave him a hostile stare. "Bob the Box," he growled.

The Governor judged that it was time to lighten the mood and fill his cash register. "Angie dear," he called to his sweet bartender, "won't you pour these nice ladies and gentlemen another round? Extra cold for Big Ben please."

This settled the congregation down to its usual conviviality and during the general raising of glasses we had the opportunity to get back on topic.

That was also the week that saw Donald Trump's former top henchman, Michael Cohen, voluntarily appear before the House of Representatives to answer questions. He had already been found guilty of crimes committed for Trump, including lying under oath, and has been sentenced to three years in prison.

"Cohen, that one," frowned our friend, the modern-day Huguenot Jean-Jay, "to me it was appropriate, how you say, that he appeared before the Lower House of the US Congress. Mon Ami, were they low! Any lower and they would have gone through the basement and into the sewer. What kind of a country has leaders like Jim Jordan, that one from Ohio? He is as fake as a president's promise!"

"Indeed so," concurred The Prof, habitually lighting his pipe in his favourite chair under the "No Smoking" sign. "But in fairness, it must be said that the gutter behaviour came almost exclusively from one side of the House - from the hardly honourable members of the Republican Party, the party of Abraham Lincoln and Ike Eisenhower, who were decent people to a fault."

"Also known as the GOP, for Grand Old Party," enlightened Bob the Book. "But no more. In an era when Republican president Donald Trump feeds the American people a daily diet of lies and deception, GOP has come to stand for, at best, Grimy Old Party. All that invective and slander poured out over Cohen for lying; as if they never lie themselves! Even on the day their outrage was fabricated for the occasion. Politicians practising the Art of the Lie. In the service of a career liar."

to target Cohen's character, one after the other as they got their five minutes each, in the hope of destroying his credibility so that people would not believe his damning revelations about Trump. It was a sickening spectacle. A gang of character assassins swinging their blades to cut the facts down as they emerge. Even Cohen remarked some way into the proceedings that he had come there voluntarily to answer questions about Trump, but that not one such question had yet been asked."

"Agreed," said Prof Too, recently returned from his overseas sabbatical, "one of those GOP scoundrels, when caught out in a wilful misrepresentation about a form Cohen had had to fill out, was even seen winking at a co-conspirator. They were clearly all working together, and working hard, to deflect as much attention as possible from the real reason for that session of Congress - Donald Trump, the source of Cohen's crimes and their leader."

"Merde!" exclaimed Jean-Jay, "They, those grandees, they were sitting there all pumped up and feeling smug! Okay, so the loser of the day was not Donald Trump, but also it was not Michael Cohen. He was more the Dreyfus of the day, with false accusations heaped onto the mistakes for which he is already being punished. Not as innocent as Monsieur Alfred Dreyfus, of course, but also undeservedly slandered. Non. Non. The loser of the day was the Republican Party."

"From grandees to grimees," snorted Luke the Dude. "They exposed themselves as traitors to the truth who care for nothing

Is plastic really such a problem?

OZENS of towns, cities and countries in the developed world, including partially-developed South Africa, have banned the use of non -biodegradable plastic, especially bags dished out by the thousand to shoppers.

The motive was noble. It received widespread acceptance and even praise since a significant proportion of these bags had wound up decorating fences and clogging

ON THE CONTRARY



but their own political careers."

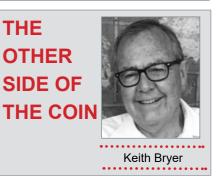
"Well," said Irene the Queen soberly, "let's hope they go down with the Trump ship when it hits the rocks, as it eventually must, surely."

"No doubt they know and fear that," said Bob the Book. "That is why they are so desperately showboating to steer their ship away from the facts."

"And while all of this is happening," opined Luke the Dude, eager to get back to his self-appointed field of expertise, "nobody is taking any notice of Vladimir Putin demonstrating his judo skills and engineering the return of Mother Russia to her former world-leader glory."

"Indeed so," agreed The Prof, "but let's also not forget that we are heading for a general election in our own wide and sad country. Regrettably, we shall have to leave it until next week, as The Governor is about to ring the time bell. In the meantime, always be nice to Trump. The Trumpets will insult you if you're not.'

E-mail: noag@maxitec.co.za



control of CO2 emissions and saving marine and other animals who inadvertently ingest plastic - this latter aspect being the only one with pristine legitimacy.

But, there is more than one way to regard plastic bags. More than one way to look at pollution of the sea. This is not to condone chucking plastic bags into rubbish dumps, rivers and/or anywhere else other than a proper disposal place.

The thing is, all plastics are not the same. They may have origins in petroleum and thus qualify as anathema to Green zealots, but not all plastic that reaches the sea winds up in the stomachs of seals or dolphins.

He owned the casino!"

"You would think so, wouldn't you Boyo?" snorted Colin the Golfer. "Well so did Trump. He owned more than one casino. Except, with Trump you never know.

"Very disheartening," nodded The Prof. "They have evidently colluded beforehand

FASTLIFT® CRANES & SERVICES

FASTLIFT® CRANES & SERVICES is a leading supplier in South Africa of used cranes. We distribute arguably some of the world's most reputable crane brands. We offer a wide selection of: all terrain cranes, crawler cranes, hydraulic truck cranes, tower cranes, rough terrain cranes and overhead travelling cranes.

Tel: + 27 21 140 1514 • Email: sales@fastliftcranes.co.za Fax: + 27 86 603 8200 • Cell: + 27 82 549 2388

www.fastlift.co.za Lifting Machinery Inspector (LMI) No. 2010120093 • Lifting Machinery Entity (LME). No. 319



drains because many people seem incapable of walking 50 metres to the nearest public litter bin.

Then the law of unintended consequences struck as it always does whenever governments use law to signal their virtue in the hope of gaining votes.

Flush with success, the Green Lobby cast around for ways to enforce a wider ban of plastic in general, having discovered that plastic is made from petroleum, that product of evil oil companies, its favourite whipping boy.

The resulting money-raising campaign against plastic in all its forms received the backing of the media (nothing like free publicity to open wallets or a good cause to attract viewers).

An anti-plastic campaign ticked all the Green boxes: ammunition against "Big Oil,

Most plastic pollution of the sea is floating on the surface in the famous Pacific Ocean gyre where a Dutch technologist is hoping to harvest it. Believe it or not, most originates in Indo-China, China and India - not in California, Europe, Canada or Australia. In other words, those panicking the most and shouting the loudest should be the least concerned. But then if you want to raise money it does not make sense to concentrate your campaign to do so in the poorest parts of the world.

Continued on P27