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TERMS & CONDITIONS: (1) One winner will qualify to win a Husqvarna 455 Rancher. (2) Entries close 31st January 2017. (3) Only entries featuring the October 2017 issue will qualify. (4) E&OE.
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By Joy Crane

Message from the Editor

Out of the starting blocks for the new year

It is 2018, and while the world’s elite cold weather athletes prepare for the Winter Olympics in February in Pyeongchang, South Korea, we in the far south are going through our own unique version of the Olympics.

Our agricultural, social and economic development, political and environmental fields are all competing for two rare commodities – water and common sense.

To list and describe the lack of common sense demonstrated by some of our leaders in parliament, board rooms, sport, business, education, unions, and churches, is not within the remit of this publication. However, apart from the factional debates about the process in which President Zuma resigns or is dismissed from his office (Zexit), the forestry sector is concerned about the potential impact the Steinhoff saga could have on the board manufacturing and upgrading, treatment and furniture manufacturing value chain.

This month, the forestry and sawmilling sections of the magazine have an environmental focus. In forestry we leap off with a look at the cute but critically endangered Table Mountain ghost frog whose watery habitat is disappearing, and the spread of the indigenous forests in this iconic national park.

Renewable energy projects, the good rainfalls in the summer rainfall areas and the drought and looming Day Zero in Cape Town are covered in the sawmilling section.

Expropriation

Forestry South Africa (FSA) has issued a statement condemning the ANC’s decision to amend Section 25 of the Constitution to allow for expropriation without compensation. “If this section is amended to allow expropriation without compensation, it would amount to no less than economic suicide. Financial markets will undoubtedly divest in South Africa and investor confidence will be shattered.”

FSA is also greatly concerned about other resolutions that came out of the ANC’s 54th Elective Conference, particularly the decision to implement a wealth tax in the form of a land tax, which agriculture and forestry already pay in the form of property rates. The issue of land ceilings is also on the table as is foreign ownership of land and the nationalisation of the Reserve Bank.

FSA, Sawmilling SA, Agri SA and other civil society and industry organisations are monitoring the situation and will make the necessary inputs when the time comes.
These were some of the questions asked during the fascinating January outing of the Southern African Institute for Forestry (SAIF’s) Western Cape branch to the Table Mountain National Park.

The branch chairman, Dave Drew, organised the visit to the SA National Parks (SANParks) Cape Research Centre in the Tokai section of the Table Mountain National Park (TMNP). Dave is the new chairman of the branch and this was his first event organised to revitalise the branch and its members. One of the stalwart members of the SAIF, DokDiek van der Zel, and his wife Marti who is in her mid-80s, joined the group and it was once again apparent how important it is for new foresters to have the opportunity to interact with, and learn from, the older generation.

Marna Herbst, a SANParks scientist, explained that the primary objective of the research centre is to research and monitor the performance and sustainability of the Cape cluster of parks in the context of their biodiversity, cultural heritage and socio-economic mandates.

She emphasised the invaluable role of SANParks’ scientists and their research, and unfortunately had to highlight some of the challenges they face, namely the activities of uninformed, and often malicious, people. “The primary challenge is people,” Marna said.

“There is a constant need to educate people on the need for preserving remote areas of the park. In particular, we have to explain the reasons for creating buffer zones to protect these sensitive areas from bark strippers, irresponsible dog owners, leisure users who leave plastic bottles and litter behind, and arsonists.”

The floor was then handed over to scientists, Zoë Poulsen and Zishan Ebrahim, who shared their master’s degree research with the group. Thereafter it was time to climb aboard 4x4 vehicles to travel to the Orange Kloof area of TMNP for a hike in the indigenous forest. En route, Zoë pointed out how the indigenous forest acted as a fire break during the 2015 Cape Town Fires.

Why is Table Mountain’s ghost frog disappearing, and why is the indigenous forest expanding?

Table Mountain’s ghost frog in the SAIF spotlight

Zishan Ebrahim, biodiversity data scientist at the SANParks Cape Research Centre, gave a brief talk on the Table Mountain ghost frog.

Heleophryne rosei, the Table Mountain ghost frog, was first listed as Endangered in 1998 in the IUCN Red List of Threatened Species, and listed as Critically Endangered since 2004. This classification is
In her presentation to the SAIF Western Cape Branch, research scientist, Zoë Poulsen, surprised everyone by showing how, contrary to general belief, the indigenous forest in the TMNP has increased.

The forests of Table Mountain National Park are relatively species-poor and in consequence often neglected in research and conservation planning. Despite this they are of high conservation importance and are home to several endemic species, including two species of moss, numerous arthropods and the Critically Endangered Table Mountain Ghost Frog.

Table Mountain National Park is home to two different types of forest: Western Cape Afrotemperate Forest and Western Cape Milkwood Forest. Zoë says results from an analysis of repeat aerial (1944 – 2008) and ground-based (1880 – 2012) photographs show that over the course of the 20th century there has been an increase in the number of patches, and in the cover, of the Afrotemperate Forest and Milkwood Forest on the Cape Peninsula. Areas where this has not occurred are primarily situated along the coast where developments have expanded and replaced Cape Milkwood Forest. The increase in closed canopy forest has occurred largely at the expense of Peninsula Granite Fynbos.

Zoë says the increase in forest cover is best explained by long-term fire exclusion which has occurred on the Cape Peninsula. Although fire return intervals have declined in the last 50 years, they remain less frequent than those in place in the 18th and 19th centuries when high frequency veld burning for agriculture depleted the extent of forest and changed the structure of the surrounding fynbos vegetation.

Now urban development dominates the lowlands of the Peninsula, meaning that fires are unable to travel through the landscape as they would have done in the past. Some areas such as Orange Kloof and Kirstenbosch have now effectively become 'fire shadows' that never burn for decades at a time. This has led to the widespread expansion of forests on the Peninsula.

An important research question, however, is whether the current extent of forests is more or less than that observed by early colonists. A more detailed understanding of Khoisan burning practices is also needed,” explains Zoë. Forest and thicket trees and shrubs will likely continue to expand into Peninsula Granite Fynbos. The intense, hot fires needed to remove forest taxa and keep them from encroaching into fynbos environments on the Cape Peninsula are difficult to achieve in practice."

She emphasises the critical need for further research to understand the impacts of these findings, particularly in the face of changing climate.

Timm Hoffman co-authored the study, which was funded by UCT’s Plant Conservation Unit and the Department of Biological Sciences Cameron Fund.

The main threats to this ghost frog are the spread of alien vegetation, including grasses, frequent fires, and presence of water storage reservoirs on the mountain, and the large reservoir in Kirstenbosch Gardens, which affect the consistency of stream-flow. Plantation forestry used to be a threat, but these have largely been removed. Intensive eco-tourism is causing soil erosion and is a threat around some of the streams, like Skeleton Gorge and Nursery Ravine.

Research and monitoring are being carried out to estimate the population size of the frog. Each stream is systematically surveyed over its length to record the presence or absence of ghost frog and tadpole populations, and threats to its stream habitat.

Editor’s note: In 1903 the artwork of the Table Mountain ghost frog by Dennis Murphy was used for a South African one cent stamp.

Table mountain’s indigenous forests are expanding
We published an article bearing this title in October 2017, relating to a talk given by Dr Steve Verryn at the DANA Forestry Investment Conference held in the Kruger Park.

There were some errors in the article, and we have asked Dr Verryn to assist us to set it right. The following explanation of Merensky Hardwood’s advances in breeding eucalypt sawlog species is summarised by Dr Verryn:

Merensky Hardwoods is the largest privately-owned eucalypt sawtimber company in South Africa (although pulp eucalypt plantation companies are of an order of magnitude larger).

As such, Merensky has, together with other partners, been involved with the breeding of eucalypt species for sawtimber for many years and is now moving into its fifth generation of E. grandis breeding. The reduction in wood end-splitting has been a success story, and the CSIR information sheet of earlier generations shows a reduction in the mean field wood end-splitting length from 25 mm to around 5 mm.

Merensky Hardwoods is breeding a number of eucalypt species and hybrids to improve yield, increase genetic diversity and manage risk. E. saligna was at one stage a major sawlog species for Merensky (and South Africa); it grows well and has a high wood density, although it is also prone to splitting. E. grandis has, to a large extent, taken over the role of E. saligna due to its ease of propagation and breeding, among other reasons.

Merensky has formulated a breeding objective called “Value Recovery”, which is a composite measure of growth, tree form, tree health and wood properties, and this enables the organisation to drive overall genetic improvement of its plantation resource.

The progress in the significant reduction in wood end-splitting was illustrated. An example of the Value Recovery was shared with respect to the latest improvements in the second-generation E. urophylla breeding for sawn timber. The improvement of this resource over the unimproved material was calculated to be 22.6% in terms of Value Recovery.

These improvements are made available to the plantations through quality seed and clones. Some selections of the E. grandis x E. urophylla hybrid have proved promising as a potential sawlog resource, especially with respect to their tolerance to Leptocybe invasa. Hybrids have often proven to be a good option to rapidly respond to new challenges, such as that of the gall wasp.

The Department of Labour says the new minimum wages for employees in the farm and forestry sectors are set to increase by 5.6 percent.

The new minimum wages will come into effect from 1 March 2018, and the following changes will take place:

- The minimum wage will increase to R3 169.19 per month, up from the R3001.13 in 2017/18.
- The weekly minimum wage will be R731.41.
- The daily minimum wage for these employees will be R146.28 and the hourly minimum wage will be R16.25 an increase from R15.39 in 2017/18.
Forestry

Piet Retief, a rural town in Mpumalanga’s forestry belt, is the home base of ANCO Manufacturing, a company that is small, yet great in design sense, generating ideas, and the ability to find effective solutions for firefighting.

When he was growing up in Piet Retief, André Scheepers, now managing director of ANCO, saw the challenges facing firefighting ground crews who need to get water and themselves as close as possible to the fire line without putting themselves and their vehicles in danger.

André is the third generation of the Scheepers clan, and when he took over the family business in 2000 he decided to expand its mechanical and manufacturing solutions to farmers, forestry contractors and forest owners.

Looking back over the last 18 years, André and ANCO’s operations manager, Casper Pieterse, are reticent about the company’s ability to design and fabricate simple solutions based on the needs of their customers.

For instance, early in the 2000s the company decided that there must be a way to improve the design of the traditional bakkie sakkie firefighting skid unit. Drawing on the knowledge of foresters and farmers, the unique ANCO Bakkie Sakkie was developed. Today it is the industry standard for commercial forestry companies.

A few months after launching the ANCO Bakkie Sakkie, André started to put his mechanical and design experience to the test by developing his own take on a forestry fire-fighting load body. It wasn’t long before the first dedicated ANCO fire tender-type vehicle body was introduced, with some unique additions.

It was the first water pump designed with a parallel / series centrifugal pump configuration. This highly cost-effective innovation doubles the performance in water delivery pressure and volume, and provides a back-up pump in the case of failure of the other.

News about the product spread through the local forestry industry, and in 2006 the first bulk order for their dedicated firefighting vehicles was completed. More orders followed for fire fighting vehicles and equipment, and ANCO gradually outgrew its premises in central Piet Retief.

The company relocated to its new purpose-built premises in Theo Mocke Street, Piet Retief, in 2012, and their reputation grew with them.

In 2015/2016 ANCO began making modular wet-end body sections for its fire trucks. This is a simple and effective solution that reduces stress on the truck chassis while...
ABOUT

When you think about technical and structural superiority, FIRAT spray booths should come to mind. Established in 1993, the company has since created the World's most trusted spray and drying booths used by Auto body shops in 50 countries around the globe. Featuring a unique waterborne extraction system, the booths improve overall efficiency and lower working costs dramatically.
making the vehicle more versatile. The modular rear discharge manifolds incorporate the water distribution to the various discharge outlets into the structure of the rear manifold.

ANCO keeps abreast with international developments so that it can source these for their clients, or apply its design prowess to adapt the technology for Southern African conditions. Examples of these interventions include an electric-assisted hose reel that effortlessly rewinds rubber hose up to 25mm in diameter during firefighting, the Canadian manufactured Scotty Foam Eductor, the ThermaGuard radiant heat shield from Australia, and locally sourced sound and vibration insulation for crew cabs.

Many of ANCO’s products have been benchmarked by the forestry industry and now form part of the compulsory specification for some commercial forestry companies. Radiant heat shields, for example, are now part of the standard specification for Mondi on all Mondi firefighting trucks. The company’s universal crew cab meets the Working on Fire specification, and is available in 5-seater, 10-seater, and 20-seater units that can fit on any truck chassis.

By far its biggest achievement by sheer size is the newly introduced ANCO 4x4 WildFire Attack unit based on the Iveco 150E24 truck chassis. This vehicle is fast becoming a popular choice for firefighting. It is a medium sized firefighting vehicle with a 4500 litre water capacity, seating for seven crew members, and is equipped with a PTO / hydraulic driven primary pump system, a stand-by pump system, dedicated storage, the Scotty Foam Eductor, and ANCO’s Electric Rewind hose reels.

Late last year the increasing demand for their products prompted another expansion of the premises. ANCO invested in a Firat spray booth that was supplied, installed, and commissioned by Your Equipment Supplier (YES). This investment has increased their throughput, reduced chemical waste, and improved the quality of the finish on products.

Today ANCO is regarded as an industry leading manufacturer of fire-fighting load bodies, and silviculture equipment, and supplier of firefighting equipment. Recent international interest in its products and services have led to exports to African and South-East Asian countries where the demand for tried and tested fire-fighting equipment is on the rise.

“The future looks promising and we are committed to continue on the path of sustainable growth, while remaining focused on building relationships and finding out how we can improve our offerings to meet the changing needs of our clients,” says André.
Specialist manufacturer and supplier of forestry fire fighting equipment since 2001

Situated in PIET RETIEF Mpumalanga South Africa where forestry is one of the major industries, ANCO Manufacturing is a business with roots going back three generations.

ANCO has been established as a leader in quality innovative products in the forestry and agricultural industries offering products and services specifically designed for the harsh African conditions.

What We Offer:
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- Forestry Fire Fighting Truck Load Bodies
- Crew Carrier Trucks / Labour Carriers)
- General and Multipurpose Load Bodies
- Light Load Trailers up to 3 500kg GVM
- Tractor Drawn Slow Speed Fire Trailers
- Engine Powered Water Pumps and Loose Engines (Honda)
- Hydraulic Powered High Performance Water Pumps
- Dealer In Davey Pumps, Parts, Sales and Service
- Fire Fighting Hand Tools / Hose and Fittings
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- Hydraulic Hose and Fittings / General Fabrication and Repairs
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2625 Theo Mocke Street
Piet Retief, 2380
Tel: 017 826 6023
Fax: 086 552 1373
Andre: 082 322 8531 / Casper: 083 556 3309 / Edward: 063 689 6497
www.ancoman.net
anco@lantic.net
Following a successful programme of training under employed young people in the Southern Cape, the MTO Forestry Group is now rolling out its training programmes for youth to different geographical regions and associated industries.

MTO’s involvement in training unemployed youth started three years ago in the Southern Cape, where the company manages 50,000 hectares of forest plantations and which is also home to the MTO Training Academy Concordia in Knysna. The academy is an accredited facility where thousands of MTO employees are annually trained.

“Employment prospects are bleak for undereducated, unskilled and inexperienced youth in South Africa’s economic environment. So, we decided to expand our training to those young people, with the goal of providing them with skills that will allow them to compete in the job market. Our only real requirement is that they are motivated to work hard and be committed,” says Yvonne van Romburgh, business manager at the MTO Training Academy Concordia.

The programmes are free for the learners, with MTO absorbing all costs. Learners also receive a stipend each month, protective clothing and equipment, and like the rest of MTO’s employees, a nutritional breakfast cereal each morning.

Mabuthi Dasi, who grew up near Knysna, was one of the first recruits in 2015. “I got lucky when MTO brought out the programme of training,” he says. “But I was scared they wouldn’t take me. I had no skills and only completed Grade 8.”

Dasi was one of 27 learners who completed the first skills programme in 2015/16, which focused on general forestry skills. “Concordia certification is valuable. When they finished the training, graduates were assisted in compiling a proper application package, including a CV, and were supported in their job search,” says Van Romburgh.

On the heels of the first year’s success MTO expanded the skills programme to focus on different geographical regions and associated industries. Last year it launched a harvesting skills programme, recruiting from communities in and around the plantations surrounding George.

Each programme runs for three months, with learners gaining both theoretical knowledge in the classroom and practical experience from the mill. The specific training courses vary, based on the industry being targeted.
This large, simple yet powerful chainsaw has been designed for the timber industry and copes well with harvesting heavy timber and destumping.

Cut back to basics

Now on the local market, the STIHL MS 661 chainsaw demonstrates yet again how STIHL constantly innovates and updates its products in line with the demands of its target market. This large, simple yet powerful chainsaw has been designed for the timber industry and copes well with harvesting heavy timber and destumping. Now timber contractors have an uncomplicated yet quality machine that combines top-of-the-range performance with a less technologically cutting-edge design for easier, more cost-effective maintenance. Its operator-friendly benefits include enhanced 9.0 kW power, reduced weight, and very good guiding rigidity for optimal control. A major plus is its improved anti vibration system that has cut vibrations by around 50% from the MS 650. Other features include a standard roller chain catcher (low wearing, low service costs), and a double bumper spike for enhanced guiding rigidity. The HD2 filter system with radial seal repels even very fine dust for increased periods between cleaning and reduced servicing. Cleaning is do-it-yourself, simple: soap and water and some oilow grease! This newcomer retains the reliability and impressive performance that is the basis for STIHL’s reputation as the world’s best selling chainsaw.

Like any superior item, STIHL products are only available at specialist dealers nationwide, for expert advice and matchless after-sales service.

www.stihl.co.za
The current 2017 cohort of learners is mid-way through their training in sawmill skills at the George Sawmill under the watchful eye of facilitator Gabriel Lategan from MTO Training Academy Concordia.

“They are learning everything they need to get an entry-level job at a sawmill. I have high expectations and hopes for them. My aim is 100% employment for them,” he says.

According to Van Romburgh the company’s current budget includes one skills programme annually, but MTO considers running two or more. “At this point it is unclear where the next programme will be located, but we are considering MTO’s White River plantations in Mpumalanga.”

While MTO hopes to be able to offer jobs to all graduates, the goal is to provide training that allows them to get jobs elsewhere in the industry, or in related fields.

“What we really want for our graduates is employment. We hope that they apply for jobs within MTO, but we understand it isn’t always feasible. Employment in the industry is considered a victory by MTO,” Van Romburgh says.

Concordia is a flagship training center in the forestry industry, with primary accreditation by the Fibre Processing and Manufacturing Sector Education and Training Authority (FP&M SETA) and secondary accreditation with the Transport Education and Training Authority (TETA).
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36 V - Total length 2.5 m - 3.4 kg

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Zama Forestry Services has increased its harvesting versatility with a new tracked HT shovel yarder.

The machine is based on a Hyundai R220LC-9S excavator, converted by Hintech Manufacturing into an HT shovel yarder, with a production capacity of up to 140 tonnes per day, depending on the rigging, tree size and terrain conditions.

It has a 300m uphill or downhill operating distance, and can extract up to eight trees simultaneously, with a payload of up to three tonnes. It is a customised forest harvesting solution that offers many advantages, including fast cable yarding set-up for increased productivity, easy mobility, precision control, low maintenance and features for improved safety in steep, slippery and remote locations.

Day Zero. It sounds so apocalyptic and Mad Max-like, that the people living in the world’s first major city to run out of water could not contemplate the fact that it could materialise.

The naked truth is it is happening. Less rain than usual during the winter rainfall season for the past few years, long hot days and strong winds fuelled by an astonishing 51% of the 4-million residents who ignored the demands to drastically reduce their water usage, resulted in Day Zero – the day all the taps to the suburbs are turned off – being brought forward to 12 April 2018.

The Western Cape is in the grips of a disaster of immense proportions with every aspect of life and the economy affected. Helen Zille, premier of the province says “This year, we are expecting the lowest agricultural harvest in decades, which will cause projected losses of R1-billion to the sector and deprive 50,000 seasonal workers of their jobs.

In November 2017, Dr Johan Malherbe, senior researcher at the Council for Scientific and Industrial Research (CSIR), said it is highly unlikely that drought conditions will be broken soon. “This area will have to wait at least until winter 2018 to know if the water crisis will be alleviated.”

Thankfully, farmers and forest owners in the summer rainfall areas of South Africa can look forward to the positive weather and rainfall conditions of the past year to continue. “For the time being, it seems as if the positive climate conditions over the summer rainfall region is set to continue in broad terms,” Malherbe said.
Driverless trucks are on their way

This is not the premise to an upcoming sci-fi thriller or something sinister. On the contrary, driverless trucks are likely to have a wide-ranging impact on logistical efficiency that may increase safety and logistics efficiencies.

By late 2018 we should expect to see autonomous trucks being tested on UK motorways, albeit manned for obvious safety reasons. It’s an exciting development for the haulage industry and there are many developments taking place around the adoption of autonomous technologies by newcomers to the industry as well as traditional goods vehicle manufacturers.

Rio Tinto is putting autonomous trucks to the test at an iron-ore mine in Australia, quoting a performance improvement of 12 percent. Meanwhile, Volvo is preparing to test a self-driving truck at a mine in Sweden. Mercedes-Benz, Iveco and other manufacturers say that they also have plans for autonomous vehicles, yet these will still need a driver.

Most commentators say it is unlikely that fully autonomous vehicles will be available until 2030, and take-up may be uncertain in a fragmented industry. Those who work with supply chains may assume autonomous vehicles are a long way off, yet developments are taking place that could mean they experience the impact sooner than they expect.

**Trucks trials**

Earlier this year, Ocado and Oxbotica trialled unmanned delivery vehicles in the London borough of Greenwich, operating the CargoPod self-driving zero emission delivery van in a residential environment. Each truck carried up to 128kg of groceries in eight delivery lockers, delivering orders to over one hundred customers during the trial.

Starship Technologies is currently developing and testing a delivery robot with a delivery radius of about 4km. If technologies such as these become widely adopted for final deliveries, they could lead to an increasing requirement for loading centres in or near urban areas due to their operating limits, although these could be overcome in the future.

Thinking about longer distance work, last year Uber acquired Otto, a self-driving truck start-up, although this is now the subject of a patent infringement lawsuit issued by Waymo. However, this isn’t stopping development, as Uber launched a new truck with more sophisticated LiDAR laser sensors in July 2017.

The vehicle is still driver assisted, but it’s clear that the ultimate objective is self-guidance. Automating transport on longer distance journeys that use highways and motorways will present fewer challenges than the more unpredictable environment of urban road networks.

There should be significant cost savings from autonomous vehicles. Morgan Stanley estimate the potential savings to the US freight transportation industry at $168-billion annually, made up from improved fuel consumption, reduced labour costs, improved productivity and reduced accidents. Interestingly, they believe that autonomous and semi-autonomous driving technology will be adopted far faster in the cargo markets than in passenger markets. Savings would be lower for semi-autonomous vehicles, but still significant.

Swedish company Einride, recently launched the T-Pod, an electric self-driving vehicle remotely controlled by drivers. T-Pods are seven metres long and carry 15 pallets. The remote driver can monitor multiple T-Pods when they are on long distance work, but only a single T-Pod when they are on city roads. When they are inactive and being charged en-route, the drivers will be monitoring vehicles that are in operation. Their ambition is to have 200 T-Pods operating between Gothenburg and Helsingborg by 2020.

Einride say there will be cost benefits as well as safety improvements and environmental benefits, but it will be interesting to see how the economics work out.
Platooning
An interesting development known as “platooning” is being tested. It could reduce the cost of point to point linehaul journeys as vehicles are tethered together electronically. For those of us who use the N3 between Pietermaritzburg and Durban, the sheer number of trucks driving nose to tail makes it appear that this is already in place. The theory is that it would make it possible for one driver or crew to control a whole platoon for the long-distance element of a journey, with the convoy being split and multiple drivers completing the last leg.

There is currently a trial in Western Australia where the lead truck in a convoy controls the others through vehicle-to-vehicle communication to synchronise speed and braking. Volkswagen Truck and Bus are also carrying out trials of platooning. After initial testing at their site in Sweden, Scania will run a trial in Singapore, where truck platoons of four trucks will cover 10km on public roads to transport containers between port terminals. The driver of the first truck will set the speed and direction, with the following three vehicles driving autonomously.

In Germany, MAN and logistics provider DB Schenker have formed a platooning partnership. They are planning to test platooning under realistic conditions over an extended period to gain meaningful data, with a platoon travelling on the A9 motorway between Munich and Nuremberg from 2018. At this stage, each truck in the platoon will have a driver to intervene in case of emergency, but it’s not hard to envisage a single driver controlling the platoon when the technology has been proven and legislation allows.

Research
Silicon Valley is backing this concept as well. Earlier this year Peleton, a connected and automated vehicle start-up company, completed a $60m funding round with investors including Omnitracs, Volvo and UPS. Founded in 2011, Peleton say their platooning platform is designed to help fleets of trucks address three of the industry’s major challenges: safety, fuel consumption, and operational efficiency.

Research at MIT claimed that savings in fuel consumption through vehicles following in each other’s slipstream could be up to 20%, depending on the number of trucks in a convoy, and other studies quote up to 35%. But of course, the big cost saving would be with drivers. Drivers may need to be more technically qualified, and therefore paid more, but there would be a need for far fewer of them. The trucks will no doubt be more expensive, but this will be more than offset by other cost savings.

A change of pace
Autonomously driving trucks should also generate a surge in capacity with no need for breaks, operating around the clock and maybe never having to return to base. Reduced congestion should also give productivity improvements, contributing to a significant reduction in the cost of transport. Some commentators have remarked that the fragmented nature of the transport sector means that the take-up of new technology will be slow due to the need for capital investment. However, this investment requirement could lead to a consolidation of the sector by well capitalised companies – either existing operators or new entrants.

As the cost of transport reduces we could see a restructuring of supply chains. The design of a supply chain needs to consider the relative costs of the different types of transportation, warehousing, production and sourcing. Other things being equal, a reduction in transport costs should lead to fewer, but larger, distribution centres and production plants, although the pressure to have shorter lead times could work against this. The only thing we can be certain of is that a significant shift in one of the cost elements in the supply chain should lead to a reconsideration of supply chain structures.

• Contributed by Phil Gibbs Executive Director, EMEA at LLamasoft
Japanese truck manufacturer, UD Trucks, says that slow growth brought on by difficult economic circumstances as well as political instability played a part in causing transport operators across the board to sweat their assets over the past number of years, thereby delaying the replacement cycle significantly.

According to UD Trucks Southern Africa MD, Gert Swanepoel, operators would typically replace trucks at approximately 700 000km. Recently though, it has become commonplace for operators to only replace trucks at 1 million km or even more.

With growth expected to accelerate in 2018, due in part to recent political changes, Swanepoel says that he hopes that this will help to restore business confidence and kickstart a renewed focus on replacement cycles within the industry and encourage businesses to invest more in their fleets.

According to Swanepoel, they expect local truck sales to grow slightly, with 1.5% in 2018, culminating in total estimated sales of 25 418 new units in 2018. Luckily, sales are estimated to grow across all three truck segments and a significant improvement in terms of exports is also expected in 2018.

The expected growth in 2018, however slight, is good news since 2017 saw the local truck market continue a steady decline losing 2.65%, recording sales of only 25 042 units compared to 27 011 units sold in 2016.

This decline has been continuing since 2014, when 31 554 sales were recorded. It worsened in 2015 with only 30469 sales recorded.

The extra heavy commercial vehicle segment was the only truck market segment to record a growth in 2017, with sales up 0.69%, to 11 967 units sold.

Sales in the heavy commercial segment fell with 4.76% to 5290 units, while the medium commercial vehicle segment recorded a decline of 6.37%, with 7 785 units sold.

Truck exports fell by 5.54% in 2017, with only 946 units exported.

The most significant decline in the South African truck market in 2017 was the smaller vehicle segments, which, according to UD Trucks Southern Africa marketing director, Rory Schultz, is an indication of a slowdown in the general economy.

The steady strengthening of the rand on the back of recent political changes is indicative of the return of some business confidence and with growth expected to pick up to 1.1% in 2018 after achieving a meager 0.8% growth in 2017, a generally better year is expected for truck sales with the return of smaller vehicle segments such as distribution to the market.

UD Trucks Southern Africa recorded total sales of approximately 2 300 units in 2017, and according to Schultz, the aim is to grow sales with around 3% in 2018.

This projection is based partly on the fact that the brand’s newest line up, the Quester and the Croner, will result in a significant boost in sales as the new models are taken up into the market.
Ford Brazil’s heavy truck division has developed an innovative prototype technology to help truck drivers ride more safely and avoid travel fatigue. The Safe Cap looks like an ordinary cap at first sight, however, it comes equipped with sensors that interpret the driver’s head movements and pick up whether he is tired or sleepy behind the wheel.

The alert is issued by three kinds of signals: vibration, sound and light flashes to guide the driver to stop for a rest.

The first step to create the accessory came from a study conducted to identify the movements from the truck driver that are related to normal work routine and movements that indicate drowsiness. This database was then transferred to the central processing unit of the cap, which works connected to an accelerometer and a gyroscope to identify each type of situation.

The novelty was presented as part of the celebration of 60 years of production of Ford's trucks in Brazil, and symbolises the spirit of innovation from the brand and its constant research investment focused on traffic safety and driver safety.

“Ford is the first automotive company to think about creating a wearable device for drivers to use for the time when they are behind the wheel that can contribute to prevent accidents. This way, we can reinforce our commitment on bringing embedded technology not only for vehicles, but also through accessories that are capable of making the lives of drivers easier. The focus on safety is a priority in our technology investments”, said Lyle Watters, president of Ford South America.

Ford tested the Safe Cap for eight months with a selected group of drivers for more than 5000km in real driving conditions. It was also presented to traffic safety experts and sleep study experts who recognized its potential to help the prevention of road accidents.

The prototype is still going through the test phase and there are no plans for its production and commercialisation at the moment. However, Ford has shown interest in sharing this technology with partners and customers to advance its development and enable its market introduction.
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Professional training sorely lacking in wood industry

Times are tough in every industry out there, and the first thing that most companies, especially in the timber industry, compromise on is training.

This is according to Ronnie Maartens, MD of Tirhani Skills Training, a private FET college specialising in the wood sector, situated in Sabie.

“Professional training has been on the decline in recent years,” says Maartens. “Especially in the last five years we have seen drastic declines in the amount of specialized training. The only sector within the industry that really still manages to attract new students is the forestry industry, but the problem there is that the sector is too small to absorb all the new students.”

This is especially worrying in light of the recent Safcol conference where one of the main themes was the need to attract more people to the industry.

According to Maartens, many companies – especially in the sawmilling sector -, with the aim of trying to save a buck, have taken to providing in-house, informal, on the job training, which according to him is problematic because firstly, there are a number of regulatory requirements that one must adhere to and these are seldom heeded.

“Another huge problem with this form of informal training is of course the fact that now people are able to do certain jobs, but they are not officially qualified. This contributes to poverty in the country since obviously there are different pay scales for different qualifications and certifications.

“People are informally trained, therefore they are not qualified and therefore they do not qualify to receive the remuneration package that would normally come with the job.

“Another obvious problem for me is that whenever I talk to sawmillers the complaints are always the same. They complain to no end about output and recovery rates, but when I ask them where their people were trained, the answer is inevitably that there is no money for formal training.”
According to Maartens the training industry as a whole has undergone massive changes in recent years. “In the past it might have worked well to have a training centre where companies can send their staff for professional training, but those days are long gone.

“These days, we do most of our training on site, as companies cannot afford to send their staff to a training centre for courses. This has had as an affect that the sector has shrunk significantly in recent years.”

Many people entering the industry still do so through learnerships, where they receive a stipend while learning. According to Maartens this system also has its flaws.

“Firstly, there are many cases where these young people have absolutely no intention of entering the industry. The wood industry, and especially the forestry sector, is seen as a ‘hard work’ sector. Thus you will find many cases where young people simply obtain the learnerships for the stipends that comes with it.

“I’ve found many instances where they simply go from learnership to learnership in order to live off the stipend. "There has been a huge shift in the general attitude of the youth in recent years. One of the main problems is that, even when they do complete the training and want to enter the industry, they are not willing to start at the bottom and work their way up.

“Nowadays, they want to walk fresh out of the training college and start work in a management position earning an unrealistic salary. There seems to be a culture of entitlement among the youth today. Unfortunately they are in for a rude awakening when they do try and enter the industry where, traditionally, you start at the bottom and work your way up, no matter your qualification.”
It has always been a sawmiller’s dream to be able to see inside logs before they are sawn,” says Olle Larsson, of Swedish sawmilling company, Fiskarheden.

The properties of logs vary enormously, which makes it difficult to select the ideal cutting solution that maximises recovery from every log. To make the best use of this resource, it is, therefore, a huge advantage to know the log’s internal quality before cutting it, and that is where Microtec enters into play.

Magnus Larsson, CEO of Fiskarheden says the mill is implementing a comprehensive investment plan, that includes the Microtec CT Log system at the wetmill infeed, a wane scanning system in the green sorting line, and a Microtec Goldeneye 900 board scanner in the dry mill sorting line. The company’s main goal is to increase the value recovery of its raw materials and to reduce waste.

“Using Microtec technology, and especially the internal information of the logs, will allow us to improve our partnership with the forest owners as well as creating the best possible products for our customers,” comments Larsson.

Microtec CEO, Federico Giudiceandrea travelled to Sweden to personally finalise the arrangements. “Everything we do is driven by the passion of introducing new technologies and innovation to sawmills, by creating true partnerships with our customers,” says Giudiceandrea.

“Fiskarheden’s important investment in CT technology ensures that they are getting the best out of their wood resources. The alignment with a Goldeneye 900 transverse dry sorter and the Mill Manager software will elevate them into a fully automated ‘Sawmill 4.0’.

“We are very happy that Sweden, being such an important country in matters of wood processing, acts as a pioneer introducing this new technology,”

The installation starts in July 2018 when the CT Log will be installed and started up. At the same time, a new wane scanning system will be installed in the green sorter. In the second half of 2018, the newest version of the Goldeneye 900 board quality scanner will be implemented in the dry sorting mill.

“We are renowned for timely and accurate project implementations. Our team is upfront and on-site until the production line runs smoothly. We are looking forward to this exciting project that has the potential of opening new horizons in sawmilling,” says Jörn Rathke, technical sales manager at Microtec. As for Fiskarheden, the investment is a huge step towards digitalisation of the Swedish sawmilling industry.

Microtec’s range of sawmill optimising equipment is available from its South African agent, Nukor Sawmilling.
Call for papers: New Frontiers in Forecasting Forests conference

The University of Stellenbosch has issued a call for papers for the conference, New Frontiers in Forecasting Forests, that will be held on 25 to 27 September in Stellenbosch.

The Department of Forest and Wood Science at the University of Stellenbosch will host the international conference. It is supported by IUFRO Division 4 (Forest Assessment, Modelling and Management), particularly 4.01.00, 4.03.00 & 4.04.02 and Division 5, particularly Working Group 5.01.04 (Wood Quality Modelling). The papers must be in by 1 March 2018.

An important objective of the meeting is to explore and discuss how new frontiers in forest modelling research can be implemented to empower decision makers and deliver impact, particularly in the context of changing international climate and market conditions.

The scientific committee identified the following key themes for the conference:
- Understanding and evaluating uncertainties in models predicting future growth, yield and wood properties
- The nexus between models of tree growth, wood formation and product properties
- Model application, integration and accessibility for forest management, planning and product development
- The cutting edge in process-based and statistical approaches: how we will model future forest attributes in the 3rd millennium
- Leveraging big data and high technology in forest models

For more information go to: www.conferences.sun.ac.za.
Cogeneration power plants are essential for the future. Renewable energy is the most promising and safest way to mitigate pollution, improve energy security and reduce fossil fuel consumption, and governments in most countries are promoting the use of wind, solar, biomass, electric vehicles, waste heat recovery and energy efficiency.

South Africa’s Nukor Group says that although wind and solar power are expected to play an increasing role in energy production, research reports are increasingly indicating that biomass is the fourth largest energy source in the world, and that Italy is a world leader in electricity production from biogas.

Cogeneration, also known as combined heat and power (CHP) is a highly efficient process that generates electricity and heat simultaneously. A recent project in Italy is a perfect example of the successful implementation of combining biomass and bioenergy generation facilities in a sustainable way. The partners in the project created a public-private cogeneration company called Ledro Energi. The main suppliers to the project were both Italian, and one of these companies, Nova Pellet, is represented in South Africa by the Nukor Group.

Kilometre zero

The project was completed in mid-2017 and is in the scenic area of Ledro Lake near the town of Tiaro di Sopra, in Trentino Alto Adige, Italy. The philosophy of “kilometre zero” was applied, which means that everything used to produce the end products must be located as close together as possible, and every bit of resource must be used.

The first phase was the implementation of an organic rankine cycle (ORC) cogeneration power plant with a capacity of 300kW using wet woodchips supplied by the neighbouring sawmill.
The second phase was a system to use the hot water from this power plant to supply a district heating line to warm public and private utilities in the nearby town. When this was ready, Nova Pellet stepped in to supply a 1500kW/T woodchip drying plant.

This plant is capable of processing 3-4 tonnes per hour of high-quality spruce wood chips and sawdust supplied by the sawmill and turning it into A1 class pellets.

Always ready to innovate, Nova Pellet developed a unique concept to connect the ORC plant's waste hot water with the woodchip drying plant.

The belt drying system has humidity sensors and software that controls hundreds of parameters simultaneously to achieve the necessary output humidity to make the pellets. It works automatically 24/7 using the variable hot water power (maximum 1.5MWt) at the maximum consumption possible. The belt system deposits the wood chips into the high volume concrete storage bunkers.

**Wood pellets**

From these storage bunkers an automatic hydraulic mobile floor extractor transports the wood chips to a screener that removes residual oversize chips, and then to the Nova Pellet N-9904 kW 132 and its metal detector. The prepared sawdust is then stored in a pneumatic silo filter Mc30 with double extractor and fed into the two pellet mills. The wood pellets are created by the Nova Pellet N-Plus No 2, 160kW vertical pellet mill with a capacity is 3-4 tonnes per hour.

The pellet mills are controlled by fully automatic software and an energy saving drive system, which is a new software application that controls the low power consumption per kilogram of pellets produced.

The pellets continue along cooling and screening lines and into bunkers that store them for packaging. The packing line is fully automatic with a bagging machine and palletising robot.

**Low emissions and no waste**

A powerful suction pneumatic line collects any residual dust and brings it back to the cycle. The material transporting systems, filters and silo are all fitted with a fire safety system, and a dust filter for the output air of the drying system achieves the very low emission rates required by the Trentino Alto Adige region.

The entire system is controlled by supervisor software installed in the main control office that generates instant management reports.

Cobus Richter of the Nukor Group says the use of wood chips and sawdust as a single energy source to produce both heat and electricity is significantly more efficient and cost effective than traditional power generation.

He invites sawmills, textile and clothing factories, furniture manufacturers, pulp and paper and related manufacturers to contact Nukor to discuss the feasibility and advantages of cogeneration.
Lonza helps little learners reach their full potential

From humble beginnings to an organised and flourishing education facility, the Vulingqondo Crèche, which is situated in the Bethania rural community of the Ugu district municipality, celebrated a record number of ‘young graduates’ on 28 November.

This can be attributed to the commitment of Lonza Wood Protection and the passion of its staff, who for nearly eleven years have dedicated their time and resources to caring for the needs of the Crèche and its children.

The traditional annual graduation ceremony is the highlight of the calendar for the Lonza team, and they clear their work schedules and spend the day with the children to celebrate this milestone in their lives.

This year the little ‘graduates’ were treated to an exciting excursion to Pure Venom Reptile Park in Shelley Beach, followed by lunch and then the best part of the day – the graduation ceremony where they received their well-earned certificates.

Not forgetting those not yet graduating, Lonza also arranged for Father Christmas to pay a special visit to the Crèche to hand out gifts and a KFC lunch to each child.

“Seeing the joy in the children’s faces and their sense of pride and achievement, makes this project a privilege to be a part of,” says Doug Sayce, Lonza’s general manager. “Through our involvement, we have been able to give back to the community by improving the Crèche facility and thereby making it possible for the number of learners to grow over the years.

 Approximately 114 children enrolled this year and we are very proud to see 34 graduating to primary school compared to 22 in 2016. This is nearly a 55% increase in young learners benefitting from education in our local rural community,” says Sayce.

Over and above donations such as computers, stationery, meals and a vegetable garden, Lonza has also made a substantial contribution to the extension of the building to accommodate more learners. In 2010 an extra classroom was built and in 2014 the bathroom was extended to accommodate six new toilets and two wash basins. With the surplus building materials, another adjoining room was built onto the kitchen to serve as a pantry.

When the need arose again this year for more classrooms, and the local government was unable to assist with funding, Lonza stepped in once again and donated a 9.6m x 3m pre-fabricated unit in July.

The logistics of moving the fully assembled unit was a challenge in itself as the Crèche is situated a fair distance off the tar road. The dirt road was so narrow in some places that the team had to clear the bush the day before, and then on the day still navigate low hanging telephone and electricity cables before this abnormal load could reach its final destination.

When the unit arrived, the teachers were overwhelmed and there were tears of joy from the Grade R teacher as this meant that she could focus her uninterrupted attention on preparing her learners for primary school in their own separate building.

The achievements of these learners is testament to the positive impact that Lonza’s devotion is having on creating an environment that is conducive to learning, thereby making it possible for them to reach their full potential.

“We believe that caring for our community is an important part of being an industry leader, and we look forward to many more years of creating sustainable value through an education facility that has formed a foundation for the children’s future schooling career,” concluded Sayce.
It’s all about confidence
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Local company, eThala Management Services, has managed to secure $990,000 from the African Development Bank (AfDB), through its Sustainable Energy Fund for Africa, to implement a 10MW biomass power plant in Harding, in KwaZulu Natal.

The project will assist in diverting the South African energy mix away from dominance by the coal industry by further adding renewable energy solutions into the mix and will go a long way toward achieving government’s goal of installing their target of 17 800 MegaWatts of renewable energy power by 2030.

According to the AfDB, the project will source its biomass from mainly the agricultural, forestry, and timber processing sectors. This, in conjunction with the gasification technology employed, is expected to present a significant reduction in CO₂ emissions.

The power plant is expected to deliver economic empowerment and boost the socio-economic development of the Harding community. The viability of this project is anticipated to have a significant demonstration effect with regards to bioenergy while showcasing corporate power purchase agreements as an anchor for renewable energy generation.

According to the AfDB, eThala Management services being a women-led business, the project is aligned with the Bank’s Affirmative Finance Action for Women in Africa. The funding has been approved under the bank’s multi-donor facility, Sustainable Energy Fund for Africa.
Africa, filled with many developing nations, provides the ideal opportunity for the application of renewable energy solutions and technologies. About 635 million Africans still live without electricity and demand for energy is rising rapidly. Given the lack of power supply, especially in the rural regions of the continent, the growth and demand for applications of small-scale solar, wind and geothermal technologies providing power to people and business, is rapidly expanding.

The use of renewable technologies is especially useful in the further and outlying areas as it is easier to install a more cost-effective solution in order to be less reliant on transporting electricity from power plants via transmission lines, which becomes very expensive. Renewable energy has the potential to substantially assist many African countries and their people to have access to energy, essential for the reduction of poverty and to ensure economic growth.

The African Development Bank (AfDB) is stepping up the pace by focusing on five priorities that are crucial for accelerating Africa’s economic transformation. The Bank calls them the “High 5s”: Light up and power Africa, Feed Africa, Industrialise Africa, Integrate Africa, and Improve the quality of life for the people of Africa.

The AfDB President, Akinwumi Adesina, describes energy as “the lifeblood of any society and the passport to economic transformation”. As such, energy is at the top of the bank’s “High 5” priorities and its new Energy Strategy aims to increase energy production and access, improve affordability, reliability and energy efficiency.

According to the International Energy Agency (IEA), the global energy demand will be 30 per cent higher with renewable energy facilitating almost half of sub-Saharan Africa’s power generation growth by 2040.

Africa’s demand for electricity is expected to increase by more than two-thirds between 2016 and 2040. Herein lies the business opportunity for the private sector participation. Added to this, renewable energy reduces carbon emissions, has the potential to supply cheaper electricity, and is becoming more affordable while coal and nuclear are likely to be more expensive.

The IEA states that solar PV is expected to lead capacity additions as it has become the cheapest source of electricity generation. Research by McKinsey indicated that Africa’s potential energy generation capacity is up to 1.2 terawatts excluding solar, and more than 10 terawatts including solar. Africa has solar in abundance and can provide almost 10 terawatts of new energy. By 2040, it has been estimated that more than 25% or Africa’s total energy will originate from geothermal, hydro, solar and wind, indicating a more than four-fold increase from only 5% in 2013.

The opportunity for private sector involvement and access to renewable energy projects in Africa will be a focused feature of the 10th African Energy Indaba (AEI) which is set to take place on 20-21 February 2018 at the Sandton Convention Centre in Johannesburg, South Africa and is set to unpack these critical issues pertinent to African renewable energy implementation.
It started with an email to the Editor from a stranger out of the blue. Alexey Steshak introduced himself as “a mad decorator” and artist who gets inspiration from the world around him in from “one of the most beautiful places on earth, the Altai Republic in Russia.”

He recently completed a 56 square metres hardwood floor with ceramic birds for a beauty salon. This marathon project took him five months to complete, working seven days a week, not counting the time for material preparation and drying.

Intrigued, I contacted Alexey to find out about the project. “I have been dreaming of creating such a floor for a very long time. And finally, my dream came true,” he said. “I am inspired by natural materials, and I also love ceramic mosaics, and have been combining various materials in my projects for many years.”

When asked about his background, Alexey said: “I’m a designer, a decorator, but I have no education besides high school. I learned everything on my own, practicing.”
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“I’m not a professional woodworker, and I made such a floor for the first time in my life. I usually work with a variety of materials: plaster, ceramics, mosaic, metal, wood; and combine them with each other. Prior to the floor I used the same technique to make a bar counter. I was impressed by the result and decided to make the whole floor in that technique in my project.

“I take orders for interior design project with one condition – freedom of art. Interior for me is like a canvas for an artist, and I ‘paint’ on it. I take orders only on WOW projects and turn ordinary places, cafes, bars, restaurants, and now this the beauty salon, into new worlds that surprise, impress, inspire, and take people out of their everyday routine.

“The beauty salon is called The White Garden. So, I started from this point. I imagined a large garden, fresh air, a cool breeze and a flock of birds flying over the garden. I wanted to create a bright space with lots of wood and an unusual concept that would surprise and inspire visitors, attract attention and stand out from the other interiors. So, the client agreed with the project.

“I wanted to convey a sense of flight, of soaring above the earth. A chaotic background picture that recalls fields and forests, as if viewed from above like a Google map. The tree, on the one hand, is like a great river that flows through these lands. On the other hand, the tree and birds on the floor are an extension of the ceramic mosaic on the wall. On the mosaic there is also a field, flowering trees, and birds that seem to fly off the wall and glide on the floor.”

Alexey collected oak, Manchurian walnut, apricot tree, apple tree, pear tree, karagach, ash, birch, ash-tree maple, American walnut, cherry tree, larch, rowan and a little mahogany. “I used wind fallen trees, some cut trees left after the fruit orchards thinning, and some trees were just brought by my friends,” he says.

“I personally handled and prepared all the wood for my project, and in the end, I had 40 bags of small wood pieces to put together in a free-flowing way to create the ‘wow’ factor I was looking for.”
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What is the environmental impact of design?

Many furniture designers and manufacturers claim that their work is “sustainable” however there is often little solid evidence to support their claim.

The American Hardwood Export Council (AHEC) collaborated with seven South African designers to examine this claim and to find out the true environmental impact of design.

In response to a brief for ‘something to sit on’, each designer was tasked to create a furniture piece made from American hardwood lumber. Their designs were subjected to a full Life Cycle Assessment (LCA) that evaluates all processes, from extraction of wood and other raw materials, transport of these materials to processing location, all processing steps (including harvesting and kiln drying), transport of processed products to the factory in South Africa, and manufacture of the finished design.

Due to lack of information on durability, maintenance and disposal at end-of-life, the LCA is not a full “cradle-to-grave” assessment, and instead determines the environmental impact of the design when delivered to the customer. The research also calculated how many seconds it would take for the wood used to make the piece to regenerate naturally in the US hardwood forest.

Ahec points out that the environmental impacts of prototypes tend to be high per unit of production due to trial and error during fabrication. When producing finished designs at scale, manufacturers can adjust material procurement and production techniques to significantly increase efficiency and reduce waste.

The LCA results are all based on carbon dioxide equivalent (CO2e). Carbon dioxide, or CO2, is a natural, colourless and odourless greenhouse gas that is emitted when fossil fuels (i.e. natural gas, oil, coal etc.) are burnt. It is the most prevalent greenhouse gas after water vapour and has therefore become the proxy by which we measure greenhouse gas emissions.

However, carbon dioxide is only one of many greenhouse gases that are emitted when humans undertake certain activities. Other greenhouse gases are methane, nitrous oxide and ozone, all of which occur naturally in our atmosphere.

To take into account the emission of other greenhouse gases when calculating the level of greenhouse gas emissions, scientists have devised an equivalent measure CO2e, which literally means carbon dioxide equivalent. CO2e allows other greenhouse gas emissions to be expressed in terms of CO2 based on their relative global warming potential (GWP).

CO2 has a GWP of 1, methane has a GWP of approximately 25 (on a 100 year time horizon). In other words, for every 1 tonne of methane (CH4) emitted, an equivalent of 25 tonnes of CO2 would be emitted. Ahec is expressing greenhouse gas emissions as an equivalent of CO2 using the GWP principle.

Eve Chair by Andrew Dominic

The overall environmental impact of the Eve Chair is low for a bespoke furniture piece. The carbon footprint of 101kg CO2e to manufacture four chairs is equal to that of driving 674km in an average car sold in South Africa, or the total carbon footprint of the average South African over a four-day period.

The main reasons for the low environmental impact are: the use of American cherry wood that is better than carbon neutral at point of delivery to the studio in Cape Town; avoidance of energy intensive materials and additives in the design; and limited use of energy during manufacturing, estimated to be only 24kWh for the four chairs.

The four chairs together will lock away the equivalent of 22.9kg of CO2e for as long as they are in existence.
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Visit www.salvocorp.com for more information on Staron Solid Surfaces.
Material efficiency is quite high for a high-end bespoke furniture product, with nearly half of the wood supplied ending up in the finished piece, a benefit of incorporating flat boards into the design, which are close to the standard dimensions available.

Efficient use of material reduces environmental impacts associated with bulk transport of lumber to the factory and with waste disposal. It also maximises the carbon storage potential of the furniture item. Over 97% of the mass of the Daybed comprises soft maple, amongst the most abundant of American hard-woods with forest volume of around 1,500 million cubic meters, 11% of the total U.S hardwood resource.

It takes less than one quarter of a second for forest growth to replace the soft maple used to manufacture the Daybed. The soft maple frame is complemented by the cork padding, another natural sustainable material with a low carbon footprint.

At 173kg CO$_2$e, the carbon footprint of the Daybed is the same as driving 1116km in a typical South African car, and equal to the carbon emissions of the average South African over a two-day period. Emissions of 302kg CO$_2$e during all processes to produce and transport the soft maple from the US, to supply the cork and other materials, and to manufacture in South Africa, are offset by 111kg CO$_2$e stored in the finished Daybed and another 18kg CO$_2$e due to burning of wood offcuts at the factory.

Additional impacts mainly due to use of a CNC machine and extractor fan, both powered by electricity from the South African national grid which has 95% dependency on heavy coal. There was a high level of wood wastage to manufacture the prototype, with only 16% of the sawn wood supplied in South Africa ending up in the finished item. The high level of wastage reduced the long-term carbon storage potential but did not add significantly to the environmental burden in other ways because the wood is non-toxic and biodegradable and may be used for energy production, offsetting use of fossil fuels.

Flow Stool by Jacques Cronje

The high wood content of The Flow Stool contributes to a relatively strong environmental profile for a bespoke furniture item. Over 95% of the mass of The Flow Stool comprises red oak, and it takes no more than a small fraction of a second for forest growth to replace the red oak used to manufacture The Flow Stool.

The carbon footprint of The Flow Stool is extremely low for a high-end product likely to have a long life and to be replaced only occasionally. At 48kg CO$_2$e, the carbon footprint of the stool is the same as driving 316km in a typical South African car, and equal to the carbon emissions of the average South African over a two-day period.

Emissions of 62.6kg CO$_2$e during all processes to produce and transport the red oak from the US, to supply other materials, and to manufacture in South Africa, are offset by 6.6 kg CO$_2$e stored in the finished stool and another 8.5kg CO$_2$e due to burning of wood offcuts at the factory.

Additional impacts mainly due to use of a CNC machine and extractor fan, both powered by electricity from the South African national grid which has 95% dependency on heavy coal. There was a high level of wood wastage to manufacture the prototype, with only 16% of the sawn wood supplied in South Africa ending up in the finished item. The high level of wastage reduced the long-term carbon storage potential but did not add significantly to the environmental burden in other ways because the wood is non-toxic and biodegradable and may be used for energy production, offsetting use of fossil fuels.

What is the environmental impact of design?
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Playbench 2 by David Krynauw

The large scale and elaborate design of the Playbench 2 design compared to other Seed to Seat designs results in a higher environmental impact. However, the efficient use of US red oak hardwood helps to mitigate this impact, both due to the low energy requirement to supply this material and the significant amount of carbon stored in the finished design.

The carbon footprint of the Playbench 2 is 157kg CO₂e, about the same as a 1000km journey and equal to the carbon emissions of the average South African over a seven-day period. Emissions of 39 kg CO₂e are offset by 32kg CO₂e due to burning of process wood waste in South Africa, and 210kg CO₂e of carbon stored in the finished design.

The Blue Chair by Dokter & Misses

Nearly 98% of the entire mass of The Blue Chair comprises tulipwood, which contributes to a strong environmental profile. It takes only a fraction of a second for the wood harvested to make The Blue Chair to be replaced by regrowth in the US forest.

The carbon footprint of The Blue Chair is extremely low for a furniture item likely to have a long life and replaced only occasionally. At 24kg CO₂, the carbon footprint is the same as driving 159km in a typical South African car, and equal to the carbon emissions of the average South African over a 24-hour period.

Emissions of 34.4kg CO₂ during all processes to produce and transport the tulipwood from the US, to supply other materials, and to manufacture in South Africa, are offset by 6.5kg CO₂ stored in the finished chair and another 4.1kg CO₂ due to burning of wood offcuts at the factory.
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The Hardwood Chair by James Mudge

James used tulipwood, which makes the Hardwood Chair very nearly carbon neutral. At only 7.5kg CO₂, the carbon footprint of the chair is the same as driving just 48km in the typical car on sale in South Africa, and equal to the carbon emissions of the average South African over an 8-hour period. Emissions of 14.8kg CO₂ during all processes to produce and transport the American tulipwood, to supply other materials, and to manufacture in South Africa, are offset by 6.3kg CO₂ stored in the finished chair and another 1.0kg CO₂ due to burning of wood offcuts at the factory.
Nestro to exhibit at Holz-Handwerk 2018

Nestro is inviting visitors to take a computer-aided, 3D Virtual Reality animated tour through a filter system at Holz-Handwerk, the European trade fair for woodworking and wood processing to be held between 21 and 24 March in Nuremberg, Germany.

Nestro’s array of live demonstrations will include:
• The highly efficient Paintline spray painting systems that can be custom designed to suit the requirements of the customer. Due to its modular design, it is scalable and can be made to fit the available space.
• The Nestro Nast 24 grinding table with a 2x1m work surface. It has a pneumatic component-clamping fixture to hold the work piece in an optimum position while high-pressure extraction ports from the NE250 deduster will extract the sanding dust.
• The NE300 deduster. It will extract dust and chips live from all the edge banding machines on the Homag stand. A key feature of this machine is its ability to filter related materials like plastic, leather, paper and other types of industrial dust.
• The NFHSU 11/11-20w briquetting press will let visitors see how wood chips and dust are filtered, collected and processed into briquettes.

Nestro says Holz-Handwerk is a must event for everyone wanting an update on the trends in wood, wood-based materials, wood finishing and woodworking machinery. You will find the company in Hall 10 on stand 309, where over 100sqm will be filled with its range of energy efficient filter technology and surface engineering solutions.
In the beginning there were two machines; the surface planer and the thickness planer. Then the “planed all round” four sided machines arrived, and it wasn’t long before the sophisticated Weinig multi-head profile moulders began to take centre stage in solid wood production factories.

With the introduction of the Powermat series back in 2004, Weinig began a new era for planing and profiling. This was the first time that HSK spindles were used, and the compact, PowerLock tool system with low set-up times has been in worldwide use ever since.

The new generation machines, from the Powermat 700 to the Powermat 2500, cover the widest range of applications, whether in profiling of mouldings, window production, beam planing, flooring production or pre-planing. A Powermat moulder is the optimal machine for profitable production for any application and any company size, from the small workshop to industrial series production.

With its modular design, the Powermat series can be customised for individual requirements, whether machining solid wood, engineered wood, plastics or composites. Thanks to the intelligent machine controls, automatic positioning of the spindles and the patented PowerLock system, setup of the machine is quicker, easier and safer than ever before.

**Add value with a Weinig Powermat moulder**

**High level of repetition precision**

The machine’s Memory Plus controls can store the setting values of the machine for any profile. If you want to produce the same profile again later, the controls retrieve the setting values. This makes the setup process so much easier and prevents operator errors creeping in.

The solidness of the machines results in excellent interaction between tool, machine and workpiece. This makes the process runs as smoothly as possible, and is reflected in the surface quality of the work pieces. This accuracy also guarantees precise profile production.

**Energy saving**

The preservation and efficient use of resources is one of the strongest trends of our time. Weinig has always taken this aspect into account when designing new products and now even more so in the new Powermat generation. In addition to the use of energy efficient IE3 motors, special attention was given to develop a new concept for the dust extraction system. The optimised flow of dust and chips reduces the performance requirements of...
The Powermat 700 is designed with a revolutionary new operating concept which no other moulder can offer. The result: improved ease of operation and very short setup times offer the highest degree of flexibility. With these outstanding qualities the new Powermat is the perfect response to the market demands of today and sets a new standard for four sided processing. The WEINIG System enhances your Powermat 700 to become a highly efficient machining center that raises productivity. The individual system modules fit together like building blocks to produce the perfect result. From tool preparation to moulder set-up. You can make your own knives and resharpen them with the Rondamat tool grinder. The advantages for you: this makes you independent from tool services and shortens your delivery times.
New tools and woodworking solutions for the new year

Vermont Sales represents an extensive array of woodworking tool and equipment suppliers, and offers technical advice, training and demonstrations on all of them.

The latest releases from its stable are:

**Bessey toggle clamps**
Bessey has introduced the latest self-adjusting toggle clamps to the South African market. In addition, it has launched a new microsite on its website that gives advice on when and how to use toggle clamps.

For more information on the benefits of these clamps that can adapt automatically continuously to workpieces of varying thicknesses, visit http://toggleclamp.bessey.de. The site includes detailed descriptions, technical data sheets and downloadable 3D-CAD data.

**Kreg Jig HD, the heavy-duty pocket hole jig**
The Kreg pocket hole jig is an example of a woodworking solution that has become a sought-after item by woodworkers. In response to requests from the construction industry for a heavy-duty version, Kreg has announced the launch of the Kreg Jig HD, which is

---

the dust extraction system and therefore reduces the consumption of energy.

**Operator safety**
The outstanding accessibility of the Powermat enables all adjustments to be made at the front the machine with ease, and a large number of these are wrench-free. Through the clear view and practical layout of the operating elements within the enclosure the operator's safety is ensured. During production the access door of the Powermat is locked according to safety regulations. Through the large window a full view of the working area is assured.

**Support**
Weinig has partnered with Austro in South Africa for more than two decades, and together they have set the benchmark for supplier service, support, solutions and advice. Contact your nearest Austro office to find out more about the Powermat range of machines and their array of standard and customisable features.
Comfortable and secure: Ideal when on the go, thanks to the compact and lightweight design, ergonomic hand grips, integrated cord holder and transport safety device.

The KAPEX KS 60 has a mitre angle on both sides of up to 60 degrees and an inclination angle on both sides of up to 46 or 47 degrees. A range of other clever details such as the LED spotlight, the pull-out extension table, the additional groove function and the bevel help to make the KAPEX KS 60 a perfect combination of mobility, versatility and optimum results. For more information visit www.festool.com
the big brother of the existing family of pocket hole jigs.

The new jig can be used to join materials that are 38mm and thicker, and Kreg says it is 50% stronger than traditional Kreg joints.

"If you own any of the Kreg jig sets for your general wood working projects, and want to do some heavy-duty wood joining, it is essential to add this Kreg HD unit to your tool box," says Ryan Hunt, sales director of Vermont Sales, the official agency for the Kreg brand in SA.

"It is now possible for you to use it in a range of applications, including timber frame construction, deck railings, outdoor furniture, or any other large project that needs the strongest joint possible. It uses the #14 heavy-duty, hardened-steel screws that provide good shear-resistance, and have three anti-corrosion layers for long-term moisture resistance," says Hunt.

"Be sure to check with your local building code authority before using the Kreg Jig HD to construct load-bearing objects such as interior walls or deck railings. Building codes differ from area to area."

The unit can work as a stand-alone jig when it is connected to the Kreg face clamp and locked into place. Depending on the project, it can also be connected directly to the K3, K4, K4MS, and K5 Kreg jig benchtop bases for upright drilling. The stop block provides easy, repeatable registration with workpieces. The Hex-Shank HD drill bit is a quick-change compatible unit. Like all Kreg products it has a lifetime warranty. The HD kit includes, the drill guide, stop block, 12mm diameter HD stepped drill bit, 6" HD driver bit, stop collar, Allen wrench, starter Kreg screw set, and owner’s manual.

Fixman tool trolley

Fixman is a leading brand in the hand tool field, and has been a supplier to the automotive, industrial, construction and hobbyists for nearly 20 years. The company offers a full range of over 2000 products, including a huge range of tool sets, trolleys, tool cabinets and bench units. It also has an excellent international reputation for tool sets, such as its socket sets of varying sizes, a comprehensive range of roller cabinets and screw drivers, hammers, wrenches, cutting tools and the general tool range.

"Fixman offers a wide range of tools and tool set option, and are a high quality, proven range of tools that are on a par with any tool available in the country, says Vermont Sales director, Dale Engelbrecht.
Interprint is presenting its new décor collection: the Six Pack 2018. The company sees special, international market potential in the six selected surfaces for furniture design and interior design. The look of the six on-focus décors covers a wide range of materials: wood, concrete, stone and steel.

**ARTISAN OAK**

Material: Timber framing wood. The goal of the technical reworking was to obtain the character of old wood. A warm and authentic contrast to the cool, industrial look.
DELIOS
An old larch from the Alpine region. Smoked, rough, cracked and planked. The white oil treatment creates a unique colour effect. Natural and handcrafted influences give it recognition value.

HANSEN
A blond wood in the Nordic style. A typical Scandinavian feature is that the material has been reduced to the essentials. Cut flowers and variable striped parts support the simple look.

AURORA
Following the metal trend: A cold-rolled steel plate with traces of the grinding process. Metallic effects with a cool look reminiscent of the northern lights. Smart materility, also available in a brass look.
**GARBO**

The walnut interpretation of a fruitwood. Soft core and sapwood elements give the decor its elegant look. Timeless and universal: harmonises with styles ranging from modern Nordic to traditional Italian.

**GRID**

A material mix with the look of concrete and stone. The geometry of the grid reveals floral details up close. A flexible design in both function and style: can be cut any way and used anywhere. At home in urban spaces.

www.interprint.com / sixpack 2018
PG Bison launches Gallery Two...

PG Bison is hitting the road again with the next installment of its not to be missed, stimulating countrywide 2018 season roadshow, called Gallery Two.

Last year PG Bison embarked on its first tour to introduce its range of new products. “In 2018 we are ecstatic to have an extensive range of new colours and finishes to show off, inspired by authenticity. From natural environments to the urban jungle, we are bringing you the perfect materials to reveal the ‘real’ you,” reports PG Bison.

Gallery Two will showcase the new colours that are accessibly grouped into four international trends to help inspire its customers, housed in an all-new black and grey sample box.

The Natural You
This range is inspired by earth and invites the outside in. Look out for new MelaWood colours Brookhill, Haven and Lockport and the new FORMICA LifeSeal Worktop and Corian colours.

The Urban You
This range has some sure-to-be-favourites, including the new FORMICA LifeSeal Worktop colours, Aquila and Tucana, and the gorgeous MelaWood and MelaWood SupaGloss colour, Petrol Blue. This trend is inspired by fast-paced modern life and displays deep, darker colours and surprising prints.
ANNOUNCING
THE PG BISON GALLERY TWO
2018 SEASON TOUR
FEBRUARY 6 – MARCH 28

We’re excited to soon be launching our new range of internationally inspired designs and finishes that’ll give you the freedom to create work, play and living spaces that are as expressive as you are. See the brands we’re famous for as you’ve never seen them before.

Just visit pgbison.co.za and follow the links to find the venue closest to you and accept our invitation for this one-of-a-kind event.

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The Explorer You

Inspired by the popular bohemian trends and memories of the places visited, this range features more exotic, daring shades and unexpected tones such as: FORMICA LifeSeal worktop’s Downtown, MelaWood’s Camden, and the new MelaWood SupaTexture colour, Cambridge.

The Sensual You

This trend is one to fall in love with. It aims to strip away the complexity of life and create a calm, relaxing space of lighter colours and softer shades. PG Bison recommends the new MelaWood colours Vardo and Arden for a peaceful, natural feel.

The start of a new year always brings a fresh look at home and commercial décor and furniture colour trends, textures, and accessories.

Social sites such as Instagram, Pinterest and Houzz all say that while white is still the overwhelming favourite shade for cabinetry, colour is creeping back into our kitchens. Blue and grey units are gaining momentum, especially in a combination of two shades of the same colour, for example, light blue for wall cupboards and dark blue for base units.

PG Bison, agrees, and says warm greys paired with earthy browns, reds and yellows, are expected to edge out cooler neutrals in the coming year. They won’t date quickly, and it is an indication of the move towards natural colours and textures that encourage a soothing and diverse mix of colours and textures.

For more information or to register to attend this industry event, please visit the PG Bison website www.pgbison.co.za.
Local woodworking machinery supply stalwart, Geerlings, has just unveiled their impressive brand new premises in Roodepoort on the West Rand.

After nearly 30 years in their old premises in Krugersdorp, the company has made a bold move, and relocated into a prime premises on the busy Ontdekkers Road, which gives them a lot more space to house their showroom, and a lot more space for their second-hand machine section and workshops.

A major advantage of the location of the new premises is that Ontdekkers Road is an important artery in the area. The vast façade of the building is imposing and welcoming for visitors.

According to Geerlings chief of operations, Martiens Bezuidenhout, the move from the old premises proved to be a bit nostalgic, since he personally has worked from that building for the past 21 years.

"I think we’ve become a landmark in the Krugersdorp area, but we will do the same at our new premises. We have a lot more space to work with and our showroom is already looking very impressive," says Bezuidenhout.

Their new premises of 2000m² has a 600m² showroom for new machines, a 600m² showroom for used machines and workshops as well as a storeroom and ample space for our offices.

"The new premises will also make us much more accessible to both current and new clients as it is situated centrally in Roodepoort on a busy main road and the building is, to say the least, impressive."

According to Bezuidenhout, the move is just the beginning and forms part of a wider plan for...
Geerlings to be much more involved within the local market and with clients.

“Our focus has always been on building and maintaining strong relationships with the market and with our clients, and this move is the first step in us refocusing our attention on becoming much more active within the South African woodworking community.

“We are looking forward to some fantastic new products and solutions from our suppliers in 2018, and we are very excited to take on this new challenge. 2018 is going to be a big year for Geerlings.”

Bezuidenhout says that the move has been in the works for well over a year. “We started talking about maybe moving to a bigger, more centrally situated and more prominently visible premises well over a year ago, so it is definitely not something that has come up suddenly.

“The fact is that the local woodworking market has had some hard times in the last few years and the industry has changed a lot as a result. Geerlings has always been a front runner in the woodworking machinery market and we are very thankful for our position within the market.

“In order to maintain and grow that position, we decided to take this approach of being more visible and much more active within the market.

“Our products speak for themselves and we are known for our superior quality machines in the Cefla, SCM and Holytech ranges, as well as for our good quality second hand machines and our excellent after sales and technical back-up services.

“This year we plan on refocusing the attention on Geerlings and on our products among the woodworking community, showing our superior products and services and ensuring that our position within the industry is not only maintained, but enhanced.”

The new Geerlings premises is situated in Princess Commercial Park on President Road just off 32 Ontdekkers road in close proximity to the Westgate regional shopping mall.
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Fax: +86-20-8755 2970
m.liang@koelnmesse.cn

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China’s home furnishing market, driven by increasing urbanization, has experienced rapid development in recent years, and the growth of the custom furniture market has been fast tracked.

The main consumers of custom-made furniture are the middle and high-end groups who are concerned with the art of living, and the design-conscious post-80s and 90s generations. The trend is for living spaces to show the personalities of the people who live there, and the emphasis is on fashion, comfort and environmental friendliness.

This development has also shifted consumers’ focus to the use of raw and auxiliary materials for wood panels, worktops, handles, sliding tracks and hinges. The use of well-known brands has become a key factor in distinguishing the perceived quality of custom furniture.

The global trend of smaller apartment sizes has increased the demand for personalised furniture that lets the homeowner get maximum use out of the available space. According to Mr Pan Xiaozhen, general manager at GoldenHome, a renowned kitchen cabinet brand in China, the Chinese domestic customised furniture industry will maintain an annual growth rate of no less than 20 percent for the next five to ten years.

Seizing this growth potential, a Custom Furniture Suppliers zone will be launched at the international hall area at CIFM / interzum guangzhou to gather international and local custom furniture suppliers with product categories covering wood panels, decorative materials, furniture hardware and upholstery and accessories.

Custom furniture manufacturers, interior decor companies and interior designers can learn much about innovative products, cutting-edge technology and the development trends of custom furniture.
IFM / interzum guangzhou will take place from 28-31 March 2018, alongside the second China International Furniture Fair (CIFF) to be held in Guangzhou in southern China.

Over 1,300 exhibitors from more than 30 countries and regions, including Germany, Italy, Japan, Spain, Malaysia, Singapore, the United States, Belgium, Denmark, France and Latvia will fill the 150 000 square metres of exhibition space. It will span five halls, each specialising in either Woodworking Machinery, Upholstery Machinery, Materials and Textiles, and Fittings and Components.

At the same time, eight country and association pavilions from Germany, USA / Canada, Turkey, French Timber, American Hardwood Export Council, Malaysian Timber Council, Canada Wood and Quebec Wood Export Bureau will showcase wood materials, furniture hardware and interior decoration materials from some 100 international exhibitors.

CIFM / interzum guangzhou 2018 is poised to outperform the last show on various fronts featuring more brands, a wider array of products and an expanded series of fringe activities.
Global leading industry players have wasted no time in applying to participate in the highly competitive event. These heavyweights include: IMA, SCM, Biesse, FGV, Sige (Italy); Homag, Duerkopp, OKIN, Covestro, Schattdecor, Pollmeier (Germany); DTC, Taiming (China), Linak (Denmark); Bekaert Deslee, Artitex, Global Textile Alliance/Monks (Belgium); Boyteks Tekstil (Turkey); Alvic, Lamigraf (Spain); Titus (United Kingdom); Bostik (France) and HB Fuller (United States).

Visitors can also expect a healthy showing of new brands making their debut, including: Cinetto, Aper, Ebanisteria Marelli, Saveplac (Italy); Cossla (China); Best Label (Taiwan); LSK (Malaysia), LS Lighting, Ungricht (Germany) and Debo Europe (Netherlands).

CIFM / interzum guangzhou 2018 online visitor pre-registration is now open. For fast access to the event and a host of exclusive benefits, and to learn more about the event, visit www.interzum-guangzhou.com.

Local entrepreneur invests in new machines from FOMA Southern Africa

When Orlando-based entrepreneur Themba Sithole started Striving Minds Trading 994 in 2009, he had only a dream, a second hand edgebander and a panel saw.

With a lot of hard work and dedication, he managed within a few short years, to create a thriving little cut-and-edge business, providing training and creating jobs within his local community.

“It was hard in the beginning,” says Sithole. “To find your footing in this industry is not the easiest thing in the world for a new small business.”

But, he managed to do it and despite all the hurdles along the way, he managed to firmly entrench his business into the market.

Working with second hand equipment has its challenges though. The outdated technology made changeovers a long and tedious process, and frequent breakdowns that robbed the business of productivity became the norm as the machines aged and required more and more repairs and maintenance.

Unfortunately, with the cost of new machines, there were not too many options for Sithole in terms of upgrading his machinery.

It was during one such a breakdown that he spoke to a representative from the FX group, who happened to be at the factory one day to deliver sawblades that had been sharpened.

“He referred me to this new company called FOMA Southern Africa, which apparently had really good, brand new machines available at a very good price,” says Sithole.

He reluctantly made an appointment to go and view some machines and by the time he was sat down in the boardroom with a cup of coffee in his hand, he had made up his mind to purchase a new edgebander and a new panel saw.

“It took me about three months to get my finances in order and then I placed the order.”

Sithole purchased a CFMC HD 610 entry level edgebander and a CFMC MJ320D panel saw with a 3.2m sliding table and he has not looked back since.
The machines were installed in November 2017 over a two day period, which included staff training, and have been running at near full capacity ever since.

According to Sithole the process was completely painless and did not even interfere with their normal every day business.

“We had to work right through December in order to meet our clients’ demands and thus we did not really have any time to waste. Especially since, with the old machines, we could only cut and edge around 40 boards per day.”

“The technical team from FOMA Southern Africa concluded the training on the second day and we basically switched the machines on and started working right away.”

This helped a lot as he now had the capacity to cut and edge an additional 60 boards per day, which meant that he could fill his December orders with no problem, even though they still had to work the entire holiday period to achieve this.”

“I am extremely happy with the machines as well as the service that I received from FOMA Southern Africa,” says Sithole, happily adding that the additional capacity has now given him the opportunity to take on bigger orders and to create even more jobs within his community.

“Our production has definitely stepped up quite a bit and morale among my staff has improved noticeably. The new machines are easy to operate and easy to clean. Even changeovers are now quick and easy.

“The new machines also make a huge difference in terms of efficiency and reliability. It is no longer the end of the world if one of the old machines needs to be serviced or fixed as we can carry on with the job on the new ones.”

That does not mean that they can afford to relax though. “One thing that we have noticed since getting the new machines is that there still is a lot of demand out there and we have easily managed to fill our order books in accordance with the increased capacity that the new machines have afforded us.

“The plan now is to work hard and save and hopefully be in a position where we can buy another two new machines soon.”
While things on the economic and business fronts may be starting to look up, especially in light of recent political developments and a renewed demand for commodities, South Africa is still a long way from being out of the woods.

It is still becoming harder and harder for small businesses to afford new machinery and thus grow their market share. Thus the massive rise in the second hand machine market as well as the market for more affordable machines from Asia.

But both of these options have their limitations, as more often than not, there is very little in the way of after sales service and technical back-up on such machines.

Thanks to FOMA Southern Africa, a unique joint venture between the well established FX Group, the state-owned China FOMA Machine Company, and the Shanghai FUMA Woodworking and Machinery Company, companies can now purchase machines at an affordable rate, while also benefiting from superior after sales and technical back up service that the company offers.

A recent installation in Orlando, Soweto is the perfect example of a small enterprise managing to upgrade their machinery and greatly increase its production capacity without breaking the bank.

According to local entrepreneur and owner of Striving Minds Trading 994, Thembu Sithole, he was at his wit’s end over the frequent breakdowns and the resulting loss of production suffered due to his ageing second hand edgebander and panel saw, when he met with a representative from the FX Group, who invited him to go have a look at the new machines available through FOMA Southern Africa.

“Even when I was on my way there I thought that I will never be able to afford new machines,” says Sithole. “But after we had looked at the machines and I saw the potential benefits that having these machines could hold for my company, I was immediately swayed.

“I decided then and there, before I had even walked out the door, that I needed these machines.”

According to Sithole it took him approximately three months to get all his plans in order and then he took the leap and placed his order.

According to FOMA Southern Africa representative, Indran Kondon, FOMA Southern Africa and the services and machines that they supply is set apart from a lot of their competitors in more ways that one.

“We have sourced the best of what the Asian machine...
manufacturing sector has to offer for the South African, and African market,” says Kundon. “So our clients can rest assured that when they buy a machine from us, it is a top quality machine in its class.

“But apart from just the outstanding quality of our machines, we will also not just sell any machine to our clients. We assess their needs and make sure that we recommend the machine that is best suited for the specific job at hand.

“In this way we know that our clients will be able to easily handle any job within the scope of that machine, and in addition, we ensure that from the very beginning, FOMA Southern Africa build a reputation as a straight forward, reliable, and practical choice when it comes time to decide on a supplier for new machines.”

FOMA Southern Africa also boasts with an exceptional after sales service and technical support division that handles installations, training and any technical issues that may arise in a quick and efficient manner.

“The installation in Orlando went off without a hitch and we managed to do it without interrupting their other work,” says Kundon. “But the real test came a few days later when something minor did go wrong. Mr Sithole was very impressed when, within a few hours of making the call to report the issue, our team showed up, on a Saturday morning in the middle of the holiday period, to fix the problem so that they could carry on with their work.”

“The client opted for the CFMC HD 610 edgebander, which is ideally suited for his purposes,” says Kundon. “It is an entry level machine in its class, and it is not the most compact of machines, but it offers a good working speed and superior quality end product while reducing waste and also being very simple and easy to operate.

“From the glue pot to the front and back trimmers, the top and bottom trimmers, the scraper and the buffer all use industrial spec motors which makes the machine so much more reliable that some of its competitors in the market.

“It is a real workhorse that is designed for optimal performance, with enough space between the stations to allow easy access to every part of the machine. It is really straightforward to operate and even to do changeovers.”

The MJ320D Panel Saw features a 3.2m sliding table, auto up and down, with a 5.5 kw motor on the blade and a .75 kw motor on the scorer.

“These machines have resulted in the client being able to take on much bigger jobs and still ensure that their end product is of excellent quality,” concludes Kundon.
WoodEX for Africa, the largest trade exhibition in Africa dedicated exclusively to the timber trade, is gearing up for its milestone fifth instalment taking place at Gallagher Estate in Midrand from 11-13 July 2018.

From the biggest CNC machines to the smallest screws, from the loggers of the great outdoors to sleek laminated flooring, WoodEX for Africa plays host to the most specialised, yet comprehensive range of equipment, tools, machinery and wood products available on the market.

While WoodEX for Africa’s exhibition is a focused event, its showing has been carefully cultivated over the years to include a wide-ranging representation of products and services.

"From the start of WoodEX in 2012, the show carried both indoor and outdoor exhibition areas to showcase products optimally, with big names like Wood-Mizer, CMC Woodworking Machinery, WoodTech, Geerlings, Bosch, De Walt and Vermont Sales, among others, proudly taking space at the show," says WoodEX for Africa organiser, Stephan Jooste,

"Heavy forestry and wood-processing equipment and machinery are best positioned outdoors, not just for practical reasons, but for exhibitors to demonstrate their equipment and machinery put to the test in its natural environment. The outdoor exhibit has always had a special vibrancy of its own with highlights over the years including exciting portable sawmill demonstrations, three-wheeler testing as well as a chainsaw wood carving competition."

Indoors at the well-equipped Gallagher Estate in Midrand, WoodEX for Africa showcases large CNC machines, woodworking machinery and equipment, veneering equipment, ply woods, tooling, fixtures and fittings as well as paints and coatings, and industry associations, making the show the most inclusive showcase of timber and related products and services on the continent.

Rounded off with its highly-anticipated Timber Talks, WoodEX for Africa has something on offer for every timber professional looking to enhance their knowledge and understanding of the trade.

"WoodEX for Africa’s well-rounded offering to both exhibitors and visitors alike makes for a multi-faceted exhibition of the top timber and related products and services available on the market, underpinned by industry expertise and a trade looking to the future," says Jooste, concluding, "We are delighted to announce that Early Bird bookings for exhibition space at the show are now open and we encourage our exhibitors to secure their space early to unlock maximum exposure for their brands."
What to expect at WoodEX for Africa 2018

Building on previous years, WoodEX for Africa 2018 will showcase innovative timber and woodworking products and services, such as woodworking machinery, fixtures and fittings, decking, flooring, structural timber, timber preservatives and treatment, sawmilling and logging, pulp and paper manufacturing, and wood material and veneer production.

“This makes WoodEX for Africa the ideal platform for those in – and associated with – the timber industry to connect with one another and other specialised dealers, stay in tune with the latest and greatest in the industry, to secure new business contacts and nurture existing ones, and to access special trade deals,” says Jooste. At the heart of WoodEX for Africa is the event’s ever-popular Timber Talk programme, which comprises a number of short presentations by industry influencers.

These compact sessions make for a dynamic and interactive learning experience for visitors and exhibitors alike, and bring together some of the timber industry’s leading system designers, contractors, manufacturers and thought leaders who address pressing industry issues and hot topics from across the timber world.

WoodEX for Africa’s Timber Talk sessions are free to attend and no bookings are necessary.

A win for exhibitors

With its strategic and targeted marketing activities, WoodEX for Africa aims to host many new visitors and exhibitors at the show. In addition, the 2018 event will offer a host of digital and social media marketing opportunities for exhibitors and sponsors to reach a highly-focused market in Africa before, during and after the show.

Particularly popular with the African trade, which makes up 60% of international trade visitors hailing from as far afield as Angola, Botswana, Kenya, Malawi, Namibia, Tanzania, Zambia and Zimbabwe, WoodEX for Africa is considered South Africa’s gateway to the timber trade in Africa.

“It is clear that WoodEX for Africa has come of age and represents an invaluable targeted marketing platform for the local and international timber trade and woodworking sectors looking to connect and build fruitful relationships,” says Jooste. “As the only exhibition solely dedicated to timber and woodworking machinery on the African continent, WoodEX for Africa has forged itself as the place to connect and inform the timber trade where it matters most. We look forward to making WoodEX for Africa 2018 yet another one for the books,” he concludes.
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