Special Requirements Need Special Solutions

KLEIBERIT HotCoating®
Edgebanding
Flat Lamination

Door Production
Profile Wrapping
Window Profile Wrapping

Parquet Production
Design Flooring/LVT
Laminated Boards

Load Bearing Wood Construction
Postforming
3D Process
INITIAL ATTACK PHASE

When wild fire behavior allows for direct attack, the main purpose using Husqvarna 580BTS blowers on the fire control line is to “transfer light fuels from the soil surface on the fire perimeter into the black area” and can be referred to as creating a “blower line”. By doing this a quick blower control line is created with an average width of 0.5m depending on fuel arrangement and weather conditions.

Several tests done over a wide range of fuel types and fire conditions have produced adequate results. Fire Bosses may consider this tool as essential during fire incident planning. However, best results are only obtained when utilising Husqvarna 580BTS blowers in combination with traditional tools like water hose, fire beaters, rake hoes, knapsacks and drip-torches.

CONTROLLED BURNING

The Husqvarna 580BTS blowers are suitable when applying burn outs and back burning tactics in a 1:2 ratio with drip-torch (1 drip-torch : 2 blowers).

MOPPING-UP

At this critical phase in wild fire suppression, Husqvarna’s 580BTS blowers effectively reduce the manpower traditionally deployed and increase the tempo of enforcing the fire line all around the contained fire. Again the success will depend on the combination with other tools chosen by the Fire Boss.
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Message from the Editor

Is it an insect? Is it a fly? No, it is RoboFly!

As I settled down to write this editorial I received a brief email alert message at the bottom of my screen about a RoboFly. Ever ready to be distracted I immediately clicked through and found a story about the first robotic flying insect that weighs just a bit more than a toothpick and takes off using tiny beating wings driven by a laser beam.

According to its creators at the University of Washington, it has a minute onboard circuit that turns the laser energy into electricity, which causes its wings to flap. Ultimately, the scientists believe their invention will have the ability to hover, perch on things, and fly around by steering the laser, or possibly by adding tiny batteries or culling energy from radio frequency signals. The goal is to direct it into performing specific tasks, such as flying in the plant canopy looking for disease, monitor humidity levels and even fitting them with smoke detectors so that they can sniff out forest fires.

The June issue of Wood SA is jampacked with news about scientific, market and social research. In the forestry section we are proud to present a special supplement on the 50th anniversary of the Southern African Institute of Forestry (SAIF). The founders and members of this group of professionals have been and continue to be integral to the development of the world’s forestry sector.

We introduce the new industry funded Forest Operations Systems Research Unit (Fosru) that is headed by Simon Ackerman and located at the University of Stellenbosch. Among the range of outcomes expected from the unit is the ability to harness “big data analytics” to aid decision making within the forestry supply chain. This sounds like a modern mouthful, but it is extremely relevant for South Africa in the context of research and the Internet of Things, Industry 4.0 and innovative developments like the RoboFly.

The transport section features the Loadtech on-board computerised weight measuring system. It accurately weighs the load on timber trucks and thus prevents over and under loading, which makes suppliers and transporters more efficient and profitable.

On the topic of profitability, Newsaw took a group of sawmillers on a benchmarking visit to Brazil to get a first-hand look at why the recovery rate in Brazilian sawmills and plywood plants is higher than that of Southern African sawmills. They returned with confirmation that with the right approach to productivity, management, and technology, local sawmills can increase recovery and profits.

The sawmilling section also features Multisaw in Plettenberg Bay and its new range of Pinnacle optimising machines. This company once again demonstrates that it is possible for South Africans to research, design, develop and manufacture world class machines.

The theme of research continues in the woodworking section where there is an emphasis on upcoming trade shows: WoodEx in Johannesburg next month, REM’s spring carnival in September, the Shanghai furniture and machinery fair later in the year, and the first announcements from Ligna 2019 in Germany.

We also report on the latest news about the national minimum wage bill, and remind readers about the opportunity to attend and contribute at the public hearings on land expropriation.
Bridging the gap between our entry level and high-end mechanisation solutions is the Kobelco SK210LC Excavator carrier matched with the H215E Waratah Head.

Kobelco is a popular and proven choice in the global forestry industry, an environmentally friendly machine with low fuel burn and an efficient design, while the H215E has been specially designed for Eucalyptus plantations to deliver the lowest fibre damage, at the lowest cost.

Bell Equipment – matching the best of the best for optimised forestry mechanisation.
Sawmilling South Africa (SSA) held its annual general meeting on 7 June.

Renowned economist Dr Roelof Botha, was the guest speaker for the day, doing a presentation on the likely future for the country and the building industry in particular over the next few years.

YES (Youth Employment Service) CEO Tashmia Ismail-Savill was also in attendance and gave an interesting presentation on the youth in South Africa and their prospects for gainful employment.

Ismail-Savill spent some time discussing the work that YES is doing in addressing unemployment among the youth, and she also outlined the work of other organisations and even individuals in the field.

Her presentation stirred the interest of the gathered sawmillers with a number of them approaching her afterward to discuss projects and initiatives that sawmillers can drive in rural areas of South Africa to address the issue of youth unemployment.

Crickmay & Associated presented the annual sawmill productivity improvement award for 2016 to PG Bison’s George sawmill.

Three new members were elected onto the executive management committee of the association and were welcomed by Sawmilling South Africa Executive Director, Roy Southey, who said that he looked forward to their insight and energy on the committee.

The new members are Piet Briel from SAPPI, Joco Oosthuizen from MTO, and Jane Tennant.

The meeting was also addressed by Tafadzwa Mudyiwa from Letsema Consulting, who presented an overview of a report Letsema have prepared on the Light Gauge Steel (LGS) industry for the association.

Light Gauge Steel has been widely seen as a threat to the structural timber industry and has been a concern for the industry for some time.

The report, which was only released to the association a day before the AGM, deals with the possible effect that the LGS industry could have on the framing and truss market, and if this might have an effect on the sawmilling industry.

According to Southey, The Executive Committee will be studying the report in some detail and reporting back to the members of SSA in the coming months.

Forestry South Africa (FSA) Executive Director, Michael Peter, in his address, informed the meeting of a “loophole” in the Forest Sector Charter that allows for the claiming of points towards a mill’s BEE status if their log supplier is SAFCOL.

Reflecting on the year gone by during the presentation of his report to the gathered SSA members, Executive Director Roy Southey affirmed that 2017 proved to be a tough year for the industry, with difficult financial times, challenging industrial relations, political uncertainty, and devastating fires in the Eastern and Western Cape all taking their toll on the industry.

According to Southey, SSA has managed to maintain relatively stable membership figures during the past year. Unfortunately the year saw the closure of two sawmills. “Both these closures were linked to log supply; tangible evidence of the resource pressure most mills are facing,” says Southey.

“We did however receive two new members, which kept membership at a constant. We also have another 10 non-paying mills representing the emerging SMME sector whom we assist with mentoring and advice.”

As in previous years, Southey took the time to remind members of the benefits that SSA membership hold for
the industry, highlighting the association’s roles and activities including the provision of a lobbying platform for the industry, thus ensuring that their collective voices are heard when lobbying government and other statutory bodies.

Southey also pointed out the association’s role in conducting industry specific research through informal partnerships with institutions such as the Stellenbosch University and the Nelson Mandela University, citing as an example, an SSA funded project conducted by SU to establish the cause and effect of felling younger trees on the structural integrity of sawn lumber.

Southey further detailed the association’s activities, including the sourcing of funding, by means of which the SSA was able to secure funding through the FP&M Seta for the development of Quality Council For Trades & Occupations (QCTO) approved curricula for the effective training of Saw doctors, kiln driers, and log yard, wetmill and drymill operators. Southey continued to give an update regarding progress on further curricula and qualifications that are still in the works.

Southey also reported that the association has had some success in their efforts to have regulations around emissions from wood drying kilns amended.

According to Southey, it appears that references in the regulations, to indirect heated kilns (those heated by steam from a separate boiler) will be altered, which will mean a great deal to every kiln drying sawmiller as it will mean savings on air emissions licenses for kiln drying sawmills.

Southey expressed thanks to SSA Chairman and the entire executive for their support and guidance over the past year, and wished all SSA members a fruitful and prosperous 2018/2019.
Don’t miss the opportunity to participate in the International Forest Engineering Summer School that will be held between 19 November and 7 December 2018 at Carmel Estate overlooking Victoria Bay on the outskirts of George.

This is the third annual international summer school and focusses on the holistic management of all forestry related aspects of harvesting, road and timber transport. It is aimed at high potential forest managers, contractors, researchers, academics, and staff employed by equipment manufacturers, from all over the world.

The course is run by international industry experts, CMO and is the perfect combination of knowledge and practical competencies to boost the careers of young professionals with some exposure to aspects of forest engineering. More experienced practitioners and young graduates are guaranteed to also gain from attending the programme.

Participants will leave the course enriched and competent in understanding and being able to apply the principles of successfully managing the full forest engineering work cycle. CMO’s facilitators and guest lecturers employ a variety of methodologies to transfer knowledge and create an environment where the team dynamics and interaction all contribute to the learning experience. Delegates will also have free access to the CMO simulators at the venue.

The summer school has been revised to include improvements based on comments from previous participants, such as:

- Technology-based solutions where every delegate will be issued with a tablet loaded with software that will be used throughout the course
- Semi-mechanised and motor manual operations.

CMO requests all delegates to arrive on Sunday 18 November because the action starts promptly on 19 November. The course fee includes all presentations, excursions, accommodation, meals, stationery, tablets and airport transfers, but excludes transport to George.

For more information, please contact Andrew McEwan (083 6765668 and andrew@cmogroup.net) or Michal Brink (082 4479477 and michal@cmogroup.net). A special early bird registration discount is available until 31 July 2018.
Seedling growers sow seeds of information, best practice and networking at annual symposium

This year the Seedling Growers Association of SA, (SGASA) held its 2018 symposium consisting of nursery tours, presentations and, naturally, wine tasting on a wine farm near Stellenbosch in the Western Cape.

The nursery tours were a great success and gave the members an opportunity to visit Westcape Biotech, a commercial biotechnology business offering tissue culture, diagnostics and molecular research services mainly to the agricultural sector. They were impressed by the high-tech facility and the research done by the company.

The members also visited Radical Seedlings and Landorf Nursery where Ad Kranendonk, head of sales and business development of the Netherlands-based company Flier Systems, explained and demonstrated the Flier Sowing Machine and the Flier Blocking Machine. He followed this up with a presentation on Flier Technology and its range of mechanised and automated plant breeders, nurseries and greenhouse production research and development.

Rob Perry chaired the symposium and was assisted during the sessions by Shaun Biggs, Anthony Baird, Dr Quintin Muhl and Rian Moore. The theme of the symposium was “Driving efficiency – Working towards a leaner industry”.

The speakers included Ronald Clemens of ICL Specialty Fertilizers Group who gave two presentations on controlled release fertilisers and their benefits and future developments.

Lindi Grobler gave advice on how to choose a growing medium, Erna du Plessis of Bosman van Zaal described the advantages of design for modular acceleration in plant production and Wandi van Renen and a colleague presented a quick course in basic financial management skills aimed at small businesses in the industry.

Luke Solomon gave feedback on the association’s research committee’s activities; Dr Willeim Hoffman spoke about farm and business management and Alan Weyer reminisced about the “spirits of the past”. Frik Joubert tackled the annual topic of certification and focused on hygiene, health and safety. He used the effective techniques of showing examples of poor hygiene practice and how not to prepare for an audit. He also emphasised the importance of using raised platforms for seedlings always to prevent contamination.

Mark van Ryneveld of Umvoto described the state of water use in South Africa with a main focus on the Cape Flats aquifer. This was a topical discussion because of the drought in the Western Cape and the urgency and high costs of hydrogeological investigations.
The recently released Code of Good Practice for managing alien and invasive species in the South African forestry industry is set to further stimulate small business development and community cooperation.

Dr John Scotcher, one of the authors of the Code, explains that although the guidelines were developed specifically for commercial plantation forestry, the guidance on the application of the law and best management practices contained therein is applicable to other land users.

“Plantation owners and neighbouring landowners need to work together to reduce any negative impacts that their respective activities may have on the resources they share,” says Scotcher. He cites water courses, wetlands, natural vegetation corridors as well as roads and other infrastructure as areas where co-operative relationships can lead to the development of small business opportunities in communities as suggested in the Code of Good Practice.

The release by Forestry SA of the code serves to highlight the work that many plantation owners have been doing for many years. For example, MTO Forestry has established good co-operation relationships with neighbours for alien and invasive plant control in the Western Cape.

Mondi’s SiyaQhubeka Forests initiative is another good example of a forestry owner acting proactively and decisively when it comes to protecting scarce resource. Mondi owns plantations on the western shores of the world-renowned Lake St Lucia and the iSimangaliso Wetland Park, a world heritage site. Officially launched in December 2001, the project has become a case study for forestry operations and rural communities, with mutually beneficial social, economic and environmental benefits.

The iSimangaliso Wetland Park gained more than 4500 hectares when Mondi land was returned to the park which benefited by the inclusion of additional high-conservation value ecosystems. This land has now largely been rehabilitated to wetland and grassland, restoring soil and water conditions and encouraging biodiversity. As a result, the SiyaQhubeka Forests plantation area – as well as the surrounding wetlands, natural forests and key ecological networks – have been integrated into the iSimangaliso Wetland Park.

The area forms a buffer between the park, local communities and commercial farming and provides an extended range for species such as elephant, rhinoceros, buffalo and cheetah. The integration and engagement of local communities and small growers in the plantation model have raised skills levels and education, along with an energetic and successful enterprise development programme.

The state-owned forestry entity, Safcol has also played its part in small enterprise development. Initiatives identified by the Enterprise Development (ED) department of Safcol created a total of 325 jobs, despite the difficult trading conditions in 2017. In addition, the partnership between Safcol and its strategic partner, the Development Bank of Southern Africa (DBSA), has been enhanced through the development of a value proposition model and the signing of a new Memorandum of Understanding (MoU).

A very successful bee-keeping project has evolved from one, into two cooperatives with six members each. This was done to increase management and operational efficiency. A mentor has been allocated to the project, which added considerable value to the operations on the ground.

These cooperatives have fully expanded into providing pollination services to neighbouring farmers. This project is going from strength to strength, with harvesting now taking place. Safcol, in partnership with the DBSA, is looking at rolling out the project to Mpumalanga, KwaZulu-Natal, and the Northwest Provinces.
Advanced forest valuation: what every forester should know

The Department of Forest and Wood Science at the Stellenbosch University, in collaboration with Margules Groome Consulting will be hosting a course at the Ascot Conference Centre in Pietermaritzburg on 14 and 15 November 2018.

The course, named the Advanced Forest Valuation: What every forester should know, is aimed at professionals within the industry involved in forest valuation and timberland investments.

Upon completion of the course, participants will have a better understanding of the methods and principles related to forest valuations, international valuation standards, and valuations for timber investments.

The course will run over a two-day period to allow sufficient time for participants to gain a working understanding of the principles and concepts involved. It will include interaction and discussion of practical examples related to forest valuations.

The short course will cover the basic principles of finance, as well as internationally accepted valuation methods, valuation and financial reporting standards, valuation requirements for timberland investments, and will include a number of case studies.

The course fee is R 5 500 per person and includes a Stellenbosch University short course certificate, class notes and refreshments.

For more information or to register please contact Cori Ham at telephone 021 808 3297 or e-mail cori@sun.ac.za
The MS 462 is the hot-off-the-press new chainsaw from STIHL, the global leader in chainsaw technology. This 70cc professional-grade model with an economical 2-MIX engine is lightweight without compromising on delivery.

It is the lightest high-performance chainsaw in the 70 cm³ capacity class, weighing in at 7.4kg with 20 inch guidebar and chain - ideal for an all day, every day powerful performance.

Designed for multiple forestry applications, the award-winning MS 462 easily copes with felling, pruning, cutting up and harvesting big timber. It is also suitable for demanding cutting jobs in agriculture, landscaping and gardening.

Lighter, faster, more power when you need it
This is an ergonomic, manoeuvrable, easy to work with machine with an impressive power to weight ratio of around 1.4 kg/kw. Its improved weight has been made possible by a new engine unit design with enhanced cylinder geometry.

The R&D experts at STIHL know that weight is a vital factor in enhanced design but reduction in weight cannot be allowed to impact on power, so they have focused on reducing the system weight – that is, the weight of the dry chainsaw including the cutting attachment.

Redesigned cylinders, slimmer chain sprocket covers and consistent changes of material for other components in the engine units in particular, have resulted in perceptible weight savings without compromising on ruggedness or service life.

The result is lower system weight and easier handling. It’s a winning combination.

Another bonus is this machine’s incredible acceleration. It is well-equipped for extreme loads and harvesting large timber as it has a significantly improved torque build up because of its new economical 2-MIX engine technology with a rating of 4.4 kW, thanks to the improved cylinder geometry with an optimised combustion chamber.

Smother and safer to work with
The MS 462 has a new anti-vibration system that reduces vibrations at the handles and improves rigidity, reducing strain on the operator’s joints and muscles and ensuring more precise control of the cut, even when using longer guide bars.

Another new feature is the plunge bar, a handy mark on the fan housing which facilitates directional control and machine control in plunge cutting. In addition, the tooth length of the spiked bumper has been adapted to the radius of bigger trees, so the saw bites into the wood with better grip when cross-cutting, and control is effortless and accurate.
Forestry

Fourth International Congress on Planted Forests

The International Union of Forest Research Organisations (IUFRO), in partnership with the Food and Agriculture Organisation of the United Nations (FAO) and the State Forestry and Grassland Administration of China (SFAG), is convening the fourth International Congress on Planted Forests at the China National Convention Centre (CNCC), Beijing, China on October 23 to 25, 2018, with optional post Congress excursions on October 26 to 27 with two routes, one for the conservation planted forests in North China and one for the industrial planted forests in South China.

The Congress is organized by the Chinese Academy of Forestry (CAF), the national research institution on forestry in China.

The fourth International Congress on Planted Forests aims to investigate the contribution of planted forests to green development in the context of global changes.

Topics include the sustainability of planted forests in the context of changing climates and the future role of planted forests in bio-resources sustainability, environmental protection and green development.

The Congress will also be a space of interface between scientific communities, wider society and government policy initiatives related to planted forests.

The Congress will arrange two plenary keynote presentations, eight sub-plenary invited presentations, around 40 parallel technical sessions with around 240 oral presentations, as well as quite a number of poster presentations.

For more information about the fourth International Congress on Planted Forests, please refer to the Congress website www.icpf2018.net or www.icpf2018.com

No servicing headaches

This is designed to be a hard-working professional machine, so STIHL has prioritised servicing and maintenance enhancements.

The MS 462’s new HD2 air filter with a radial seal has a longer life and improved fine dust filtering efficiency compared with the previous model.

It is easy to clean and has an oil-and-water-repellent surface. Proven features have been carried over, including the side chain tensioner, captive nuts and a one-part shroud with quarter-turn locks for ease of access to all maintenance components, such as the filter or spark plug.

A surefire winner

The new STIHL MS 462 C-M was awarded the silver medal in the innovations competition ahead of the demopark fair. Now available in South Africa, the STIHL MS 462 is set to transform the local forestry industry. Experience how it can transform what you do.
Forest operations systems research unit launched at Stellenbosch University

The Department of Forest and Wood Science at Stellenbosch University has formed a strategic partnership with SAPPI, Mondi and York to form a specialised Forest Operations Systems Research Unit (Fosru).

The unit will be headed by research scientist Simon Ackerman and will begin its work in July 2018. Fosru will concentrate on high-level research and will complement the university’s continued and successful collaboration with industry in the field of postgraduate research and teaching.

The current industry partners will finance the position. The intention is to build and grow the consortium, and the unit invites other stakeholders to join and participate for the benefit of a greater South African forest industry.

Fosru will take advantage of new disruptive technologies and analytical methodologies, in the form of “Big Data analytics”, to aid decision making within the forestry supply chain. Ackerman’s core obligations are:

• Research on compartment characterisation and the effect on end of rotation processes and the forestry value chain
• Fulfil the role as South African coordinator at the EU 2020 Tech4Effect initiative and maintain the partnership with the Norwegian Institute of Bioeconomy Research (NIBIO) through the project
• Continue to contribute to the management and execution of the productivity improvement initiative developed by Stellenbosch University and the ICFR in 2014.

Supplemental work will entail high-level academic research through MSc and PhD research with subsequent scientific publications as output through a specialised technical liaison between academia and the forestry industry. Fosru will also, but to a lesser extent, serve as a resource base for testing trending technology and techniques, and will address shorter-term research questions from the industry partners.

Ackerman is a well-respected researcher in South Africa whose experience and expertise will be used and supported within the academic support structures of Stellenbosch University. Dr Rasmus Astrup, research director of NIBIO will supervise his PhD at the university.
Transportation within the timber industry is a highly specialised field that requires vehicles and equipment suited to the task. Large amounts of off-road and on-highway work is required – so trucks and trailers need to be suited to both environments, drivers need to be adept in all manner of scenarios and operators need to ensure they have all their bases covered in terms of legislation and industry-specific requirements.

It’s therefore unsurprising to learn that the local sector is dominated by a few key players, although there are numerous smaller companies who have risen to the challenge. One such company is T3 Timber and Transport. Owned by Morne Els, T3 operates within three areas; the first is long-haul, and the other two are within timber itself.

“We run timber in the lowveld area, Mpumalanga, Gauteng and KwaZulu-Natal. We’ve got seven of our own trucks and 20 sub-contractors,” Els explains.

The core of the company’s timber business is trading. “We buy timber from farmers and resell it to customers such as Sappi and Mondi,” Els explains.

The other facet is that of timber transport. The company moves the commodity for both large companies and private partners. (The long-haul division specialises in moving commodities, too, including cement, sugar and steel.)

T3 runs a fleet of UD trucks – it’s just added another two – and a lone Hino. They pull a combination of super links, flat decks and a single skeleton trailer. However, for Els, running suitable vehicles are only one piece of running a successful timber transport company.

“There are numerous aspects in all areas of the business that need to be considered in aiming for best practice in this industry. We need to have focused drivers and trucks that are good on the road. Safety must be put first, with timely maintenance.

We need to achieve maximum payload per trip and cost per kilometre (CPK) must be as low as possible … to achieve maximum return the company needs to be run as economically as possible,” he says.

Running economically doesn’t mean running cheaply. On the contrary, it means investing in the right equipment to enable the company to do things properly.

Among the equipment fitted to the vehicles is the Loadtech Onboard Weighing system.

## Weighing in log by log

Operating in the timber industry is not for the faint-hearted. GAVIN MYERS chats to T3 Timber and Transport and one of their suppliers, Loadtech, to find out how they approach the task.

Transport Weighing in log by log Operating in the timber industry is not for the faint-hearted. GAVIN MYERS chats to T3 Timber and Transport and one of their suppliers, Loadtech, to find out how they approach the task. 

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Transport Weighing in log by log Operating in the timber industry is not for the faint-hearted. GAVIN MYERS chats to T3 Timber and Transport and one of their suppliers, Loadtech, to find out how they approach the task.
“This computerised weight-measuring system is fitted to the timber truck, allowing the driver to control the weight being added during the loading process. This ensures that the truck is loaded correctly the first time – every time.”

“Once the truck has moved off the loading zone, it is unlikely to return for load adjustment, meaning that there is a small window of opportunity while the truck is being loaded to ensure that the load is correct,” explains Neels Botes, VIGIA and Onboard Weighing brand executive at Loadtech.

“This means that suppliers can be sure that the truck is not overloaded, which would lead to penalties for the transporter, and that the mill receives the correct load,” he adds. At T3 this is exactly the case.

“The Loadtech systems are fitted to our flat-deck trailers, and they help in numerous ways. First we can derive maximum payload from the rig, so, if the customer is under loading we can still demand the full price because he hasn’t got enough timber on site.”

“The scales also help us stay within specifications of the National Road Traffic Act. We can ensure that each axle is loaded correctly and that the rig is not overloaded.”

“As the system is an onboard scale, the driver can monitor the loading via a screen in the cab and then run a printout. He can see exactly what is loaded on each axle and the total weight of the truck,” Els says.

Naturally, the results go right down to the bottom line and using the system has even saved money for T3. Els notes: “If we have to weigh our trucks on weighbridges each time, to check they are within spec, it can get very expensive… We are charged an arm and a leg and can end up with quite a bill, per truck, each month. These are running costs we’ve been able to avoid.”

It’s clear, then, that investing in the right equipment can give any company a leg up in a competitive marketplace, which is being proved by the partnership between T3 Timber and Transport and Loadtech.

• This article first appeared on pg 14 of issue 4 (2018) of Focus on Transport and Logistics.
African sawmillers learn from benchmarking visit to Brazil

A group of sawmillers from Angola, South Africa and Swaziland enjoyed a jampacked study visit to Brazil to learn more about why the average recovery rate in Brazil sawmills is higher than that of local sawmills and to get an overview of the technologies applied in Brazilian soft and hard wood saw mills and plywood mills.

The tour was organised by Newsaw in conjunction with the largest Brazilian equipment and machinery manufacturer, Vantec Maquinas. Newsaw is the South African based supplier of a range of specialised equipment and machinery, maintenance and consultancy services to the wood processing sector locally and internationally.

Why Brazil?

When asked “Why Brazil?” Louis du Plessis of Newsaw explains that Brazilian sawmillers are using technology that is assisting them to drive the resurgence of their wood fibre market. This has taken place amid an unstable political environment, and after a long recessionary period, current domestic market segments like packaging and panels are growing, and the outlook for pine wood products is optimistic.

Marciano Chagaz, the commercial export agent of Vantec, agrees and says that while some of the political fallout continues to affect the full recovery of the domestic economy, foreign markets have provided Brazil’s pine industry with real impetus. “In March 2018, the volume of pine plywood exports reached a record high of just over 200,000 cubic meters, a 22% increase over March 2017 and a 36% increase over March 2016.”
The volume of sawn wood exports also set a record at 210,000 cubic metres, which was the best March performance in the last decade.

Although the Brazilian forestry and sawmilling and plywood industries are much larger than that of South Africa, Du Plessis says the fact that both countries are in the southern hemisphere and grow similar species with similar characteristics makes Brazil an ideal country to use as a benchmark.

“Our industry is small, and we do not have the same resources for forest science or industrial research and development. Over the last decade Brazil has had access to well-priced raw materials such as steel, and this, together with the large size of the forestry sector has made it possible for industrial experts like Vantec to invest in the research and development necessary to make the sector internationally competitive,” comments Du Plessis.

He says there are a variety of explanations for the revival of the Brazilian sawmilling industry and one of the reasons is the fact that their recovery rate and related sawmill business profitability is high. “The higher recovery rate is because the sawmillers have access to the best processing equipment for their raw materials and markets and, importantly, they aim for the highest possible recovery throughout their mills and not just in the wet or dry mills.”

Vantec factory
Vantec was founded 50 years ago by the Vanzin family, and its CEO, Adriano Luiz Vanzin decided that based on its popularity in Brazil and other South American countries, the time was right to make its products available in the rest of the world. Du Plessis says when Vantec received an enquiry from a veneer plant in Mpumalanga they decided to research and find a technology partner in South Africa that matched their business philosophy. They identified Newsaw and after a period of intensive investigation the partnership was formalised in October 2017.

“We jointly decided that it would be important for African sawmill owners to visit the Vantec factory, meet and talk with its clients and to experience combinations of their products at work," says Du Plessis. A group of five sawmillers from South Africa and two from Angola and Swaziland joined Du Plessis on the trip.

The first stop was the Vantec factory where the engineers in the group were impressed by the quality of the design process, manufacturing equipment and the skills and knowledge of Vantec’s production experts. The machines, which are all built with precision by highly trained technicians using CNC machinery, are extremely heavy duty and provide excellent access to all moving parts. They were also impressed with the use of automation that allows the company to reduce labour costs and thereby make the machines more affordable.
TECHNOLOGY IN WOOD PROCESSING EQUIPMENT

Forklifts
Loaders CI4000

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Six heads horizontal bandsaw

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Randa Sawmill

After the educational visit to Vantec's manufacturing plant, the group drove to Randa Sawmill in Bituruna in the state of Paraná. Randa is a privately-owned company that was established 30 years ago. It is a significant manufacturer of finished doors and plywood in Latin America, the United States, Europe and the Middle East. It has built its reputation on the quality and variety of its products and services.

The sawmill was upgraded two years ago and now occupies 103,000 square metres. It prides itself on being one of the most modern door and plywood factories in the world and uses a combination of automatic and manual processes. Environmentally and socially responsible, Randa invests in its own research and technology and manufactures its products from *P. taeda* and *P. elliotii* from sustainably managed FSC certified forests. It also invests in social projects.

Vantec supplied the wet line that is run by 12 people and produces 180 cubic metres a shift. It consists of a log turner, twin vertical band saw with four inch blades, a Vantec five head horizontal multi-cut band saw that breaks down the cant, and Vantec multi-rip saws and board edgers. Smaller dimensions are edge laminated. Randa’s Vantec value adding waste line includes an in-line oversorter that sorts the chips from the saw dust with the chips going to a chipboard plant and the saw dust to a boiler that fuels the kilns.

Incolagre veneer factory

The group then visited the family-owned Incolagre veneer factory. The brothers buy their logs from plantation owners and they take care to add maximum value to their raw materials and to expand their market share. They have been successful and recently upgraded their equipment and are considering buying a new drying system this year.

Vantec designed and equipped the entire mill for the company. It has a short log and a long log line. The infeed has a 2800mm log chain infeed conveyor and log debarker and after the lathes there is a rotary guillotine, and the exit veneer conveyor is equipped with two hydraulic lifting tables, three residue conveyors and a chipper. There are two lathes, one with a traditional spindle and the other is spindle-less. Du Plessis says the spindle-less lathe enhances precision and is complemented by an auto-loader allows the taper to be removed with more accuracy and reduces the core size to 35/40mm, which greatly improves the recovery rate.
The Mpumalanga veneer plant will soon feature the Vantec spindle-less lathe with auto-loading and levelling. The Vantec chipper will be on show at Newsaw’s stand at WoodEx Africa next month.

**Rodrigues Plywood Factory.**

The group then moved to the Rodrigues Plywood Factory, located in the municipality of Correia Pinto, in the state of Santa Catarina. This factory was established in July 2004 by Nereu Rodrigues who has more than 30 years’ experience in the industry. The company has its own forests and specialises in the production of plywood.

It currently has an installed production capacity to produce 7000 cubic metres of pine plywood per month and a recovery rate of 82%. It only serves the international market and everything is exported to countries in Europe, including Germany, the UK, Kingdom, Belgium, Italy, Netherlands, and to the United States and Puerto Rico.

There are three fully automated Vantec peeling lines. The company processes long trees with diameters between 350mm and 500mm that are handled by
Sawmilling

the 2800mm log chain infeed conveyor where they are scanned and cut to length. The double-spindle lathe lines are loaded by an auto loader, and the exit conveyor takes the veneer sheets to a rotary guillotine and then to an automatic vacuum stacker and quality control.

Link Sawmill

The last stop in the action-filled tour was Link Sawmill in Palma Sola. The Link family entered the industry many years ago when they saw a good business opportunity in forestry and established their own pine, eucalyptus and Araucaria plantations.

Three years ago, they decided the trees had come of age and the time was right for them to commence harvesting. It was then they decided they wanted to diversify and expand into sawmilling to add further value to their product.

They had very little knowledge about sawmilling and approached Vantec to assist and guide them through the process of matching their raw materials and market needs with the ideal combination of plant, machinery and equipment. Vantec designed and installed the turnkey project within a year.

Eight employees work in the sawmill. Logs are processed by a log carriage and vertical twin band Saw with six-inch blades. There is also a five-blade circular saw multi-rip, board edger, circular saw trimming machine and gutter conveyors that splits the residues which are sold. The sawmill capacity is an average of around 140 cubic metres.

Profitable sawmilling is possible

Du Plessis says it is possible for sawmill owners to run a profitable business. “This is what we are about. We believe that it is important for African sawmillers to know their raw materials and match it with their market needs,” he says.

“Profitable sawmilling is possible. There is a growing international market for Brazil’s plywood. The higher recovery rate is because the sawmillers have access to the best processing equipment for their raw materials and markets and, importantly, they aim for the highest possible recovery throughout their mills and not just in the wet or dry mills.”

“A significant factor in profitability is to invest in the correct processing machinery that is fit for purpose. It is time for existing sawmills to re-examine their inputs, transformation processes and outputs. It is possible that they may be losing valuable recovery because they are using the wrong technology and machines for the job.”

Du Plessis explains that everything Newsaw recommends is designed and built for African conditions. “Our clients recognise that we are a highly experienced and hands-on one-stop-shop that can advise, design, install and maintain entire sawmills or lines or specific machines. We have a strong PLC crew that can work on any machine in our industry.”

Newsaw has partnered with a fully equipped engineering workshop in Pretoria and professional mechanical, boiler making, structural and electrical engineers to provide a backup service to the entire industry. They do quite a bit of project development work and project fundraising throughout Africa. The company’s administration office is in Cape Town, its technical office and workshop is in Pretoria and they have an active office in Angola.

“We have a reputation for consultation and designs based on profitability. We would rather lose a job than provide a client with equipment that will hamper its growth and development. We have worked in and for companies in Mozambique, Democratic Republic of Congo, Zimbabwe, Angola, Ghana, Brazil, and Australia.”

Newsaw invites sawmillers interested in participating in the next tour to Brazil to contact them.
Public hearings on land expropriation begin

The land expropriation without compensation public hearings hosted by the Constitutional Review Committee have kicked off and will take place in all nine provinces until 4 August 2018.

Chairman of the parliamentary committee, Vincent Smith, said that 722,000 written submissions have been received by Parliament on the topic before the deadline of 15 June. Forestry South Africa made a well-researched and detailed submission on behalf of the forestry industry and Roger Godsmark urges everyone from the sector who intends to speak at the public hearings to read the document, which is available on the FSA website, beforehand.

In a separate step, Parliament has delegated responsibility for processing the written submissions to an external service provider that has 30 days to capture all the submissions and produce a report. If the figure of 722,000 submissions is accurate, they will have to process over 24,000 submissions per day.

The public hearings see the constitutional review committee split into two groups, with one covering inland areas and the other the coastal areas. The hearings will be run like a parliamentary committee, and translation services will be available. Speakers should ideally make their case within five to 10 minutes and if multiple representatives from a single organisation are present, only one will be permitted to speak on behalf of the group.

The committee only wants to hear responses to the following questions: “Must the Constitution change to allow land expropriation without compensation; if so, how? If you don’t think the Constitution must change, why don’t you think so?”
Multisaw unveils new range of Pinnacle machines

South Africa’s manufacturer of world class sawmilling machines, Multisaw, has announced the launch of their newly developed and tested range of machines known as Pinnacle machines.

Multisaw operates from its base in Plettenberg Bay in the Southern Cape and has built a reputation on the design and manufacturing of saw mills that improve throughput, increase recovery, reduce power consumption and elevate overall sawmill efficiency.

Neil Murray, Multisaw’s managing director says the Pinnacle range embodies everything that Multisaw’s customers expect from their machines – heavy duty, robust, and made to withstand harsh African conditions.

The Multisaw design team does not shirk its duties when choosing steel size and therefore the machines are typically heavier in construction than other similar machines. Also, being a small owner-managed business Multisaw is able to offer machines at much more competitive prices than similar imported machines. An important factor for all sawmillers is the fact that support and backup is local, in local time and the parts are in stock locally.

The new Pinnacle range includes
• Log scanning tally systems
• Log sorting systems
• Horizontal fingerjoint systems
• Linear and component saws
• Optimising cross-cut saws
• Multiple head trim saws

Log scanning tally systems
Numerous Pinnacle log tally systems are in use currently and the system is inexpensive and makes it easy to receive critically valuable information. Managers no longer need to hand measure incoming logs or believe the suppliers’ tally. Shift volumes are available live in real time so management can quickly react to any unnecessary stoppages.

The Pinnacle installation team proudly wearing their AP Green sawmill jackets under the log rotator at the sawmill’s log sorter installation
• OPTICUT
• LINEAR SAW
• COMPONENT SAW
• HORIZONTAL FINGER JOINT MACHINES
Log sorting systems
In conjunction with the Pinnacle log tally system the log sorter unbundles, singulates, scans and places logs into class bins specified by the customer. The classes are length and diameter intervals or whatever the user prefers. A log rotator is also an option where logs need to be orientated either big-end or small-end first into the primary sawing machine.

Horizontal finger joint systems
For aesthetic reasons Multisaw decided to produce a Pinnacle horizontal fingerjoint system. This gives a line on the face of the board rather than the unsightly zig-zag. There is a high volume automatic machine available as well as a lower volume and less expensive system for the smaller user.

Linear roof truss automatic saws
Multisaw is proud to introduce the new Pinnacle linear saw for use in Mitek roof truss plants. The machine uploads jobs from the Mitek design software and automatically saws the roof parts according to the specified length and angle. The software for the Pinnacle machine was developed in-house by Multisaw and the machine was designed in partnership with Mitek.

Murray says this is great news for local truss manufacturers as the only alternative machines are imported from the United States at great cost and the time zones make it difficult to get support and backup when it is needed. Multisaw’s service department is on-line or a phone call away and parts are available in all major centres. In the case of an emergency a technician is a local flight away.

Component saws
The Pinnacle component saws are similar to the roof truss saws and can be programmed to produce cut-to-length and angle components. It is ideal for customers that need to cut a number of components in a cycle. Data can be input using Microsoft Excel as a translator. Optimisation of material is incorporated so that the most efficient nesting is achieved.

Opti-cut cross cut
The Pinnacle optimising cross cut saw can be programmed to
Linear Saw

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Office: 044 532 7840

https://m.youtube.com/user/multisawZA
Sawmilling

cut-to-length and it can quickly and efficiently sense chalk lines drawn to mark defects and remove them. There are different options available depending on customer needs, such as the option to cross-cut defects and default to product length.

Cycle time is quick with a crank-type saw actuator and high feed speeds through the machine. The feed rollers are sharp, hardened and scrolled to keep dimensions accurate. In addition, the rollers are segmented so that high wearing sections can be swapped out before replacement is necessary.

**Multiple head trim saw**

This Pinnacle multi-head trim saw is ideal for use where a number of accurate same-length pieces are needed out of longer lengths. The run speed is fast and changing the cut length is as quick as stopping the machine, unlocking the head and shifting it with the rack and pinion system. The system ensures that the sawing heads remain perfectly in line with the cut and it takes only two minutes to make the size change.

The machine is modular and is able to accommodate as many sawing heads as required. This is made possible because the base length is available from three metres to six or nine metres or longer. An added feature is that because the top hold-down frame is cantilevered, material that is longer than the base can be cut.
Trim Saw

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https://m.youtube.com/user/multisawZA
Wood-Mizer adds Swedish woodworking machines to its line-up

Wood-Mizer has acquired the business interests of 30-year-old Swedish woodworking machine manufacturer, MOReTENs.

The acquisition of MOReTENs places a full range of four-sided moulders, planers, table saws, spindle moulders, planer/thicknessers and CNC routers into Wood-Mizer’s globally available product range.

Wood-Mizer’s initial successes in the thin kerf narrow-band portable saw mills market created the momentum that resulted in new acquisitions, product innovations, expanded ranges into new industries and a fast-developing global manufacturing footprint that now includes the USA, Europe and Sweden.

The addition of MOReTENs products gives Wood-Mizer the ability to offer a full range of equipment that can seamlessly convert logs into dried lumber and finally into finished wood products - all backed by Wood-Mizer’s expertise and commitment to excellent customer service.

“Throughout our history, Wood-Mizer has been committed to providing the best quality equipment to process logs into finished wood products,” explains Wood-Mizer president and CEO Richard Vivers.

“The affordable and versatile moulder and planer product lines from MOReTENs have been proven worldwide for decades and are now backed by the high-quality service and support network customers expect from Wood-Mizer.”

“To add to the tradition of excellence and continuity in expertise, we have asked Bo Mårtensson, the founder of the company to join us as the general director of the MOReTENs factory in Ostersund, Sweden,” comments Vivers.

“Many years ago, I was a young engineer with carpentry experience when I started MOReTENs and began building woodworking machinery,” says Mårtensson.

“I’m proud to see my products in workshops worldwide. Our incorporation into the wider Wood-Mizer product family
The easy-to-use control panel gives access to all machine functions.
The user friendly measurement scales makes it easy to adjust the height and width of the working parts.

Wood-Mizer started with the phased introduction of the MORETENs range into its global distribution network earlier this year. The MP260 and MP360 four-sided moulders and their tooling will be introduced to South Africa first, with the rest of the MORETENs product family following later.

“We are confident that the MORETENs moulder-planer combination represents a new chapter in affordable, high quality, moulding and planing capacity,” says Gavin Prowse, managing director of Wood-Mizer Africa.

“New and existing woodworking companies now have access to technology that can plane and profile in one pass, which to date fell well outside the budgets of many companies and prevented them from entering the market or improving their production capacity and quality.

“The small footprint of the unit makes it easy to slot into existing production layouts and inexpensive to link to support services like dust extraction.

**MP260 planer-moulder**

The Wood-Mizer MP260 four-sided planer-moulder is a versatile, compact machine engineered for professional woodworkers, carpenters, and joiners in the construction trade.

It planes and moulds boards on all sides in a single pass into a variety of products including tongue and groove flooring, planed boards, crown moulding, cabinet trim, panelling, door and window frames, and furniture components.

The maximum material dimension that can pass through the unit is 230mm x 410mm. The unit’s four cutter heads are driven by 3kW motors.

**MP360 planer-moulder**

The MP360 four-sided planer-moulder is a high-production, large capacity machine that has been engineered to process larger planks. It has a maximum planing-moulding height of 230mm and a maximum cutting width of 510mm.

The unit’s four cutter head motors range in size from 3 – 5.5kW with the feed speed at 3-15m/minute.
Less Waste, More Profit

*Our customers have seen overall recovery improvements of up to 2%*

High Level Specifications
- Material Thickness: 20 to 70mm
- Material Width: 70 to 400mm

Material Length: 1,5 to 6,6m
- Piece Count: Average 15 pieces/minute (length dependent)

Wood-Mizer Africa (Pty) Ltd
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UCL Sawmill in Glenside in the KwaZulu-Natal Midlands is adding significant value to its raw materials as a result of the installation of two Wood-Mizer Titan EA3000 Optimising Edgers.

The two Wood-Mizer Titan EA3000 Optimising Edgers are part of UCL’s ongoing sawmilling improvement programme to increase its sawn timber production capacity and efficiency. The vertically integrated agricultural company uses its own commercially grown timber to produce certified structural timber that is sold locally and in the region.

The first EA3000 was installed as part of a complete Wood-Mizer Titan sawmill line that went live at UCL Sawmilling in 2015. The second EA3000 replaced a manual edging system on the sawmill’s framesaw line in February 2017.

UCL Sawmilling’s operations manager, Keith Bailey, says the company decided to opt for the optimising edgers because of availability and cost. “The first unit was part of the Wood-Mizer line and the fact that it met our expectations and requirements primed the decision to get the second unit,” explains Bailey.

“On the bandsaw line, if we were to include more 25cm diameter logs in the current 13cm to 23cm diameter log mix, we would reach between 180 and 200 cubic metres per nine-hour shift.”

Bailey says it is difficult to do a volume comparison between the volumes achieved with the EA3000 when they did manual edging on the framesaw line. “This is because our log diameters have changed. We’re currently cutting 25cm and above diameters on the frame saw line and our input now stands at between 180 and 200 cubic metres per nine-hour shift. However, the installation of the optimising edger in this line has improved the wetmill recovery calculated over six months by 1.4%,” explains Bailey.

“Due to the fact that the optimising edgers have removed the human error that are associated with manual operations, the recovery in the wetmill is now more consistent and therefore has a positive impact on the bottom line. I am sure that if we were to increase our volumes of 25mm and 19mm boards by changing our cutting pattern strategy, our recovery will increase even further.”

Manual board edging is a high-piece count and physically demanding activity where mistakes add up and recoveries drop as crews tire towards the end of a shift. To manually wrestle heavy side boards into position and judge which position, and dimension will give the best recovery, often results in bottlenecks which impacts on output and overall sawmill productivity.

Optimising edgers are designed to alleviate the bottlenecks that occur during the decision-making and processing stages of the edging process to improve overall edging efficiency.

According to Wood-Mizer, their Titan range of optimising board edgers balance cost with effectiveness to give sawmillers an intelligent edging solution with a justified price tag.

The entire edging process is automated and uses optical scanning technology to achieve high precision and low waste edging of boards. The system is made up of a material infeed conveyor, scanning station, positioning station, sawing head and waste separation outfeed.

On the material infeed side, a transverse or in-line material infeed option is available. The transverse conveyor has an unscrambler and cross-conveyor that separates and indexes each board for scanning. The in-line conveyor can also be fitted with an unscrambler to separate material before feeding it into the machine.

The transverse conveyor transfers long and short lengths equally well while the in-line conveyor is better suited to shorter lengths. Scanning is done in-line or transverse depending on the material infeed option that is chosen. The computer reads the profile of each board to confirm...
Global lumber prices continue climb in the 1Q/18

Wood Resource Quarterly report

North America
After softwood lumber consumption in the US reached a ten-year high in 2017, demand fell in early 2018. Despite the reduced first quarter consumption, lumber production on the US west coast was actually up due to strong demand from China.

While lumber production in Canada’s eastern provinces increased slightly in early 2018, sawmills in British Columbia reduced their production by an estimated three percent in the 1Q/18 as compared to the 1Q/17.

Northern Europe
In the Nordic countries, the sawmilling industry has seen their markets improve both in regard to demand and to pricing during the past year. Although export volumes declined somewhat in early 2018 as compared to the same period in 2017, prices increased, reaching the third highest level seen in the past decade.

China
Demand for wood in China slowed in the 1Q/18, following a record 2017, with import volumes of softwood lumber falling to their lowest levels since the 4Q/16. Imports from Canada fell the most, with quarterly shipments reaching an eight-year low. The Nordic countries have filled the gap where Canadian suppliers have pulled back. Lumber volumes from Finland and Sweden accounted for 12% of total imports, a doubling of their market share as compared to 2015.

Japan
The record high softwood lumber prices in the US have impacted the costs for North American lumber imported to Japan in the past six months. In May 2018, prices for US Douglas-fir lumber and Canadian hemlock lumber delivered to Japan reached their highest levels for the month of May since 2013.

Russia
Russian lumber exports reached an all-time-high volume of 28 million m³ in 2017. Exports to China fell 19% y-o-y. Average export prices have trended upward in both US dollar terms and rouble terms over the past two years, with the biggest increases occurring in lumber sold to China, Uzbekistan and Egypt.

Global lumber, sawlog and pulpwood market reporting is included in the 56-page quarterly publication Wood Resource Quarterly (WRQ). The report, which was established in 1988, tracks sawlog, pulpwood, wood chip, lumber and pellet prices, trade and market developments in most key regions around the world.

how the board will be edged to recover the best volume and value.

After scanning, the boards pass through an alignment station where the board width is read and communicated to the electric-servo sizing system that adjusts the width of cut before the board is cut. Depending on the conditions, the EA1000/EA3000 can edge up to 20 boards/minute at feed speeds of up to 240m/minute.

The easy-to-use Windows-based computer control system can be changed to a manual PLC system with a flick of a switch. Online support allows technicians to dial remotely into a machine to diagnose and remedy issues.

Wood-Mizer’s local after-sales service network, readily available spare parts and training assistance, add additional avenues to slash costs plus the certainty of lifetime backing.
• 70cc professional-grade model with an economical 2-MIX engine with 4.4 kW

• Lightest high-performance chainsaw in the 70 cm³ cubic capacity class at 6 kg

• Lighter flywheel with smaller diameter

• Very high torque over wide speed range

• Impressive power to weight ratio of around 1.4 kg/kW

• Lower system weight and easier handling through re-engineered cylinders, slimmer chain sprocket covers and changes of material for other components including the engine units.

• New HD2 air filter with a radial seal has a longer life and improved fine dust filtering efficiency for improved service periods and easier maintenance.

• Proven features include the side chain tensioner, captive nuts and a one-part shroud with quarter-turn locks for ease of access to all maintenance components, such as the filter or spark plug.

*Like any superior item, STIHL products are only available at specialized dealers nationwide, for expert advice and matchless after-sales service.*
All wrapped up

If you are wrapping wood-based profiles – anything from MDF to pine - with paper, vinyl, or decorative materials, you need to know about a brand new development from Kleiberit that can help you cut costs as well as maintain your product quality, even with difficult-to-wrap materials and challenging profiles.

Kleiberit’s PUR HM 702 range of profile wrapping adhesives is well proven and for several years, 702.5 in particular, has been a core product for manufacturers from around the world working with anything from architraves to skirtings and profiles used in kitchens.

The 702 range includes viscosity grades for demanding materials that are perfect for more delicate materials with a very low softening point, or vinyls with a low overall thickness that can easily stretch during manufacturing.

But with its new 702.8 grade, launched at Holz-Handwerk, Germany and promoted strongly on the stand at Xylexpo, held recently in Italy, Kleiberit has come up with a winning formula that will really appeal to those servicing the most cost-conscious sectors of the profiles market.

“We have just released a new product called 702.8.08,” says Kleiberit’s Wolfgang Hormuth.

“It’s a new PUR HM adhesive which has very good processing characteristics that works well with many materials like paper, PVC and other foils.

“*This product has good application characteristics at a very attractive price, but we’ve managed to achieve
Special Requirements Need Special Solutions

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that without any reduction in the performance of the product. It has been run through industrial processes and has performed extremely well from high gloss foil wrapping up to veneer wrapping.

“In the past, we have always offered different products for foil, paper and veneer. The new 702.8.08 product will work with many types of substrates and works on wrapping machinery from single profile wrapping machines to complete surface lamination lines that are equipped with slot nozzle technology.”

Aside from the attractive price, the key advantages you’ll benefit from with Kleiberit 702.8.08 include a very high green strength with pronounced tackiness, heat resistance to over 150 degrees celcius and cold resistance down to -40 degrees.

“The 702.8.08 product is also sustainable,” adds Bradly Larkan, Kleiberit’s General Manager for the UK, Ireland and South Africa.

“The supply chain, availability of raw materials and our stock holding around the world means everything is geared for customer satisfaction, allowing us to meet the requirements of the marketplace whilst offering manufacturers an economical, cost-effective option.

“We pride ourselves on being able to offer a specific technical product offering, and this product is no exception.

“Every market is looking for a product that performs at the highest level for the decorative materials they are wrapping. However, in the UK, most manufacturers want to achieve standards set by the FIRA Institute. In order for us to fully service this market, the new 702.8.08 range complies with the test methods used to meet the requirements set by FIRA.”

Like the other products in the 702 range, Kleiberit’s 702.8.08 is available in 1.8kg, 20kg and 190kg packaging options and is already available for immediate delivery.
Asia’s Leading
Furniture Production Fair

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American red oak, fibre glass thread and steel are the elements chosen by the architecture studio Miralles Benedetta Tagliabue (EMBT) to produce ‘Weaving architecture’, which is on show during the Biennale Architettura 2018 in Venice, Italy.

Unveiled in May, the installation will remain on display until November 26, 2018. EMBT’s project conveys how manual techniques, such as weaving, can be incorporated with other materials to soften the visual effect and blur the boundaries created by architectural structures.

EMBT is constantly experimenting with combinations of materials and first drew attention with their wicker Spanish Pavilion at Expo 2010 Shanghai. They then worked on a metro station in Clichy-sous-Bois and Montfermeil (on the outskirts of Paris) as part of Grand Paris Express that incorporates a marketplace to be built with fibres.

‘Weaving Architecture’, at La Biennale, deals with the concept of weaving at different scales: weaving the city through its metro, weaving activities of people in the public space, and weaving the structure of the canopy to dress it with fibre fabrics.

The canopy provides protection and shade, creating a comfortable, semi-open space for various communal activities. Its colourful nature recalls patterns of African traditional clothing as well as local graffiti – an artwork owned by the people. This architecture, like the infrastructure it represents, links territories and builds a sense of social inclusion by manifesting architecture’s social role.

Currently the Grand Paris Express is Europe’s largest infrastructure and development project with 200km of automatic metro lines and 68 new stations to build, which integrates metro networks, trains and airports. With a scale of this venture, the project is not only a technical and architectural opportunity but also an economic, social and cultural challenge that will make these stations and their neighbourhoods better places to live.

The red oak components of Weaving Architecture were made in Madrid by the craftsmen at Intrama, a workshop with more than 30 years of experience in the field of architectural carpentry. According to Antonio Arce, director of Intrama, the workshop has been working with red oak since the 80s: including major projects such as the joinery of the Spanish Parliament.

It is a species Intrama likes to work with because it is very noble, has a great look and is easy to work with. For this project, EMBT decided to use a natural oil to finish the timber to highlight the wonderful grain of the red oak.

Red oak is the dominant species in the US hardwood forests with distinctive grain and wood that is not always red in colour. The name is supposedly due to the Autumn leaf colour. Red oak trees grow only naturally and almost exclusively in North America, although planted elsewhere. In general, the sapwood of red oaks is light brown and the heartwood is often pinkish to reddish brown. American red oaks have very good overall strength properties relative to weight. Its main uses are furniture, flooring, doors and certain construction applications.
According to the American Hardwood Export Council (Ahec), red oak not only has a minimal carbon footprint but is also truly sustainable. The American hardwood forest, which occupies about 120 million hectares of the United States, has been well managed by successive generations of small landowners. Trees are selectively harvested and replaced through natural regeneration. The timber grows at a much higher pace than it is extracted, and the forest increases by 401 hectares each year.

Two years ago, EMBT embarked on a journey with Ahec to demonstrate the potential of underused species, which despite growing abundantly in the forests are being underused because they are not in fashion. This journey started with The Workshop of Dreams, where they teamed up with Pritzker Prize Director Martha Thorne to create a series of coffee tables made from sustainable. It continued with Too Good to Waste, an installation presented at Milan Design Week 2017, which opened up a dialogue about the need to use all the different species that the forests produce in order to achieve real sustainability.

When thinking about the material for Weaving architecture, American red oak was the obvious choice for EMBT. Thanks to those two projects, they had previous experience with this beautiful timber and were aware of its outstanding environmental properties.

Exhibition credits

About the Architect
Benedetta Tagliabue studied architecture at the Istituto di Architettura di Venezia (IUAV) and currently acts as director of the international architecture firm Miralles Tagliabue EMBT, founded in 1994 in collaboration with Benedetta Tagliabue.
with Enric Miralles, based in Barcelona and, since 2010, in Shanghai.

Among her most notable projects built are the Edinburgh Parliament, Diagonal Mar Park, the Santa Caterina market in Barcelona, Campus Universitario de Vigo, and the Spanish Pavilion at the 2010 Shanghai World Expo which was awarded the prestigious RIBA International “Best International Building of 2011” award. Current studio projects include the Business School of Fudan University in Shanghai, office towers in Xiamen and Taichung, public spaces of HafenCity in Hamburg Germany, the metro station Clichy-Montfermeil in Paris, France (first prize in competition) and the metro central station in Naples, Italy.


She is also the director of the Enric Miralles Foundation, whose goal is to promote experimental architecture in the spirit of her late husband and partner Enric Miralles.
The growth in the building industry in the Southern Cape is providing a boost for local truss and furniture manufacturing businesses, prompting Buco in George to upgrade and invest in a state-of-the-art planing machine to help keep up with the demand and improve the quality of work completed.

Buco’s production manager, Steve Fivaz explains that a lot of homework was done before deciding on which machine to buy. They decided to invest in a Goodtek top and bottom planer from Wiese Woodworking Machinery because the company is based in George and has a national track record of supplying quality machines and good service for more than 20 years.

The existing Buco machines are the older, traditional surface planers. These have served and are still serving the company well however they are slower because they are manually fed and although the quality produced by their parallel planer blades is satisfactory, it does mean that clients who are buying wood for palisade fencing and other decorative uses must put in a lot of extra work before they are satisfied with the feel and look of the products.

The new machine now alleviates that challenge, ensuring a smooth, great quality finish.

Sam Wiese of Wiese Woodworking Machinery says Goodtek is a Taiwanese company that has specialised in planing machines since 1996. “We have represented Goodtek in South Africa for quite a while now and have found their machines to be well researched, developed and manufactured and their backup is excellent,” says Wiese.

Buco has installed the Goodtek 365ARD planer that has top and bottom spiral cutter heads fitted with turn-over tungsten carbide tipped (TCT) knife bits. It has a working width of 635mm, sectional infeed rollers and pressure spikes that hold the workpieces of various sizes firmly and evenly. The helical cutter heads are precision machined and provide an extremely fine surface finish.

Wiese provided training to the Buco George operators, helped develop its standard operating procedures and makes regular visits to the plant to ensure that everything is running smoothly.
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CMC Group invites you to visit their stand at WoodEx 2018

The CMC group will be exhibiting at WoodEx 2018 and invites everyone who has supported them over the past 27 years to visit them and see all the new machinery on display at the show.

The CEO of the CMC group Pieter Olivier decided this year to increase the show stand to display some of the company’s bigger CNC machinery and their range of vacuum presses. He also included the Alusmart aluminium range of machines which will be interesting for companies working in the architectural and design fields of the construction industry.

Leadermac moulders

While the stand will showcase mainly panel processing equipment for the kitchen, shopfitting and furniture industries, it will also introduce the newly designed Leadermac moulders to the solid wood products manufacturers. All the machines on display will be fully operational and CMC’s technical support staff and a sales team will be able to assist with all technical enquiries and information regarding the working capacity and specifications of the equipment.

Not to be missed AES CNC show special

The flagship on display will be the AES extreme 2142 CNC nesting machine that can cut, drill and router 12 x 6 board sizes. The AES is fitted with the latest European standard safety features including a cutting depth selector, and human error prevention built into the software.

The AES software consists of the latest Alphacam advanced programme as a standard, with the option to upgrade to the Cabinetvision software to handle front and back office designing with a stock management system included.

The model on display will be available at a special show price that includes an automatic off-loading system and a rotary tool changer with two Becker 250 cubic metres vacuum pumps that are housed in their own separate stand raised off the floor. This allows for water prevention as well as sufficient air circulation to protect these costly pumps. The electro spindle and boring heads are Italian HSD standard with a 12hp capacity to cut durable material like aluminium, graphite board as well as Perspex and composite materials.

Other interesting machinery on display will be the AES Sirius through-feed boring machine with built-in router head, which assist clients with CNC drilling, grooving and selective router designs on panels.

New KDT panel processing range

The new KDT range of medium to high production panel processing will also be on display, with the KDT 468JK full house edging machine, as the showpiece. This machine offers pre-milling cutters and two sets of top and bottom trimming blocks to increase the quality on the finish.

The front and back trimming blades are on self-lubrication linear slides and when fitted with a double corner rounding unit for high quality door and panel finishing, it is an excellently specced machine at a very competitive price. The polishing unit is supported by front and back panel cleaning liquid applicators to ensure quality end results on gloss, acrylic and impact edging products.

The KDT range also offers solutions for panel cutting on the medium to advanced high production beamsaw and multiple drilling machine and edging solutions to suit most budgets and specifications. Our consultants will in our meetings discuss your needs and provide you with the correct package all round to strengthen and grow your company.

Ribbex Robo

CMC show team will explain how the Ribbex Robo vacuum press in single and double table configurations can take care of your wrap door and foiling requirements. This machine in the latest black and white colour change will demonstrate how to effectively and simply manufacture high gloss doors and PVC components.

Aluminium products

CMC’s main aluminium machinery supplier Yilmaz from Turkey showcase various product solutions for on-site machinery for CNC controlled aluminium and PVC door and window machines. The Alusmart team will welcome all woodworkers who would like to stretch their wings and try the aluminium production side. Olivier points out that many wooden component manufacturers have boosted their turnover by investing in this value adding benefit to their solid wood production business.

Trust your supplier

The CMC Group says that apart from demonstrating its extensive range of technological solutions, it is at the show to convince local clients that quality products can be obtained in South Africa when they trust their machine supplier’s backup and service. Olivier says many manufacturers have lost money and time with cheap imports from the Asian markets. It is important for clients to work through local agents who offer local warranties that protects them. “I have paid my school fees over the years and clients should take sound advice from leaders in the machine industry when purchasing expensive equipment,” he says.

“We would like to invite everyone to our stand at WoodEx 2018 and look forward to meeting new clients from all over the continent who would like to see the machines in production and discuss suitable productive solutions.”
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The much talked about and by now infamous National Minimum Wage Bill, along with the Basic Conditions of Employment Amendment (BCEA) Bill, the Labour Relations Amendment (LRA) Bill, along with the National Minimum Wage Exemption Regulations, were passed in Parliament on 29 May.

This despite objections from within the already hard hit industry, where some are still dealing with the aftermath of one of the worst droughts in recent years, as well as a recent spate of devastating forest fires in the Eastern and Western Cape.

The three Bills will now be tabled in the National Council of Provinces for their approval, after which they will be signed into law by the President.

The final National Minimum Wage Bill has not changed much from the initial draft that was gazetted, despite numerous recommendations made to the Parliamentary Labour Portfolio Committee by Forestry South Africa (FSA), Agri SA, and numerous like-minded institutions, hoping to reduce the potential negative impacts the the Bill could have on employment levels and the economy in general.

According to Forestry South Africa’s operations director, Roger Godsmark, it must be noted that it is not all doom and gloom, and that certain positive changes have been made.

Sectoral Determinations has been retained and will now be administered by the NMW Commission, and not the Minister of Labour as was previously the case.

“This is important because the NMW Commission will determine future wage rates for, among others, forestry and agricultural workers,” says Godsmark. “This could well lead to an extended phasing in period in respect of the wages for these workers as was recommended by FSA.

“The initial Bill only allowed for a one year phasing in period – 90% in year one, and 100% in year two.”

Another positive is that, in terms the Sectoral Determination, the ‘allowable deductions’ from wages for food and accommodation, once again as recommended by the FSA, will continue.

“This is a major concession,” says Godsmark. “These concessions were not allowed in terms of the original National Minimum Wage Bill.

“Allowable deductions for food and accommodation of up to 10% each from a workers wage, as is currently the case, may thus remain in place.

“This is on condition that certain criteria are met as per the Sectoral Determination for the Forestry sector.”

Another important issue to note is that Agri SA head of Labour and Development, Jahni de Villier, has been appointed as a member of the National Minimum Wage Commission.

According to Godsmark, this is to be welcomed by the industry as it will ensure that the organised agriculture industry has a voice on the commission.

While the respective bills have been passed in Parliament, the implementation date of the National Minimum Wage Bill is yet to be decided upon.
REM appointed sole agent for MARTIN saws

REM is proud to announce that since June 2018 they are the new sole agent for the German woodworking machines manufacturer, Martin, for Sub-Saharan Africa.

Martin’s range of machines are tried and tested in the South African market and are trusted for build quality and reliability. REM is proud and excited to be associated with this prestigious brand and plans to further develop Martin’s reputation to ensure that it is recognised as the leader in precision saws.

Martin Woodworking Machines is a subsidiary of the family owned Otto Martin Maschinenbau, a leading manufacturer of German woodworking machinery for 96 years. This family influences the fortunes of the company with a great sense of tradition and innovation and its deep-rooted connection with the community and the people who work for the company.

The Martin apprentice workshop that was founded in the 1970s is a clear indication of the company’s recognition of social responsibility. Thanks to the solid professional training of young people in a whole range of managerial, technical and administrative professions, Martin can rely on highly motivated and excellently trained personnel – the basis for continuous innovation. In turn, the workforce shows its appreciation with a high average length of service with the company.

Otto Martin founded the company on 4th February 1922 at the age of 20. It has earned a reputation of producing advanced woodworking machinery that is 90 percent designed, engineered and made in-house.

This focus on the core business set the course for the company’s success in producing wood-processing machines.

REM is confident that the partnership with Martin will assist both companies to successfully cope with future challenges and continue to stand for top quality, pioneering machine technology and optimum customer service.
NEW APTICO SURFACE

Visually Irresistible, Anti-Fingerprint Surface

FunderMax’s Aptico Surface is a unique matt surface sensation that is the exceptional result of specialist patented technology.

Featuring a special anti-fingerprint finish, FunderMax’s Aptico Surface’s warm texture and fine structure makes it visually appealing for a host of interior applications including interior decor, furniture, shop-fittings, tables, walls and more.

Aptico also features an innovative element of thermal repair for micro-scratches and abrasions allowing you to effortlessly enjoy your surface, time and time again.
Local woodworking machine supplier Geerlings, as usual, be a prominent exhibitor at the annual Woodex For Africa show, will be held from 11 to 13 July at the Gallagher Convention Centre in Midrand.

According to Geerlings representative, Jacqueline Geerlings, their stand (stand number A12), will this year be a little smaller than in previous years, measuring a still impressive 65m², as the company will, in addition to their stand at Woodex For Africa, be hosting a concurrent show to at their brand new premises situated at 32 Ontdekkers Road, Roodepoort.

This is to unveil the impressive new headquarters that they have recently occupied after many years at their old premises in Krugersdorp.

Some of the top technologies on display at their in-house show includes CNC drilling and routing machines including the SCM Morbidelli M100 four axis CNC, and a panel processing SCM Sigma Impact beamsaw.

Also on show at the Geerlings in-house show/unveiling, will be over 100 value adding and finishing machines.

The company has also announced that their old headquarters at 7 Adcock Street, Chamdor, Krugersdorp, will be the venue of a second hand machine clearance auction on 13 July.

Woodex For Africa

As part of their offering at Woodex For Africa, Geerlings will bring a first to the woodworking fraternity in South Africa, in the form of an Edda 1000 Horizontal Circular Stretch Wrapping machine for panels, doors and components.

This will mark the first time that this post-finishing machine, designed for bubble wrapping panels for transport, has been displayed in South Africa.

Other machines to be displayed at Woodex For Africa include a range of standard high quality value adding machines such as the SCM K560 edgebander which features award winning air-fusion technology, making seamless edging a reality. The air fusion is an extra that can be ordered.

Geerlings brings their edge banders in with the Smart Glue pot (SGP) on SCM award winning patent – which produces the perfect joining line for edging, thanks to the unique spreading roller.

Geerlings will also be displaying a range of other machines, including the SCM Minimax panel saw, spindle moulders, smaller edgebanders, as well as traditional single function machinery from Holytek.

The company will also have on display a range of Geertech machines originating from carefully selected and quality-proven Chinese manufacturers, at very competitive prices.
The annual South African Music and Guitar Expo, held recently at the Wanderer’s Club in Johannesburg brought together some of the top music instrument and equipment suppliers in the country.

And while musicians flocked to the event to see the latest and greatest of what is on offer in the ever evolving technological landscape of musical equipment, the exhibitors that, to everyone’s surprise, truly stole the show this year, was the local manufacturers of top quality boutique musical instruments.

Among the stalls displaying and selling everything from guitar strings, to speakers and cables, amplifiers, effects modules and everything possibly imaginable for the production of music, including some of the top international brands of music instruments including Gibson, Fender, Ibanez, Tokai, Yamaha, and top German brand Duesenberg, was one stall co-operated by four of the top boutique guitar builders in the country, namely Donmeister Guitars, Pearson Guitars, CM Custom Guitars, and Alain Smith Guitars.

Showgoers flocked to the stall to inspect these locally built guitars, mostly, I suspect, to see whether they are able to hold their own against some of the top international brands that have become so entrenched in the industry. And to everybody’s surprise, the originality, the tonal quality, the quality of both the craftsmanship as well as the electronic and other hardware on these homegrown boutique guitars, more than just stood its ground against the forerunners in the international space; in many instances, the locally produced instruments were in every way superior.

**Electric guitars**

Electric guitar builders, Donmeister Guitars, Pearson Guitars, CM Custom Guitars, and Alain Smith Guitars literally stole the show at the 2018 South African Music and Guitar Expo.

Being located in the main show hall, the stand was overrun from the opening day right through to the last minute of the show.

Labeled as boutique guitars, these instruments are mostly custom built per order, and the astonishing attention to detail, the innovative designs and the rarity of the materials used, makes for a truly unique instrument.

Some of the guitars also featured some interesting structural features, especially the neck-through designs by Alain Smith, who, in order to keep the weight of his instruments to a minimum, had to come up with a plan to ensure the structural stability of the instruments.

He managed to achieve superior structural stability in his very light instruments by coming up with his through-neck design, with a five piece laminated neck, that runs through the entire length of the guitar, with the body side-pieces laminated to the neck.
According to Charl Malherbe, owner of CM Custom Guitars, the marked difference between a boutique guitar from any one of these local builders and mainstream brand name guitars, is the attention to detail in everything from the design of the instrument to the construction and even the tonal attributes of the instruments.

“These are not guitars that come off some assembly line that produces hundreds of instruments per day,” he says. “Every one of these guitars are individually designed and handmade down to the smallest detail.

“From raw wood to finished product, they are produced one by one in mostly low-tech environments where you cannot rely on a machine to get it right for you. It requires skill and patience to get the shape, the structural integrity with the neck and joints, the precision in terms of design and playability and the finish just right, and then we have not even gotten to the electronic hardware that produce just the right tonal qualities that you require for the specific instrument.”

From the rare and beautiful timbers used, which include species as varied as Mango wood, African Wild Olive, African Blackwood, African Mahogany, Ash, both flamed as well as quilted Maple, Hawaiian Koa, and a whole host more, to the absolute precision and care that goes into every aspect of the build, locally produced guitars are definitely worth a second look.

In terms of price, the locally produced guitars compare favourably with the top international brands and considering that you get an instrument that is fully handcrafted and not coming off some assembly line, it is well worth the money.

If interest at the show, as well as on online forums is anything to go by, this is an industry with lots of potential in South Africa.

**GE18 competition guitar**

Three local guitar builders, Donmeister Guitars, Pearson Guitars, and CM Custom Guitars, along with Neil Pincus from Rude Rock Pups, (who hand wound, wired, supplied and installed the pickups) teamed up to build a specially designed, one-of-a-kind, top quality electric guitar especially for the 2018 edition of the South African Music and Guitar expo, and the result of that collaboration was one of the highlights of the entire show.

Sporting an African Mahogany body and neck, African Blackwood fingerboard, with flamed maple and rare Hawaiian Koa facade, the guitar literally had showgoers falling over each other to enter the competition in the hopes of owning this unique musical instrument.

The top chamfer was carved and shaped by hand, resulting in breathtaking aesthetic lines as well as superior functional ergonomics, while the combination of Hawaiian Koa, Maple, Mahogany, and African Blackwood, along with the legendary electronics manufactured,
Locally produced boutique guitars stole the show at the 2018 Music and Guitar Expo. The specially designed and made GE18 competition guitar had shoegoes scramble to enter the competition.
supplied and installed by Neil Pincus, ensured that the guitar produced sounds as tonally beautiful as it is visually sculpted.

**Acoustic guitars**

The fine art of luthiery comprises so much more than just fine woodworking, and South Africa sports some of the finest luthiers in the world, with new instruments from companies like Cape Town-based Cassimi Guitars fetching as much as 10 000 pounds in the UK for their unique and innovative guitars.

Unfortunately in both the electric guitar and acoustic guitar sectors, there were some notable absences at the show, including Cassimi Guitars.

But the luthiers that were present more than made up for the absences, with locals, Murray Kuun and Jacobs Lutherie, presenting their ranges of fine handcrafted guitars to crowds of appreciative showgoers.

Murray Kuun has made a name for himself as one of the foremost producers of acoustic and Jazz guitars in the country, and his innovative, sometimes radical designs had showgoers gaping at the astonishing beauty of these handcrafted, tonally perfect instruments.

Jacobs Lutherie, also a distinguished local guitar builder, more known for their stunning traditional acoustic guitars and their attention to fine details, from the aesthetic look and intricate finishes of their instruments to the superior tonal qualities of their guitars, had a fine showing with lots of interest.

Another local luthier that had numerous showgoers stop and stare, was Stones Guitars. A small operation based in Johannesburg, Stones produces only around three guitars per year, every one of them built entirely by hand with and with no stone left unturned to ensure that these instruments are the finest quality that money can buy. Once again the local luthiers firmly held their own even against the top international brands such as Taylor Guitars, Gibson, Martin Guitars, Santa Cruz, and many more.
Luthiery and design: Murray Kuun sets the standard

After a lifetime in the furniture and furniture design sectors, highly regarded industry veteran, Murray Kuun, who also happens to be a connoisseur of classical music, decided to try his hand at violin building.

But, being Murray Kuun, he is not one to conform to the conventional. His keen eye for detail and his unique ideas on design are, after all, what has made him a bit of a legend within the furniture design space.

Kuun was especially well known for his ranges of Wi-Fi and television cabinets, designed specifically to enhance the sound from these devices while at the same time being aesthetically unique.

So, sometime in the ‘90s, he set out to tackle the fine art of luthiery, employing his own ideas in the design of what would become a highly sought after line of violins.

But, after becoming frustrated with the limitations of what one can do with a violin, and seeing an increase in demand for high quality guitars, Kuun decided to expand his range to include guitars.

According to Kuun, this has also given him a bit more scope for creative design individuality.

Kuun has since established himself as one of the premiere boutique guitar builders in the country, with his ranges of mostly classical and Jazz instruments gracing stages and recording studios not only locally, but across the globe.

According to Kuun, the art of luthiery encompasses a lot more that just fine woodworking, as every aspect of an instrument, from the types of wood used, to the bracing structure of the instrument, to the adhesives used, has an effect on how that instrument will sound.

This, to Kuun, is an especially interesting challenge, as he, in his own words, does not look at musical instruments in quite the same way that most other luthiers do.

“I am not a musician who one day decided to build musical instruments,” says Kuun. “I am a designer first and foremost, who happens to have a passion for music.

“This means I come up with a design idea and then I have to figure out how to best generate the sound.”
that I want from the instrument within the parameters of the design.”

And Kuun has proved masterful at it. His unique and innovative guitars, as with his violins, have become renowned across the music industry.

As a package, the combination of sound quality, playability and aesthetics to this level have rarely been achieved in the world of guitar building, especially in South Africa.

Murray Kuun designs and builds each unique creation by hand in a humble double garage from his home on the West Rand, sporting very basic equipment, save for a CNC Step High-Z-S-1000 table top CNC machine, a small band saw, and a belt sander.

All instruments are made using homemade jigs and an array of small hand held woodworking tools, many of them designed and made by Kuun himself.

The attention to detail is astonishing and the array of woods is used is equally impressive.

Kuun’s unique musical creations have proven to be so popular that he has devised a plan that has seen a number of new entrants into the market by offering training to would-be guitar builders, and to people who would just like to build their own guitar.
The training consists of students building their own Kuun guitar - under the watchful eye of Kuun himself, of course - from scratch, in one hourly weekly sessions.

Students get to choose from any of Kuun’s designs, and get to choose the woods that they would like the guitar to be built from.

“I do offer some customisation options from my existing designs, but I do not allow for copies or near copies of existing guitar brands, as the entire point, in addition to building a great guitar, is to make something unique and open the student’s eyes in terms of the design possibilities that one has when it comes to building guitars.

Kuun recently showcased his range of guitars at the SA Guitar and Music Expo, where, as usual, his unique design concepts drew a lot of attention from guitar enthusiasts from across the country.
CM Custom Guitars: the epitome of quality and precision

When local guitar enthusiast Charl Malherbe was bitten by the guitar building bug approximately three years ago, he would never have dreamed that he would, in a few short years, come to be seen as one of the country’s top electric guitar builders.

Charl’s company, CM Custom Guitars, has since its formation gained a loyal following of guitar enthusiasts, especially in online forums, and the popularity of his superior quality handcrafted guitar brand has been cemented with his appearance alongside some other local guitar builders at the 2018 edition of the South African Music and Guitar Expo, held recently at the Wanderer’s Club in Johannesburg, where they received quite a lot of attention for their clean lines, beautiful finishes, and superb tonal qualities.

Looking at these breathtaking guitars, one would think that they are built in a modern factory utilising the latest in technology, but, one would be wrong.

“It’s a very low tech operation, to say the least,” says Charl, and he is not kidding. The design of the guitar is about as technologically advanced as it gets, as he uses a computer programme to do the design drawings.

“Once I have the idea of what I am going to build, I do the design to scale on the computer and I print it out on vinyl. The vinyl prints are then stuck onto pieces of MDF, which are then cut out and perfectly shaped to make master templates of the guitar.”
Charl specialises mainly on one piece guitar bodies, and sometimes two piece bodies, where he laminates the two pieces together, often with additional woods in between for aesthetic purposes.

“Sometimes it is part of the design, and other times, due to the scarcity of the woods that we work with, it is hard to find a large enough piece to do a one piece body, or even two piece body. Luckily the lamination process contributes a lot to both the aesthetic and structural elements of the guitar.”

Once the body template is made, Charl will trace it onto the wood that is to become the body and cut it out using a bandsaw.

“All of my guitars feature carved and contoured bodies for both ergonomic and aesthetic reasons, and I do all of the contouring by hand using a small angle grinder initially and then a number of files, chisels and hand sanding blocks for the finer work.”

He firstly draws his contours onto the wood and then, using the small angle grinder and thereafter sanding blocks, he slowly but surely works the wood until the contours are perfect.

Another feature that makes the CM Custom Guitars range unique, is Charl’s preference for using a technique called faux binding, but in a unique way.

Guitar bodies generally consist of two elements: the body and the top. The body is generally made out of a darker hardwood, for instance African Mahogany, and the top would typically be a flamed or quilted Maple, or even Ash.

Traditionally, faux binding is created by scraping away paint around the edge of the guitar, exposing the sides of the top where they meet with the body.

Charl prefers to do the faux binding during the manufacturing process, by, after contouring the body, taping off certain areas of the top that he would like exposed and not spraying those areas. This creates the illusion of a very intricate binding and lending a very unique aesthetic element to the instrument, that visually enhances the contouring and ergonomic elements of the guitar.

As Charl prefers a set-neck guitar, where the neck joint is glued to the guitar body, a lot of care is taken to make the neck tenon and body mortise joint as perfect as it can be. “A lot of precision is required in this step as the neck needs to fit into the body perfectly. It needs to be perfect both in terms of straightness as well as in height.
otherwise the instrument may not line up correctly, or the strings may end up too close to the body, or to high off the body.”

Charl makes every part of his guitars by hand, and the neck is no exception. He once again uses a series of self made templates to cut out and shape the neck to perfect proportions.

For fingerboards, or fretboards as they are called by guitarists, he uses a number of different woods, depending on the aesthetic finish that the guitar requires. These range from African blackwood to Imbiua and even Maple, among others.

The neck cavity, the neck and the fingerboard requires some of the highest precision work on the entire guitar and fingerboards are cut and shaped as precisely as possible before being fitted onto the neck.

For this, Charl uses different glues, depending on the guitar, but by far one of the most popular choices among guitar aficionados, is hide glue, which hardens to a crystal like quality and has as an effect a unique resonance in the sound of the guitar.

“Unfortunately this product is very difficult to work with because of its very quick drying time,” he says. “Once you have applied the heated up glue you have to be very quick and very precise in your glueing as once it cools back down to room temperature - which is rapid - there is no moving or adjusting anything.” It must be said that hide glue is also great that it can be reheated and dismantled and redone, with a lot less effort than modern wood glue.

Once the guitar is constructed and frets and inlays are installed, and before the electronics are installed, the guitar is stained and finished in clear lacquer or polyurethane, depending on whether the client wants a matt or gloss finish.

The end product is a guitar that sports exceptional attention to detail in every aspect of the instrument, that can compete against a mainstream brand instrument of the same price on every platform imaginable.

According to Charl, the boutique guitar industry in South Africa has not yet gained the recognition or support of the guitar playing community, which can be quite conservative.

“As with most things, people tend to go for a tried and tested name brand instrument, simply because of the reputation the brand has earned.

“What they should consider is that most of those name brand instruments are made in an automated factory, mostly by machines, that can produce up to a few hundred guitars in a day, obviously excluding painting and finishing.

“What they get when they purchase a boutique guitar like I produce is an instrument that was completely handmade from raw wood to finished product, in a meticulous process where no detail is overlooked.

“Every guitar designed in full consultation with the client and to the client’s specific ergonomical, aesthetical, and tonal requirements.”

Still, if one looks at the rapid growth of online followers as well as the keen interest that these guitars commanded at the recent SA Music and Guitar Expo, it seems there is a lot of potential for growth within the custom guitar industry.

Please visit CM Custom Guitars at website: http://cmcustom.guitars or their facebook page: https://www.facebook.com/CharlMGuitars

The latest of Charl’s musical creations
When you need to cut plywood and other large sheets down to size, you’ll want a reliable professional way to make long, straight cuts. An easy way to do this is with the Kreg Rip-Cut and Kreg Accu-Cut saw guides.

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For edge-guided cutting, choose the Kreg Rip-Cut. It has a long guide that follows the edge of your sheet and a long rail that positions your saw. You can just lock in the cutting width you want and then guide the saw along to make your cut.

As you push the saw forward with your dominant hand, use your other hand to hold the edge guide against the sheet. That positions the saw, so you don’t have to worry about following a cut line.

With the Rip-Cut, you get nice, straight cuts consistently and easily. A good tip is to cut with the back face of the plywood up and the good face down. That way, if you get any splintering along the edge, it will be on the back face rather than the front.

**Track-Guided Cutting**
Convert most portable circular saws to a track saw. With this type of guide, the track guides your saw as it rides on top. Cutting is almost effortless. Just use some downward pressure as you push the saw along.

The sled that holds the saw follows the track exactly as you cut, while guide strips under the track hold it in place.

**Support Your Sheet**
With a track guide like the Accu-Cut, you get a nice, straight cut and a very clean edge. This is due to the splinter guard on the base of the track that counters chipping from the saw blade.

We recommend cutting sheets on 3 to 4 cm thick rigid foam insulation, which is available in most hardware stores. It supports the whole sheet and makes cutting plywood a lot easier and safer.

Optional Kreg Track Clamps are available for slick materials, such as melamine.

One great feature of the Accu-Cut sled is that you can remove it from the Accu-Cut track and install it on any Kreg Rip-Cut.

Kreg is a leading brand at Vermont Sales and is available at leading specialist’s outlets countrywide.
Weinig establishes Automation & Digital Business unit

Hot on the heels of its second major initiative in the Industry 4.0 arena, Weinig has taken the initiative to extend its research and development in this field with the establishment of a new Automation & Digital Business unit.

Weinig is a market leader in machines and systems for solid wood and panel processing and this move has created the structures for maximum efficiency in dealing with the challenges ahead.

CEO Wolfgang Pöschl says the unit strategically aligns the company to the future, which is being driven by digitisation. The new company unit will be positioned in Weinig Concept, which groups together Weinig’s engineering activities. Jochen Ganz, who is currently head of the product unit Service, is the managing director of the new business unit. He will act as the second head alongside Dr Otto Leible, who will continue to head Engineering, his traditional field of responsibility.

Ganz has worked at the Weinig site in Tauberbischofsheim for some time in the context of digitization. For example, he was significantly involved in the development of the successful Weinig App Suite. Initially, the head of the product unit Service will continue to work until his successor is settled, before moving to the head of the new business unit.

The establishment of the new business unit Automation & Digital Business is the third major Weinig initiative in the Industry 4.0 arena in a short time. Following the introduction of the W4.0 digital standard in Weinig’s own product world, the digital alliance MindSphere World was co-founded in January this year.

Under the leadership of Siemens, the members of the organisation work together on the cloud-based Siemens IoT operating system, MindSphere. Access to the uniform platform helps Weinig to further develop W4.0 digital and optimise it for the benefit of its customers.

Chief sales and marketing officer Gregor Baumbusch says: “The customer benefit will remain an outstanding and unique strength of Weinig on the market even in the age of digitalisation.”
The next installment of the world’s top wood and timber industry expo, Ligna, which runs from 27 to 31 May 2019, will put the spotlight on three key themes, namely Integrated Manufacturing – Customized Solutions, Smart Surface Technologies and Access to Resources and Technology.

For primary wood industry players, the world’s leading trade fair for machinery, plant and tools for the woodworking and timber processing industry serves as an important platform for dialogue and the latest technologies as well as a gateway to new markets. The same is true of the fair’s Wood Industry Summit, which will be themed “Access to Resources and Technology”.

The Wood Industry Summit is a joint production by Ligna organizer, Deutsche Messe, and the German Forestry Council (KWF), and will be in its third season at Ligna 2019.

Comprising of a forum, lounge and exhibition space, the summit will have a strong presence right in the heart of Hall 26 at the Hannover Exhibition Center.

Among much else, the focus will be on ways of optimizing the entire forest-wood-logistics value chain – from standing trees through to final processing in the factory – as well as on protecting forests from biotic and abiotic damage, and on climate and environmentally-friendly harvesting processes and the future of the forest and wood industry.

Other key themes covered by the Wood Industry Summit include digitisation in forestry, data protection and data integrity, forest firefighting, forestry infrastructure, road networks and logistics.

**Digitisation**

Digital technologies now span the entire forestry value chain, from forest information and integrated harvesting systems right through to modern forest management practices. The technologies involved include drones, apps, laser scanners and all kinds of sophisticated software programs.

Sustainable forest management involves enormous volumes of data, such as forest inventory data, silviculture data, environmental and wildlife data, operational data, and data relating to feasibility studies, risk analysis, accidents, forest damage and monitoring.

As in other industries, the key to getting the most out of these vast data streams is efficient data management software. That’s why digitisation will be at the forefront of topics explored at next year’s Wood Industry Summit, both in the discussion forums and in the exhibition area.

“We are delighted that the German Forestry Council is supporting us again this year by giving us access to its excellent international networks and by ensuring that...
the topics covered at the Summit are highly relevant and offer a good mix of scientific and commercial issues,” says Christian Pfeiffer, Deutsche Messe’s Global Director for Ligna and Woodworking Events.

“The Wood Industry Summit will feature a different focus theme on each of the five days of the show.

“It’s a perfect platform for networking and sharing knowledge with international representatives from science and politics, decision-makers from the pulp and paper and panel products industries, and forest industry professionals from some of the most resource-rich regions in the world,” explains KWF Director, Dr. Ute Seeling.

“The Wood Industry Summit comprises a series of panel discussions and speed presentations, a meeting area, guided tours and an exhibition area.

The 2017 Wood Industry Summit attracted delegations from Brazil, Bulgaria, Chile, Germany, Finland, Canada, Columbia, Rumania, Russia, Ukraine and the USA, and resulted in contracts worth over 30 million euros.

**LIGNA**

Looking back, LIGNA 2017 was in top form as the world’s leading trade show for machinery, plant and tools for the woodworking and timber processing industry.

It attracted a high degree of international participation, featured an absolute wealth of innovations, and provided comprehensive market coverage. The show attracted more than 1 500 exhibitors from 50 countries and occupied some 130 000 square meters of net display space.

It also attracted 93 000 trade visitors, 43 300 of whom came from abroad, from more than 100 different countries.
China International Furniture Fair: Shanghai edition

The 42nd edition of the China International Furniture Fair (CIFF) Shanghai, will be held at the National Exhibition and Convention Center (NECC) in Hongqiao, Shanghai, from 10 to 13 September 2018, and will be conducted jointly by the China Foreign Trade Guangzhou Exhibition General Corporation (CFTE) and Red Star Macalline.

Red Star Macalline is the leading Chinese furniture retailer and distributor with a domestic home furnishing market worth 4-trillion RMB. It manages 260 shopping centres nationally in China, providing a total display surface area of more than 15 million square metres, and annual sales of more than 78-billion RMB.

CIFF is the world’s largest furniture exhibition, and by far the most influential in Asia, covering a total annual surface area of 1.15 million square metres.

This year the Shanghai furniture fair theme is “Global home life”. According to the organisers the show, which will cover an area of 400 000 square metres, promises to build on the furniture fair held in Guangzhou in March, and will showcase the quality of design and manufacturing that Chinese furniture manufacturers are capable of.

China International Exhibition on Wood Manufacturing Equipment

Running concurrently with CIFF Shanghai, will be the China International Furniture Machinery & Woodworking Machinery Fair.

This fair is the outcome of a new partnership between CIFF and the International Exhibition on Wood Manufacturing Equipment (WMF), and will cover the entire production chain of the sector, all the main manufacturing technologies and processing machine types, including wood-based panels and first-stage wood-processing equipment.

Numerous local and international exhibitors will attend. These include: Hornag, SCM Group, Weinig, Biesse, Jinan Restar, Nanxing, Foma Group, SWPM, Italian, Siempelkamp, Wemhoener, LMT, Ruiwudi, Leke, Huajian, Yuanlian, Lianrou, Hengkang, Fuyi and Xinqunli.

With the emergence of Chinese woodworking machines as a viable alternative to the traditionally top tier European machines, this fair would definitely be worth a visit.
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