Linear Saw

neil@multisaw-sawmilling.com
Neil - 082 569 2430
Office: 044 532 7840

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

Pinnacle Locally Manufactured by multisaw
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2019 – another ‘Annus horribilis’?

Year endings and year beginnings. What a mixed batch of possibilities – and disappointments. 2018 was generally hailed as an awful year, despite holding so much promise. How will 2019 fare?

Last year, the timber and forestry industry remained one of the more predictable and better performing commodities in the Agri sector, contributing significantly towards GDP, economic growth and job creation, increasing to R70 644 48-million in Q3 2018, from R69 544 51-million in Q2 2018.

The Department of Agriculture and Fisheries, (DAFF) identified within the National Development Plan and New Growth Path, that Agriculture remained critical for employment and food security. “Agriculture delivers more jobs per Rand invested than any other sector, and NDP estimates that Agriculture could potentially create, 1-million jobs by 2030,” it stated in a March 2018 media release.

President Ramaphosa, in his first State of the Nation address (SONA) highlighted the importance of Agriculture, allocating a 14% budget increase to the sector, reprioritising R581.7-million for the black producer commercialisation programme.

Deon van Wyk, ABSA Regional Agri business manager in an article with SA Forestry, cautioned that to make a domestic forecast, it was important to look to the international markets and trends, as about 70% of all timber products are exported.

Prior to the 2008 recession levels on the world market, he noted that the use of industrial roundwood remained 1.3% below the previous levels and that the Western timber demand would increase over the short term. He saw that energy generation from biomass was due to increase, coupled with growth in the developing world, resulting in an increase in global timber consumption, and was expected to reach unprecedented levels.

But while 2018 held so much promise, it was a tumultuous year for many South Africans, on various levels.

SA had a President dismissed and new one appointed (another déjà vu moment here for the country), the Guptas moved to Dubai and VBS Bank was plundered and then liquidated. The volatile political landscape turned the economy sluggish, with StatsSA stating that South Africa entered a technical recession, with two consecutive periods of contraction, with GDP dipping by 0.7%.

In amongst all this uncertainty, in early 2019, fires once again blazed through the Western Cape, despite the South African Weather Service optimistically pointing to a possibility of above-normal rainfall between December 2018 and February 2019. At the time of writing, The Overstrand fires have been raging since New Year’s Day, with at least 31 homes destroyed and 28 damaged.

Also raging in 2019, is the critical land expropriation without compensation issue. The outcome will only become apparent after the impending 2019 General Election, which seems to be viewed as either the magical elixir that will see the country right itself on the one hand or capsize completely on the other. Agribusiness says that South Africans still face the real possibility of a failed state “and far more needs to be done to address nation-building, restore confidence and create an enabling policy and legislative environment to attract investment and foster economic growth and development”.

Only once the election is past will we best be able to judge whether Ramaphosa will deliver on his promises and whether or not there will be ‘A good story’ to tell the rest of the world – unlike the mayhem and horror that presently has paralysed neighbouring Zimbabwe. We can only pray that our destinies are not aligned...

“By felling the trees which cover the tops and sides of mountains, men in all climates seem to bring upon future generations two calamities at once; want of fuel and a scarcity of water.”

Baron Alexander von Humboldt

Sources:
www.statssa.gov.za
http://tradingeconomics.com
https://agbiz.co.za
Southern Cape forest fires pose serious risk to sustainability of regional timber industry

A total of 7,643 hectares of predominantly pine plantations belonging to private timber growers in the Southern Cape region have either been totally or partially destroyed in the fires that raged in the Outeniqua Mountains between 25 October and 16 November 2018. Plantations ranging in age from one to 25 years old were affected.

These were the findings of a meeting of 35 people involved in the timber and timber processing industries held at the Nelson Mandela University on 3 December 2018.

The severity of the loss is exacerbated by the fact that more than 65% of the timber affected was older than 16 years. This will have a major negative influence on the future ability of the forestry industry in the region to produce the timber needed to supply the processing plants that rely on this resource.

The value of the timber lost has not yet been completely established, as many factors need to be taken into consideration. The cost of re-establishing those areas that have been totally destroyed has also not been established accurately. However, initial estimates are that just the re-establishment costs could be in the region of R80-million.

Furthermore, many jobs in the timber-growing sector will be permanently lost. Forestry infrastructure was also destroyed.

The processing side of the industry in the region has the potential to process approximately 700,000 m³ of logs per annum, the majority of this through sawmills and pole treatment plants. An entire sawmill in the Geelhoutvlei area, capable of processing upwards of 60,000 m³ per annum, and valued at more than R100-million, was destroyed entirely. This has left more than 400 people in the processing sector permanently unemployed.

After the devastating fires of July 2017, the latest fires pose a severe risk to the sustainability of both the forestry and processing industries in the Southern Cape. Both Forestry South Africa and Sawmilling South Africa are working hard to ensure that the future of these industries will be secured.

It is unfortunate that representatives from the Department of Agriculture, Forestry and Fisheries (DAFF), the lead department in forestry matters, did not attend the meeting, despite assurances that a high-ranking official would be there to be briefed on the seriousness of the situation. Resolving the current situation will require close collaboration between the private sector and Government.
Matriarch founders to drive a renewed forestry focus at Bell

Bell Equipment’s strategy to revitalise its presence in the agriculture and forestry industry has been bolstered by an announcement in January that the South African manufacturer will acquire its long-standing partner, Matriarch Equipment.

Matriarch Equipment was founded in 2009 by brothers, Justin and Ashley Bell - grandsons of the late Bell Equipment founder, Irvine Bell. The company focuses on developing innovative equipment for a wide spectrum of industries. Reminiscent of the early days of Bell, Matriarch has enjoyed particular success in agriculture and forestry thanks to its ‘customer centric’ approach and quick turnaround of niche solutions.

The Bell/Matriarch partnership dates back to January 2014 and Bell currently distributes and supports the complete, locally manufactured Matriarch range of agriculture and forestry equipment.

This comprises highly innovative and relevant products for the sugar and forestry industries such as the UltECO5 and UltECO6 slew loaders for sugar harvesting operations as well as the FASTfell and Skogger for timber harvesting and extraction.

In addition, last year Bell collaborated with Matriarch for the conversion of Kobelco excavators for the forestry industry in order to provide customers with a professional and thorough approach to conversions.

Following the transaction Matriarch will become a wholly owned division of Bell and will continue to operate from its existing workshop premises in Felixton, outside Empangeni on the KwaZulu-Natal north coast. Bell Equipment Chief Executive Officer, Leon Goosen, said that the acquisition creates a win-win scenario for the two companies and their customers. “The transaction gives Bell a renewed energy and focus on agriculture and forestry.

“The range of Matriarch products complements our range and enables us to be able to better provide a tailor-made full line solution to our customers. In return we bring to the partnership a respected and quality distribution and after-sales support network that will provide Matriarch with access to more international regions and a larger market.

“We’re excited to have Justin and Ashley back at Bell and carrying on the Bell family values. They’ve proven through their work at Matriarch that the ability to innovate and develop according to customer’s needs is entrenched in the genes. We look forward to them joining the team and
Kobelco conversions set the industry benchmark

While the fitment of processing heads to excavators is not a new development, Matriarch Equipment differentiates itself by offering a complete package - from the full fabrication of the guarding to the installation of the guarding and head – and has set a new industry benchmark in the process.

Matriarch has already completed several different types. The first conversions were carried out on three 26-ton Kobelco SK260LCs to make them suitable for a mill yard application where they are used to feed the lines to the mill as well as off-loading trucks to stockpile. To enhance the carrier’s mobility and reduce long term running costs, the customer requested that the excavator tracks be replaced with custom-built wheeled chassis.

Several nose cone, grab and cab guarding installations have also been carried out on SK260LC units and the smaller 21-ton SK210LC.

More recently Matriarch has carried out a conversion to fit a Waratah H215E processing head to a SK210LC. “The installation of a processing head, as a more complex attachment compared to a grab, is a more complicated fitment as there are additional controls that are installed to the machine, some auto-electrical work required along with additional hydraulic valving, plumbing and an auxiliary hydraulic cooler,” says Ashley.

In addition to fitting the head, Matriarch can also extend the track grousers for additional ground clearance and traction. Machine structural guarding is more comprehensive in line with the operating environment and heavy-duty belly plates have been fitted along with forestry guarding to the entire upper structure for protection against falling trees. Cab protection includes a bullet proof windshield to guard against chain shot and polycarbonate windows on the side of the cab.

“A great deal of thought has gone into service accessibility. We’ve tried to think of everything, so steps and handles have been added for ease of access and the guarding serves as hand railings for safety while working on top of the machine. The additional hydraulic cooler is easy to access and clean and is also well protected while the guarding on the windshield unlatches and pivots with gas-struts for easy cleaning or replacement of the windshield. Eight additional LED lights have also been positioned on the machine for night-time operation.”

A thorough and professional approach to the design, installation and support means that a standard excavator is converted and delivered to the customer as a fully functioning forestry processor, complete with an illustrated parts manual for the Matriarch kit.
Will the 2019 fire season treat land-owners kindly? asks Tiaan Pool

Statistics from Forestry South Africa suggest that veldfires have caused the forestry industry to suffer average losses of 18 147ha planted forests every year since 1980.

Over the last 10 years however, the average losses increased to 26 167ha per year (an increase of 8 02 ha or 44% per year). Fire managers have to consider the facts – they are losing the battle.

The Institute for Commercial Forestry Research (ICFR) found that there are significantly less rainy days per year (See table).

This implies more rain in a shorter time, less infiltration of rain, more run-off, a lower water table and hence, more sunny days to heat up the earth.

Rainy days measured 1950-1970 compared to rainy days measured 1987-2007.

<table>
<thead>
<tr>
<th>Region</th>
<th>Decrease in rainy days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midlands</td>
<td>22%</td>
</tr>
<tr>
<td>KZN North</td>
<td>11%</td>
</tr>
<tr>
<td>KZN South</td>
<td>18.6%</td>
</tr>
<tr>
<td>Zululand - coast</td>
<td>6.4%</td>
</tr>
<tr>
<td>Zululand inland</td>
<td>42.5%</td>
</tr>
<tr>
<td>Northern Mpumalanga</td>
<td>19.1%</td>
</tr>
<tr>
<td>Central Mpumalanga</td>
<td>32.1%</td>
</tr>
<tr>
<td>Southern Mpumalanga</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

It is therefore not surprising that fire seasons last longer and arrive earlier. Heat builds up rapidly in summer and warm conditions persist into autumn. Low relative humidity, extreme winds and an increased occurrence of dry spells adds up to an extended fire season.

Owing to climate change and other factors, woody weed species with high fuel loads are replacing natural vegetation, changing the characteristics of vegetation types to favour more intense veldfires. Indications are, that by the end of 2018, South Africa would have experienced ± 45 000 veldfires that were significant enough to trigger satellites (Global Forestwatch, 2018).

These observations are expected to increase in 2019 owing to El Niño and the probability of drought predicted for the biggest part of Southern Africa, because of it.

A term that was not coined until recently is ‘mega fires’. A mega fire is a plume-driven, high-intensity fire, burning out of control and causing major damage to infrastructure and the environment, and poses threat to human life. Global statistics indicate a ± 6-year return frequency of this phenomenon.

These mega fires are on the increase across the globe and 2018 marked extreme fire events in Portugal, Greece, California, South Africa, Spain, Sweden, British Columbia, Latvia, Indonesia, Australia, United Kingdom, Italy, Finland and Norway.

State of the art equipment, accurate and detailed information Advanced Fire Information System (AFIS), well organised
Fire Protection Associations, competent fire managers and excellent detection systems, don’t seem to have the desired effect to curb these fires.

The question that remains is: Why will it be different in 2019?

On the positive side, fire managers are learning to cope better with disaster fires. Management of the recent George fire saw an ICS management team who learned from the Knysna fire and managed the incident effectively overall.

Pockets of excellence in fire management are also evident across South Africa. Effective fire management is especially evident where communities (forestry, local authorities, conservation agencies, WoF and other) join forces and don’t work in silos.

The opinion however remains that not all South Africans are adequately prepared to deal with a changing environment that brings along the likes of the Knysna and George fires.

Veldfires and its knock-on-effects is second only to the impacts of poverty, unemployment, crime, aids and politics.

This is a reality in South Africa, with no quick fixes. Apart from effective day-to-day management of fuel loads and resources, fire management will therefore have to be innovative and creative.

Planning and budgets should therefore focus on the long term and be based on potential losses from fires.

It is not the current generation who will bring significant changes about, but an empowered next generation. The following strategies are suggested to have a positive impact on the effects of future veldfires:

- Managers across different organisations should talk about solutions and not problems.
- Educate the nation about veldfires – especially in schools, but also on the streets and in parliament.
- Managing veldfires is a war. Wars are won by the most disciplined. When people’s lives, livelihoods and the destruction of the environment are at stake, discipline is not negotiable on any level and should be enforced.
- Effective management is not possible without understanding. More research supporting fire management strategies are needed.
- Poor land management anywhere should not be tolerated.
- Plan for water ‘where there is none’, or for shortages in case of drought.
- Adopt coping mechanisms to absorb losses, like diversification of land use.

One should probably bet against the odds of a ‘good’ fire season in 2019. The clues to follow simply suggest that it will be a reasonable bet. The irony is that the increasingly destructive veldfires experienced are not because of a lack of knowledge, resources, or the willpower to fight fires. In the words of Axel Jooste (Projects Manager SAPPI), we simply suffer from: “A case of factory blindness” by not preparing for the unexpected.
In a bid to meet market demands, Hintech has secured the sole agency for southern Africa for IRUM Forestry Skidders

IRUM is a European family-owned business focused on providing forestry solutions to Europe, South America and now Africa.

Wayne Le Roux, director of Business Development at Hintech Manufacturing says: “Our focus is to provide the local forestry market with proven solutions that represent real value for money much like our URUS Cable Yarders and proven HT Shovel Yarders at Hintech Manufacturing.

The IRUM skidder range offers proven cable and grapple solutions to the forester, from the basic compact TAF 690 PE, to the mid-range TAF 2012 4-cylinder, up to the larger TAF 2012 6-cylinder units.”

Based on local market research, Hintech identified a gap in the market for a more mechanical, and compact machine, with fewer frills. “Many machines currently in SA are designed around very large North American type operations, where timber sizes are vastly bigger than our own.

With the larger timber and higher volumes come larger equipment ownership costs, and the small to mid-size foresters just simply can’t afford these machines. Of course, with a machine like the compact TAF 690 PE, there are some compromises when compared to the larger machines in the IRUM product line. Nonetheless, when it comes to doing the actual work of skidding logs, the TAF 690 PE does so without operational compromise.

It is a remarkable machine, powered by an economical Perkins powerplant, it has repeatedly proven its worth,” he says with conviction, adding that over 5 000 of these units have been manufactured to date.

Hintech recently tested the machine at MTO forestry in the White River area. Wayne adds: “After getting our rigging right and with the help of foresters in the area, the TAF 690 PE got into a rhythm and found its sweet spot skidding approximately 600 to 650 trees per day, making use of its dual 7-ton-per-side winch which helps to manage the load very well around tricky terrain.

“We are very pleased at the output of this compact machine and believe it will benefit our clients who are faced with tough economic decisions when procuring forestry equipment,” he says in conclusion.

A special thanks to Robert Butler from Henque Forestry who helped with getting the TAF 690 PE into field, to both Vaughan and Wikus at MTO forestry, Gavin from Simms plant hire, AND Zander from FTM for all the input and assistance.
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- **Load:** 3.0 ton

---

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URUS I, II, III

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Skyline & High-head cable yarders.

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- **Load:** 1.5 ton to 3 ton

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On track with HPE
Zama Forestry Services has invested in a tracked Hyundai R220LC-9S excavator, supplied by HPE Africa

The excavator, which has been converted into an HT Shovel Yarder to cope efficiently with demanding uphill and downhill logging operations in Mpumalanga, was converted by Hintech Manufacturing.

Hintech Manufacturing worked closely with HPE Africa to transform the robust Hyundai R220LC-9S crawler excavator into a versatile HT shovel yarder for high-lead forestry operations, purposed for the extraction of logs.

“The 22 T Hyundai R220LC-9S excavator, which is the durable and mobile carrier of the HT Shovel Yarder conversion, has an impressive production capacity of up to 140T per day, depending on the rigging, tree size and terrain conditions,” explains Alex Ackron, managing director of HPE Africa, exclusive distributors for Hyundai Construction Equipment in South Africa.

“This fuel-efficient machine has a 300m uphill or downhill operating distance and is able to extract up to eight trees simultaneously, with a payload of up to 3T.

“There are many advantages of this customised forest harvesting solution, including fast cable yarding set-ups for increased productivity, easy mobility, precision control, low maintenance and features for improved safety in steep, slippery and remote locations.

“The Hyundai excavator, which is self-stabilising due to its weight, provides its own anchor support, eliminating the need for guy lines.

Unlike conventional cable yarding systems that are anchored, this tracked machine is able to self-travel between felling areas and manoeuvre over arduous and moderately steep terrain.

Apart from providing extra stability and supporting the tower, the bucket is also used to clear debris on site.”

The Hintech fitted forestry spec all-weather steel operator cab is spacious, with glass windows on all sides for clear 360° visibility and a fully adjustable suspension seat.

These are important features for enhanced operator comfort and improved safety in forest harvesting.

The advanced operator cluster, with a colour LCD screen and toggle switch control, allows the operator to select machine preferences during logging operations.

These options include boom or swing priority, power mode, machine diagnostics and optional work tools.

A computer aided power optimisation function automatically selects the ideal hydraulic flow balance for boom and swing motions, smooth operation and reduced fuel consumption.

The operator easily controls winch spooling from the cab, using haulback and mainline pilot operated joysticks and foot pedals which are conveniently mounted.

A multi camera system for operator and offsite winch control and choker monitoring, is an additional safety feature.

Ground-line access to critical services and grease points of the excavator, ensures easy serviceability and reduced maintenance time.

“Hintech’s skilled engineering team is able to custom convert and reinforce every Hyundai machine to meet exact forest performance requirements, using proven systems, which have been developed in-house over the past 15 years,” confirmed Karl Hinteregger, owner of Hintech Manufacturing – with over 30 years of service in the South African forestry sector.

HPE Africa offers an OEM parts, repair and maintenance support service throughout the country.
Charka - 40 years as SA’s number one braai partner

It is 40 years since Charka, the iconic and proudly South African charcoal and briquette manufacturer first transformed our relationship with fire.

Charka Briketts were the first on the SA market and, for a long time, were the only such product available. Today, the Charka range, including Braaimeester, is available at all leading retail stores nationwide.

In 1978, Yellowstone Timber Holdings purchased the Charka Factory at Wildrand from a company then known as Hunt, Leuchars & Hepburn Forest Products (today Mondi Forests). Yellowstone Timber Holdings, a wholly owned subsidiary of Suiderland Development Corporation, changed the Charka company’s name to Suiderland Charka Limited.

In 2015, the company changed its name to Safire Charka (Pty) Ltd when a local short-term insurer, Safire Insurance Company Limited, together with a syndicate of timber farmers and existing Charka management, became major shareholders.

The Charka-Safire relationship is a synergetic one, which is particularly relevant given that symbiotic relationships in nature form the foundation for Safire’s marketing efforts.

Safire Insurance is a specialist agricultural and general insurer with a strong co-operative base of timber-growing clients countrywide. Charka is able to use wood from burnt plantations in charcoal production, thereby reducing the ultimate net loss from timber fires through the maximisation of salvage recoveries.

The production process

The Charka production process is sustainable and is good news for the environment, as invasive alien Black Wattle (amongst other woods) is used. Wood is packed into kilns and burned in a controlled process. The burned residue, known as lump wood charcoal, is sorted and the larger pieces become Braaimeester Lump Charcoal, a pure, natural heat source.

Smaller pieces are milled into a fine charcoal powder mixed with corn starch and water, run through a briquetting press that shapes it into pillow shaped briquettes, and dried in a hot air drier.

Charka Briketts, Braaimeester Lump Charcoal and Charka Firelighters are the main products distributed by the company, but Charka has also developed innovative additions to its range. Instabriks (instant lighting briquettes) and Braaimeester ILC (instant lighting charcoal) eliminates the need for firelighters when starting a fire or a braai.

Subhead SABS and FSC certification, internationally approved

Charka has a factory in Piet Retief, close to its timber source, and another in Polokwane, near to the silicone smelting plants and Tzaneen forests. The smelters use bulk loads of charcoal in their production process.

The factories are South African Bureau of Standards (SABS) accredited and Charka was the first SABS-approved charcoal product in the country. Charka is the leading charcoal manufacturer in South Africa and is F.S.C. (C.o.C.) certified as required by the export market, to prove that sustainable wood supplies are used.

A cost-effective product

Charka and Braaimeester products are extremely concentrated: 6-7kg of wood makes 1kg of briquettes.

Being so concentrated ensures a heat source ideal for braaing, retaining its heat and ensuring an even-burning fire that lasts for a long period.
Beating the budgeting blues  By Hugh Sutherland

This article is extracted from www.talkingtrucks.co.za and will form two parts, published in two consecutive issues. The articles address budgeting with a view to assisting road transport operators to better understand this very contentious subject from descriptive alternatives presented by various academic approaches, to basic, but critical budgeting techniques. Hugh will then move on to some of the more common errors found in budgets, and how to avoid them without having an awareness of costs relative to income, it’s all too easy to spiral down into losses over a period of time.

“If you don’t know where you are going, any road will get you there.” – Lewis Carroll

There are three main budgeting techniques:
- Incremental budgeting
- Zero-based budgeting
- Flexed budgeting

What is incremental budgeting?
The incremental approach to budgeting combines the costs identified from the previous accounting period, with percentage additions. These percentage additions are utilised to cover two key areas which include:
1. Cost increases as a result of inflation or,
2. Greater purchasing expenditure associated with increases in both costs and income as a result of business volume predictions.
We go the ECONomical way

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With more than 11 million units sold worldwide, the BPW drum brake is the embodiment benchmark of a reliable brake for towed vehicles. It sets new standards for lifecycle costs thanks to its robust construction and ease of servicing through the ECO principle.
A key limitation of the Incremental Budgeting system is that it is likely to be considerably more accurate as the budget is adapted to suit various external changes. Within this approach managers are able to provide key information resulting in an achievable budget, pessimistic budget or an optimistic budget.

Through undertaking the process of flexed budgeting, managers are better able to make important decision relating to risk and expenditure, having gained a wider perspective on best and worst outcomes.

As highlighted above, there are three main categories associated with budgeting which include incremental, zero-based and flexed budgeting. Each of these approaches has various strengths and limitations with the latter approach being able to provide more accurate information.


Look out for Part 2 of this article in the February issue of Wood SA, where Hugh will discuss:
- Incremental budgeting
- Benefits of incremental budgeting
- Drawbacks of incremental budgeting
- Zero-based budgeting
- Stages in Zero-based budgeting (Z-BB)
- Benefits of Z-BB
- Drawbacks of Z-BB
- Conclusion

A budget is a quantitative expression of a plan for a defined period. It may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows.
WOOD-MIZER LT15 RANGE
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LT15START
LT15POWER
LT15GO
LT15WIDE
LT15 MANUAL

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Tel: 011 473 1313 | enquiries@woodmizerafrica.com
www.woodmizerafrica.com
To get to the village of Yaou where Transchaines’ brush manufacturing division is located, you pass through Grand-Bassam.

Lying on the Atlantic Coast east of Abidjan near the Ivory Coast’s western border with Ghana, Grand Bassam was the capital city of the country between 1893 and 1896.

Since then, the forests, wide lagoons, and coconut groves that surround the town, together with grand buildings from the colonial era, have allowed Grand Bassam to become a tourist and industrial zone that now adds to the Ivory Coast’s expanding economy.

Transchaines was established in 1997, by Nassiroudine Issany. Originally from Madagascar, Monsieur Issany’s talent for trading and good management skills resulted in Transchaines becoming the agent of global industrial brands like FAG, LUK, ABB, GATES and REXNORD in the Ivory Coast.

Good sales of these brands in Ivory Coast and the region and support to companies that used the brands, ensured that Transchaines grew fast.

A tropical hardwood log sales division at the company’s depot in Abidjan also added income. To boost profits, Transchaines started milling the logs into sawn timber that could be used in a brush ware factory that was started to generate additional revenue from the logs, instead of exporting only raw logs.

A Wood-Mizer LT15 Electric sawmill was purchased to mill boards from the logs that were then shaped into brushbacks and handles.

The choice of the Wood-Mizer was deliberate.

Monsieur Issany knew that to use expensive hardwoods for his brush ware and handle range, he needed to cut carefully. The Wood-Mizer thin-kerf narrow bandsaw blade made it possible to waste less and turn as much of the log...
Two Wood-Mizer EG350 edgers with remote operator stations are used to edge and rip sawn timber into sizes for manufacturing.

Sawmilling

Two LT40 Remote sawmill lines with log decks and incline conveyors installed at Transchaines’ Yaou brushware manufacturing site.

An LT40 Remote slicing through a rubberwood log.

The accurately sawn timber produced on the Wood-Mizer’s is used for a variety of brush and handle products.

Wood-Mizer LT40 Remote sawmill lines to grow company

“The successes of the brush manufacturing factory made it possible for us to now look at further opportunities in the timber sector,” Narcisse Balley says. “This is why we could upgrade the brush factory to produce more brushes and handles and to start making pallets,” he continues.

Part of the upgrade has been the installation of two Wood-Mizer LT40 Remote sawmill lines, together with new kilns and expanded timber treatment baths.

The two Wood-Mizer LT40 Remote sawmill lines at Yaou consists of:

- A remote operator station to control all functions of the mill and timber movement
- Setworks 10 provides easy-to-use machine control functions, with the added benefit of pre-programming set sizes that makes repeatable cuts across these sizes easy
- Log decks to stage and load logs onto the sawmill
- Incline conveyors at both ends of each mill to move slabs and boards from the sawmill
- Two EG300 edger multirips to edge boards

Both LT40s are equipped with powerful 18.5kW electric motors to cut log sizes of up to 900mm in diameter and 5.8-6m in length into accurately sawn timber.

A brush factory in Yaou

Transchaines’ brush division received a further boost when company managing director, Monsieur Narcisse Toussaint Balley, decided to move the factory closer to the forests in Yaou, near Grand Bassam.

“The larger factory close to the forests allowed us to produce more variety and volumes and we also saved on transport costs to get the logs to Yaou. “We also replaced the teak brushbacks and handles with rubberwood.

It’s a durable, attractive hardwood that is grown sustainably, making it freely available at a much lower cost than teak,” Monsieur Balley says.

The company also invested in timber treatment baths and kilns to protect the timber from insect attack and dry the timber before production.

The end result is accurately cut timber from Transchaines’ single Wood-Mizer LT15 passing through treatment and drying and manufacturing, to deliver a product that is exported throughout West Africa.

The end result is accurately cut timber from Transchaines’ single Wood-Mizer LT15 passing through treatment and drying and manufacturing, to deliver a product that is exported throughout West Africa.
Boards with wane that exit the mill pass through a set of EG300 edgers that can edge or multirip boards, depending on the requirements of the sawmiller. Both edger units have remote operator consoles to make it easy to control all functions of the edger. An electronic setwork system that the operator uses to flexibly pre-set the required width cut from each board, improves recovery.

In and outfeed tables at both ends of the edger makes it easy to handle long, heavy boards in and out of the edger. With the new Wood-Mizer’s, Transchaines is now producing enough sawn timber to make more brushes and start manufacturing pallets. The log decks and outfeed tables make it easy to handle more timber with fewer workers. The company will also save electricity with many of the old machines that used large motors to cut the timber now no longer needed.

“The successes of the brush manufacturing factory made it possible for us to now look at further opportunities in the timber sector.”

Narcisse Balley

Synthetic and natural palm fibre combine to produce brush ware for use in homes and factories.

“Forest fuel

By Dr Bruce Sithole

Extracting maximum value from our forests via biorefinery technologies

The forestry, timber, pulp and paper (FTPP) industry plays an important role in the economy of South Africa as it contributes about 4% to the country’s manufacturing GDP. It is also a major contributor to job creation, employing about 160 000 people.

The industry, however, like many other industries in the country, is facing severe challenges related to soaring energy costs and water shortages. Some of these challenges have a direct influence on production costs and hence, on the international competitiveness of the sector.

This situation has been further exacerbated by a strong decline in the demand for pulp and paper products and has led to some South African companies closing or downsizing their mill operations in this country and in other parts of the world. Additionally, the industry has limited products, and processes the valuable wood biomass resource inefficiently.

For example, the yield of chemical pulps in chemical pulping industries range from 35 to 45%, whereas the yields of saw mill and timber industries average about 47% with some saw mills achieving yields as low as 25%.

At the same time, there is ever-increasing pressure on the industry to make changes, improvements and/or adaptations to their processes in order to achieve cleaner production technologies that are more environmentally friendly.

The disposal of their waste by-products in an economically and environmentally acceptable manner is another critical issue facing the FTPP sector.

This is mainly due to challenges in locating disposal works and complying with environmental requirements imposed by waste management and disposal regulations.

For instance, sawmills produce large volumes of sawdust and other tree trimmings such as bark, leaves and branches. Pulp and paper mills, in addition to the waste streams, also generate large quantities of process waste by-products in the form of sludge, dregs and fly ash.

These by-products are traditionally stock-piled on site, landfilled, or burned. However, according to environmental regulations (eg ACT 39 of 2004), these practices are being curtailed, as they are environmental hazards that generate greenhouse gases and can lead to possible leaching of toxic chemicals into surrounding ground and water sources.
In the case of landfilling as a means of waste disposal, significant costs are incurred by industry for transporting waste to landfill sites, maintaining landfill sites, and establishing new landfill sites once the previous ones are full.

According to one local pulp and paper manufacturer, it costs one of their mills in the region of R2.5 million per annum to transport waste to the landfill site, and a further R1 million per annum to maintain the landfill site. Their capex expenditure in the last 12 years has exceeded R35 million.

The problem is further compounded by the fact that suitable land for landfilling in relative proximity to where the waste is generated, is limited. Disposal of organic waste (including food waste) to landfill is outlawed in many countries (DEA 2010) including Germany, Sweden, Canada; and diversion of organic waste from landfill is now also a priority in South Africa (DEA 2011).

Thus, most of our valuable timber resources are lost as waste during processing. Therefore, maximising the capital effectiveness of FTPP operations must become a focus area of the industry to increase revenues.

One promising approach to achieve this is by adaptation of the biorefinery concept – which focuses on new and/or transformative technologies that can more cleanly and efficiently fractionate biomass and the generated waste streams – into a range of products such as fuels, power and chemicals are emerging as the solution to management of organic wastes.

This means that traditional tree growing and liberation of fibres, whilst inefficiently disposing of by-products, becomes old technologies. In its place is forest stewardship and the processing of wood in such a way to extract fibre, fuel, chemicals and power streams that are valued by society and the marketplace.

Producing bioenergy and new biomaterials, in addition to traditional wood, pulp and paper products may thus lead to competitive synergies, new markets and increased product flexibility for the pulp and paper industry.

Opportunely, the waste streams generated by the FTPP sectors may be composed of potentially high value products and finding alternative and innovative uses for these industry waste streams and diverting them from landfill, will transform the face of the FTPP industry, both economically and environmentally.

The overall objective of this project is therefore to contribute to the evolution of the South African FTPP mills into forest biorefineries through innovative biorefinery technologies, and in so doing, revitalise industrial development opportunities within this renewable biomass processing sector, whilst at the same time mitigating some of its environmental impacts.
This will ensure that the local industry stays abreast of new environmental and technological developments in order to remain internationally competitive and economically sustainable.

Increased revenue streams from the production of new bio-materials and chemicals would ensure preservation of infrastructure, jobs, supply chains and permits, whilst at the same time helping the country minimise its energy problems and environmental impact.

Biorefinery technologies can be accomplished via three main technologies for fractionation of biomass, viz., 1) thermal, 2) chemical, and 3) biological.

In thermochemical processes, a combination of heat and pressure in the absence of oxygen, cause the chemical breakdown of the biomass feedstock into several biocomponents, such as cellulose, hemicellulose, lignin and extractives.

These bio-components can then be further processed into commercial products.

In (Bio)chemical conversion chemicals and/or microorganisms (eg enzymes) are employed as a desired breakdown process of the biomass feedstock into various components.

The CSIR and the Department of Science and Technology have established the Biorefinery Industry Development Facility (BIDF). Informed by the needs of the South African biomass processing sector stakeholders, the objectives of the BIDF include:

- Development of knowledge and innovations on biorefinery technologies identifying new and emerging technology opportunities.
- Piloting innovative technologies for industry and SMMEs that will stimulate the growth of the biomass processing industry and create sustainable jobs in the existing and new industry value chains;
- Offering industry and SMMEs a facility for testing, evaluating or developing biorefinery technologies at a pilot scale level at the BIDF;
- Provision of specialised infrastructure, experimental facilities, and expertise to service the sector to improve the competitiveness of existing biomass processing streams;
- Addressing the shortage of science and engineering expertise needed to lead the development of the biomass sector (ie, agri-processing, forestry and waste biomass sectors);
- Leveraging R&D funds from industry and funding entities to assure sustainability of the programme.

The BIDF is open for business and is making great strides in development and implementation of biorefinery technologies in South Africa.

The facility is managed by Professor Sithole a world-renowned scientist with expertise and experience in pulp and papermaking technologies and biorefinery processing technologies gained from Canada. ■
Unauthorised use of ITC-SA logo strongly discouraged

It has come to the attention of the Institute for Timber Construction South Africa (ITC-SA), South Africa’s professional body for the engineered timber construction sector, that its trademark and logo have been used inappropriately by a handful of unscrupulous contractors in the industry who are advertising to the general public their purported association with the Institute.

The ITC-SA is the registered proprietor of, amongst others, trademark no. 2006/14222 for ITC SA in class 37 in respect of, inter alia, ‘Construction; installation; development, maintenance and repair services; information services relating to the aforesaid including in relation to construction, installation and fitment of timber and roofing trusses; services ancillary and related to the aforesaid in class 37’.

Apart from the various trademarks which the ITC-SA owns, it has also made extensive use of these for many years and, as such, substantial reputation and goodwill are attached to these trademarks, which are afforded special protection by the Trade Marks Act.

According to Amanda Obbes, ITC-SA General Manager, “Advertising a business as being a member of the Institute, creating the false perception of association with or endorsement by the ITC-SA, is not only potentially damaging to the reputation of the ITC-SA, its stakeholders and the industry, but puts consumers, many of whom prefer to enlist the services of ITC-SA accredited contractors, at risk through knowingly deceiving them.”

How does the ITC-SA protect the consumer?

A professional body like the ITC-SA has the intent to protect the public interest in relation to the services provided by its members and the associated risks. Recognised and accredited professional bodies like the ITC-SA are mandated to develop, award, monitor and revoke its professional designations in terms of its own rules, legislation and/or international conventions.

The role of the ITC-SA is to ensure consumer protection in the use of timber engineered products in contracts entered into with the ITC-SA membership and to regulate the professional conduct of its members.
Where prima facie evidence confirms professional misconduct, in order to protect the consumer and the reputation of the industry, the ITC-SA will apply proper sanctions.

Conversely, enlisting the services of a contractor who is not a member of the ITC-SA will waive this ‘safety net’ and the consumer will have to pursue remedial or legal action at their own expense.

Individuals or entities who are not members of the ITC-SA, but who claim to be, are urged to desist in using all infringing trademarks, being the ITC-SA trade mark, and/or any confusingly similar marks in relation to their business.

This includes the use of the aforementioned trademarks on invoices, webpages, websites and any advertisements which may deceive the general public in relation to the individual’s or entity’s association with the ITC-SA.

Failure or neglect to comply with the above may result in legal proceedings taken up on an urgent basis for an interdict restraining such use, damages as well as any other form of ancillary relief, the costs of which will be for the account of the defendant.

“By virtue of its trade mark registration, the ITC-SA and its members are entitled to the exclusive use of this mark in relation to the services covered by such registration.

Any unauthorised use of the mark ITC SA (or any name confusingly similar thereto) in relation to those services, or similar goods or services, constitutes infringement of these trade mark rights and/or constitutes common law passing-off,” says Obbes.

“The role of the ITC-SA is to ensure consumer protection in the use of timber engineered products in contracts entered into with the ITC-SA membership and to regulate the professional conduct of its members for a better industry overall.

As such, the general public and the trade are encouraged to check in with the ITC-SA timeously and before any project is initiated to verify the membership status of their chosen contractor before any formal work commences, as a preliminary safeguard and for peace of mind,” she concludes.

For more information about the ITC-SA, visit www.itc-sa.org. To find a list of ITC-SA accredited members near you, select a designation from the drop-down ‘Members’ list and complete your search.

For more information on becoming a member, click on your designation of choice on this list and read the designation descriptor relevant to you.

Feel free to get in touch with the ITC-SA should you need any assistance.

About the Institute for Timber Construction (ITC-SA)

As a professional body, the ITC-SA’s vision is to create and maintain the highest standards in the engineered timber construction industry by monitoring its membership, continuously improving standards, promoting and marketing engineered timber structures, and overseeing the training and development of its members.

With the ITC-SA, the trade and consumer can enjoy the protection that comes with a safely erected and inspected timber roof, home or deck. The ITC-SA is a SAQA-accredited professional body and a recognised Voluntary Association in terms of the Engineering Profession Act, 2000 (Act 46 of 2000).

The Institute was established more than 40 years ago to regulate the engineered timber roof structure industry and to provide design, manufacturing, erection, inspection and certification for compliance with inter alia SANS 10400 and SANS 10082, where engineering rational designs are applicable. The Institute is a SALGA Disaster Risk Management Strategic Partner.

ITC-SA contact:
Amanda Obbes
General Manager
Tel: 011 974 1061
Email: enquiries@itc-sa.org
Web: www.itc-sa.org

Media contact:
Jennifer Rees
Haas&DAS Communications
Cell: 076 119 8819
Email: Jennifer@hassndas.co.za
Web: www.hassndas.co.za

The role of the ITC-SA is to ensure consumer protection in the use of timber engineered products in contracts entered into with the ITC-SA membership and to regulate the professional conduct of its members for a better industry overall.
PROTECT YOUR MOST PRECIOUS ASSETS...

With a correctly designed, built and inspected roof by an ITC-SA-accredited manufacturer, erector and inspector.

YOUR ROOF NOT ONLY COMPLETES YOUR HOME, BUT:

-Makes your house a comfortable home
-Protects against the elements and keeps you warm
-Protects your possessions and valuables
-Protects your family

The next time you put a roof over your head, give thought to the quality of the structure, an essential, specialised part of your home for safety, comfort and security.

Don’t compromise; be informed by the experts in the timber engineered product industry today!

www.itc-sa.org

HEAD OFFICE
SAFCA Building | 6 Hulley Road | PO Box 686, Isando, 1600
Tel: +27 (0) 11 974 1061 | Email: enquiries@itc-sa.org

BRANCHES
South / Eastern Cape | KwaZulu-Natal | Western Cape
Finally, South Africa’s creosote shortage is a thing of the past, thanks to Industrial Distillers & Refiners, who is meeting the local market’s demand

After many years of only supplying creosote to the export market, Industrial Distillers & Refiners (IDR) finally yielded to the requests of various local timber treaters during the creosote shortage a few years ago, to sell its creosote in South Africa as well.

IDR decided to bite the bullet and went through the laborious registration process at the Department of Agriculture, finally obtaining its registration in 2018. With many years’ experience in the manufacturing of creosote, IDR undertook extensive research on market requirements, resulting in positive feedback regarding the product.

Currently, the manufacturer has capacity to supply about 1 000 tons/month of creosote.

History
The business was originally established in 1956 as a soap factory operating in Denver, Johannesburg. In 1973, it started on the path of chemical manufacturing.

The primary objective was to take coal tar chemicals and upgrade them into higher-value products, leading to the manufacture of, amongst others, Phenol, Cresylic Acid, Creosote and High Boiling Tar Acids. Additional raw material saw the production of Industrial Solvents, Coumarone Indene Resins and Superplasticisers.

Over the years, the product line changed, with new ones added and in 2007, the plant moved to bigger premises in Alrode, from where it is currently operating.
Creosote

Creosote oils have been used for over a century as a timber preservative and are used in the treating of transmission poles, decking, fencing poles and many other household, industrial and agricultural applications. It is an extremely cost-effective preservative and, when applied correctly, will protect wood for up to 100 years against insects, fungi, mites and various other pests.

IDR Creosote is manufactured to strict specifications, complying with the British Standard BS144 Type II, the South African National Standard, SANS 616 Type 2 or Type 3.

The plant also produces the IDR Creosote Type C, (IDR Carbolineum), which is thinner and suitable for brushing applications.

In addition, IDR can supply a customised creosote oil according to a customer’s specific needs.

Current activities

IDR in Alrode has a plant, workshop, offices and liquid bulk storage on the premises.

The plant includes high-pressure boilers, chemical reactors, filters, distillation columns and other process equipment.

Industrial Distillers & Refiners is currently a manufacturer and supplier of chemical products such as creosote oils, tar acids, solvents and resins.

The plant also does toll manufacturing, including distillation, reaction, filtration, mixing and blending as well as various other unit operations.

IDR is experienced in the recovery of solvents and other chemicals from contaminated products and is also a registered waste management facility with a license to store and recover hazardous waste.

Amongst other things, IDR can recover solvents from contaminated sludge from the paint industry.

At Industrial Distillers & Refiners, the plant is small enough to meet customers’ individual needs, while also big enough to deliver large orders timeously.

Working under the guidance of three chemical engineers, their experienced
R&D department finds a solution to most problems that are chemical, distillation or manufacturing related.

IDR obtained Environmental Authorisation from several local, provincial and National Authorities for all activities and is in possession of an Atmospheric Emission License.

The company is a member of SAUPA (South African Utility Pole Association) and SAWPA (South African Wood Preservation Association) as well as being accredited by SATAS (South African Technical Auditing Services) for the manufacturing of creosote according to the specification of SANS 616. SATAS offers Product Certification and conducts inspections to the requirements of National, International and private standards. Its mission is to provide an internationally acceptable South African Certification Scheme which will enable clients to compete in international markets.

IDR is also a proud member of Chemical & Allied Industries’ Association (CAIA) and a signatory to Responsible Care, the chemical industry’s own, unique, global initiative – a voluntary programme that helps raise standards and earn greater trust from the public.

Some of IDR’s storage tanks for their black products.
PROMOTING THE USE OF PRESERVATIVE TREATED TIMBER
PROMOTING TREATED TIMBER PRODUCED BY SAWPA MEMBERS

CHOOSE THE CORRECT HAZARD (H) CLASS:

H2 – Low Hazard: Inside above ground
H3 – Moderate Hazard: Outside above ground
H4 – High Hazard: Outside in ground
H5 – High Hazard: Outside in contact with heavy wet soil or in fresh water
H6 – High Hazard: Prolonged immersion in sea water

FOR MORE INFORMATION ON ANY ASPECT RELATED TO TREATED TIMBER PRODUCTS AND THE CORRECT USE OF TREATED TIMBER, OR WHERE TO CONTACT SAWPA MEMBERS, PLEASE CONTACT:

Tel: 011 974 1061
edmin@sawpa.co.za
www.sawpa.co.za

South African Wood Preservers Association
Lonza invests in the education of the community’s little learners

Situated in the rural area of Bethania near Port Shepstone in KwaZulu-Natal, Vulingqondo Créche has, through the support of Lonza over the past decade, developed from a basic rural establishment into a flourishing school.

At the end of 2018, a record number of 51 little learners graduated to primary school compared to just 34 the previous year.

“In the past the students were only from the surrounding community, but now Vulingqondo has children travelling by bus from further afield so that they can attend this school.

We are thrilled to see the positive impact of Lonza’s commitment to support the needs of the crèche, which in turn is helping more than 100 children from communities near and far to break the cycle of poverty through education,” said JJ du Plessis, senior business manager of Lonza South Africa.

Each year Lonza supplies the school’s basic stationery and a computer was also donated to assist with the necessary teaching aids.

An extra classroom was built in 2010 and the bathroom was extended to accommodate six new toilets and two washbasins.

Before, approximately 80 children had the use of one toilet.

The surplus of building material was used to build a much-needed store-room/pantry.

The playground was transformed from uneven and overgrown veld grass to a beautiful play area with manicured lawns, trees and a jungle gym – which was built with timber treated with Lonza’s own wood preservative, Tanalith® C.

When the local government was unable to assist with funding for additional classrooms to accommodate the increasing number of children, Lonza stepped in again and donated a 9.6m x 3m pre-fabricated unit.

However, it is the annual year-end Christmas party and graduation ceremony that always stands out as a highlight for the children, their teachers and the Lonza staff who spend much time preparing gifts, entertainment and lunch with sweet treats for everyone.

With the increased number of students, the 2018 graduation ceremony had to be moved to a local church nearby.

To ensure that all the children and their parents were able to attend, Lonza went a step further to arrange transport with four local taxis.

Vulingqondo teacher for the graduating class, Sure Zodwa, said: “To see the proud expressions on the faces of the children and their parents is priceless.

The Vulingqondo graduating class.
It’s all about confidence
Tried, tested and trusted preservative protection for timber.
Joining Forces

Soderhamn Eriksson and USNR deliver unprecedented levels of service and support

The union of USNR and Söderhamn Eriksson offers customers around the globe many more options when planning their capital improvements. By merging product lines, service and support operations, and technologies, customers can access an even broader range of locally-supported solutions to best achieve their goals.

USNR operates seven facilities in the United States and Canada, including three large manufacturing plants, plus a sales and service center in Russia.

USNR is best known around the world for providing end-to-end solutions for sawmills and planermills, including log lines, curve sawing gangs, edger lines, trim-sort-stack systems, dry kilns, and the optimization and control technologies that maximise the output and performance of all that equipment.

USNR is also known globally for its Coe and Ventek brand products used in the manufacture and grading of plywood and other panel products.

USNR traces its roots back to 1852, the dawn of the wood processing industry in North America. Söderhamn Eriksson has its own long history, dating back to 1864.

The Stenberg family acquired A.K. Eriksson in 1937, and then in the early 1990s acquired what had been Söderhamns Verkstäder.

In 2000, the Stenbergs combined these organisations to form Söderhamn Eriksson.

Today, the company operates five facilities in Sweden, and maintains local-language sales, service, and aftermarket support centers in Canada, Norway, Finland, Russia, Estonia, Poland, and Germany.

The company is known around the world for its high-quality log lines and edger systems. Its Cambio debarker was invented by Söderhamns Verkstäder in the 1950s, and subsequently sold many thousands of machines around the world.

Flexibility and advanced automation

The first saw line featuring Swedish mechanical design paired with USNR scanning and optimisation technology is at Norwood’s Viratsi sawmill.

The result is exactly what was needed for this processor and proves the flexibility of the solution.
Viiratsi Saeveski AS is one of three sawmills in the Nordwood group in Estonia.

In 2016 they started discussions with USNR about a new saw line for large diameter logs to match their existing small log line.

Competition in the market for small logs had increased significantly in Estonia, making it hard to grow by volume.

The sawing capacity in Estonia is also bigger than the availability of raw material, therefore it was necessary to expand the raw material base to maintain the volume of sawn material.

Nordwood’s lumber is used in a wide variety of applications such as construction works, furniture, packaging and wood industry.

Hence, Viiratsi needed a flexible solution which could manage a broad variety of saw patterns.

The solution to this equation spells out the SuperSaver merry-go-round line.

The merry-go-round sawline, together with an optimised edger line, is a common solution in many regions, and in Scandinavia it is closely associated with the Söderhamn Eriksson brand.

We asked Tõnu Ehrpais, the mill manager, why Viiratsi Saeveski chose to go for the SuperSaver solution. “The decision was based on an economic estimate.

Based on our raw material, we need optimum saw patterns plus the maximum possible curve sawing recovery to achieve our goals.”

Mr. Ehrpais underlined the competition for raw material and the role of the suppliers, “The main objective of the investment was to offer forest owners the opportunity to supply all possible assortments of logs to one factory.

Before this investment, the Viiratsi Sawmill was a small log sawmill.

Upon completion of the new line, we can handle logs with diameters from 8 to 50 cm at the small ends, and with lengths of 3-6 meters.”

The Viiratsi sawline is a complete USNR line from the Cambio 800 debarker to the resaw and the Catech edger line. The advanced optimisation, together with sweep sawing technology and the Catech edger, guarantee a high recovery level.

**Catech Edgers**

Catech edgers have long been the top-of-the-line trademark for high-speed softwood edging.

Viiratsi Sweden, where one of the first two Catech systems with BioLuma technology have been installed.
Scanning and measurement technologies have evolved throughout the years, and now USNR’s BioLuma technology has been implemented.

The standard scan heads in Catech systems are now BioLuma 2900L.

The sensors feature laser scanning at a resolution of 8mm at a scan rate of 2500Hz over the full length of the board. As an option, the system can be fitted with vision scanning for full value optimisation.

Recently, the first two Catech systems with BioLuma technology have been installed, one in Fiskarheden Sawmill, Sweden, and one in Viiratsi.

**Why Catech?**
Margo Jaska, technical manager at AS Viiratsi Saeveski explains why they chose the Catech edger for their new sawline, “The edger was chosen mainly because of the capacity – with a peak capacity of up to 70 boards per minute, and an average speed of 55 boards per minute. Other vendors in Europe did not have an edger with such capacity.”

BioLuma 2900L geometric profile scanners with USNR’s optimisation package were chosen based on the precision and reliability that are proven out over many installations.

**Smooth installation**
The performance of the machinery once it’s up and running is only one of many parameters to consider in the process of buying new equipment.

A smooth installation and commissioning process is important as well.

When we asked Mr. Jaska about the Catech installation his answer was very concise, “The installation process went unnoticed.

That is a good sign of assembly quality and professionalism of the startup/installation crew.”

**Supersaver concept**
SuperSaver is USNR’s versatile concept for merry-go-round saw lines.

The common denominator in all SuperSaver configurations is the compact layout, high recovery, and high capital utilisation.

The core concept is the quad bandmill, through which the logs pass up to four times depending on log size and machine configuration.

Debarked logs enter the saw line’s scanner and the optimum saw pattern for each log is determined.

The log is rotated into its optimised sawing position and fed into the canter.
The cant is then fed into the quad bandsaw where two or four sideboards are sawn off.

The board separator separates the boards from the cant and sends them off to the edger.

The cant is rotated 90 degrees before returning for the next pass.

The Viiratsi line is equipped with a quad resaw for extra high output; this means that all patterns can be sawn with just two passes through the line.

To view a video of the line in action go to: https://www.usnr.com/en/product/SuperSaverSM/videos

To learn more about how this combination can benefit your operation, please contact us directly or through our local representatives at MultiSaw.

Söderhamn Eriksson: +46.270.746.00 (Söderhamn), or info@se-saws.com
USNR: 800.BUY.USNR, +1.360.225.8267, or info@usnr.com
Multi-Saw: Neil Murray 082 569 2430, or Allan Pierce 082 312 5667, or info@multisaw-sawmilling.com

The standard scan heads in Catech systems are now BioLuma 2900L.
AstaChem is the leading Malaysian chemical manufacturer of formaldehyde, adhesive resins, specialty chemicals, hardeners, and fillers

Catering to a wide spectrum of industries, we are capable of providing high quality products and innovative solutions to meet the needs of our customers locally and internationally.

Since opening its doors in 1974, AstaChem has always continued to innovate and improve on our products and processes. With a well-trained workforce that focuses on Environment, Health and Safety; and manufacturing facilities located in the north and eastern regions of peninsula Malaysia, we have the capabilities to provide products of added value and assist our customers with technical support and solutions that are developed to suit their needs.

Plywood manufacturing

Variables to consider: How the glue mix affects bonding properties

The plywood manufacturing process is a fairly simple one, comprising of only 10 steps from the logging stage to finished product. However, achieving a high-quality end product requires plywood manufacturers to monitor the properties of the raw materials used in their processes. Aside from veneer and wood moisture properties, the glue mix formulation plays an important role in achieving good bonding properties between veneer sheets.

Glue mix formulation: Moisture resistant (MR) boards & Weather and Boil Proof (WBP) boards. In order to achieve good bonding properties for MR boards, resin content of the glue mix should preferably be more than 40% of the total mix. For WBP boards, resin content of the glue mix is usually more than 33% of the total mix.

The proposed glue mix formulation is shown as a reference below:

<table>
<thead>
<tr>
<th>Moisture Resistant (MR) boards</th>
<th>Weather and Boil Proof (WBP) boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glue (powder) 100 Parts (wt.)</td>
<td>Glue (liquid, 43% solid content) 100 Parts (wt.)</td>
</tr>
<tr>
<td>Water 100 Parts (wt.)</td>
<td>Filler/IWF 30 Parts (wt.)</td>
</tr>
<tr>
<td>Filler/IWF 20-30 Parts (wt.)</td>
<td>Total 130 Parts (wt.)</td>
</tr>
<tr>
<td>Hardener 2-4 Parts (wt.)</td>
<td>Total 234 Parts (wt.)</td>
</tr>
<tr>
<td>Resin Content 100/234 X 100% = 42.7%</td>
<td>Resin Content 43/130 X 100% = 33%</td>
</tr>
</tbody>
</table>

Pot Life: The time interval from the completion of glue mixing until the mixed glue is not suitable for spreading or would not give a satisfactory bond is 4-6 hours, varying on the amount of hardener used.

AstaChem’s Formaldehyde based Powder Resins

Powder resin is liquid resin that has been through a drying process. Only the mixing of water and catalyst/extenders (where required) is needed prior to use. Unlike liquid resin, powder resin allows for maximum flexibility in glue formulation and preparation that can be customized for different applications.

AstaChem offer 3 types of powder adhesives:
1. Urea Formaldehyde
2. Melamine Formaldehyde
3. Melamine Urea Formaldehyde.

These powder resins are formulated specifically for use in the production of wood panel products. Manufactured specially for export markets, this powder resin solves logistic and storage problems that many may face when dealing with liquid resin. In powder form, challenges such as shipping and handling, as well as specific storage requirements are not an issue. Besides that, the long storage life of the resin (about 9 months) makes it ideal for small doses and irregular use.

AstaChem powder resins are able to meet stringent international bonding requirements such as BS EN 314, 312, 622, JAS 1751, JAS 1460; and low emission requirements such as E2, E1, E0, SE0, F****, F***, and CARB P2.

Applications:

<table>
<thead>
<tr>
<th>Types</th>
<th>Used in Production of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea-Formaldehyde (UF)</td>
<td>1. Particleboard</td>
</tr>
<tr>
<td></td>
<td>2. Medium Density Fiberboard</td>
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<tr>
<td></td>
<td>3. Plywood</td>
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<tr>
<td></td>
<td>4. Furniture</td>
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<tr>
<td></td>
<td>5. Laminating</td>
</tr>
<tr>
<td></td>
<td>6. Bonding paper and veneer overlays</td>
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<td>7. Interior flush doors, etc.</td>
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Surrounded by heritage trees and buildings, the Arch4Arch awaits the arrival of Archbishop Desmond Tutu on its inauguration day.

An Arch for The Arch

The Arch for Arch monument situated on Government Avenue in Cape Town is the oldest pedestrian thoroughfare in the country and is remarkable in that it is entirely made of wood.

Commissioned by Design Indaba its name is a play on Archbishop Desmond Tutu’s nickname, "The Arch" and the architectural attributes of an arch structure.

Made from 14 individual arched beams of laminated Siberian Larch timber that form a dome, the imposing Arch for Arch stands nine meters tall.

It was manufactured and erected on short notice by a master carpenter, Marc Lüdi and his company, Swissline Design. Marc explains that the structure required the utmost precision and accuracy.

“We worked closely with the timber engineering company, Haring in Switzerland, to ensure that the cutting list was true to the engineering drawings.

The intricacy of the design required the beams to fit perfectly to form the shape.”

Lift off: Swissline’s team begins the laborious process of erecting the Arch4Arch in the shadows of St George’s Cathedral.
Siberian Larch timber was specified because of its high density, rot resistance, bending and laminating properties and its moisture content of between 16% and 18%.

“The wood selected for the Arch is highly durable and weather-resistant, which will allow the structure to age gracefully,” says Marc.

“The use of wood adds warmth and is unusual for a monument, which typically conveys messages of solidity and permanence through materials like stone, bronze or concrete.

This choice was made to encourage people to interact with the structure in a friendlier way.”

The manufacturing process was not an easy task. The timber was machined and laminated using 25/150mm size planks at Swissline’s factory. “Each beam was curved along two different radiuses and laminated by hand using custom designed and built jigs and special glue with waterproof properties we imported.

To complicate matters, each beam included a conduit placed in the centre of each curve to carry the electrical wires for the lighting feature,” explains Marc.

“It took us about three weeks to make the 14 beams and because we were pushed for time, we worked very long hours,” Marc comments with a smile. “The jigs and bending brackets enabled us to bend two complete beams a day.”
Once the massive beams were laminated, they needed a smoothly planed finish.

The only way to achieve this without taking months of hand planing was for Swissline to innovatively adjust its thickness planer to accommodate the curved beams.

They suspended the planer from an overhead crane so that each beam with its curve and twist could be threaded through evenly, several times over.

“We demanded a lot from the planing machine, which we bought from Austro years ago, and it coped very well.

The main manufacturing challenge was to get all the angled cuts aligned so that we could pre-drill the holes for the bolts,” says Marc.

“We also designed and made the connection and base plates and coated the wood with an imported UV-resistant oil to the client’s colour preference of slightly grey.”

The erection of the arch was carefully planned and swiftly executed.

It is located next to St George’s Cathedral where Tutu served as Archbishop and is adjacent to the Houses of Parliament, the Company Gardens, and the Slave Lodge.

Swissline devised an ingenious system for bending and laminating the 14 beams for the Arch4Arch.

The area is a heritage site and all eventualities had to be considered.

This included safe work practices and having an archaeologist and Cape Nature present. “The only snag we hit was the difficulty to place the curved beams with a crane between the huge trees which are protected and cannot be removed.

With the help of Cape Nature, we only needed to trim a few branches and managed to maintain the integrity of the trees,” comments Marc.

The inauguration of the monument took place on 7 October 2017 with a gala event celebrating The Arch’s 86th birthday by an impressive list of dignitaries, including Marc and his wife Nadia.

Unfortunately, a few months later vandals struck. “We warned the client and the architect during the planning phase that there is a strong possibility of vandals stealing the bolts, we suggested that the bolts be glued or welded in.
Regrettably they did not heed our suggestion, however, when it happened, we were prepared and could assist,” comments Marc.

“We were selected because of our reputation of designing and constructing interesting timber structures that require in-depth knowledge and engineering skills of working with structural wood.

Before coming to this country in 2006 Marc was involved with the design and manufacturing of the domed wooden roof of the famous Salt Hall in Switzerland.

Locally we recently completed a helicopter hangar made from bent and laminated beams,” explains Nadia. “Marc has a passion for interesting and difficult timber projects.

The more complicated the design, the more it inspires him to defeat all obstacles that could occur,” she says.

“Our next exciting project is the Woodbridge Island Bridge restoration in Milnerton, Cape Town.

This is quite an honour-and commences at the end of January 2019.”
OPTI-mising kitchens

In the highly competitive environment of cabinetry, longevity and reputation go a long way to keeping ahead of the pack

Optima Kitchens was established in 1991 and since, has become one of the most reputable kitchen companies in South Africa. Founded by Fanie Marais, who entered the kitchen industry in 1970, it is now second-generation Stefan Marais, who holds the position of CEO of this all-South African manufacturer.

An expansive 400m² showroom opened its doors in 1998 in Strijdom Park, alongside a factory. However, before long, Optima Kitchens had to move the factory to a 2 000m² premises in Kya Sands as the premises required expansion to meet the growing demand. Chief operations officer (COO), Andries Kruger explains, “We handle everything from the order being received to the handover of the finished product to the client.”

The differentiators

In a competitive market, differentiators are the lifeblood of a company, and Optima Kitchens has many strings to its bow. From receiving the order, the design team in Strydom Park spends hours planning the project to client spec, ensuring every component is scrutinised for appropriateness and that it meets requirement. The configurations are designed on computer, using PLanit - Maxima Bespoke Software, which ensures the most accurate measurements and attention to the finest detail.

“All the components are listed using the Excalibur Optimization programme. The project then goes through the production process, from cutting, edging, drilling and if apt, spraying, to assembly, packaging and delivery,” says Andries and adds, “And then the next phase starts, namely installation.” This is undertaken by any one of eight installation teams that regularly travel across border to do installations, unlike other companies that sub-contract to a local in-country agent. This hands-on approach ensures that the same quality is maintained throughout the production/installation process.

What sets Optima Kitchens apart from many other similar companies is that it ensures that the customer is led through the entire production/manufacturing process, that the client is made fully aware of the various stages of production and remains abreast of delivery timelines within that process.

“For example, we cannot install our cabinets if the windows are not in because the builder hasn’t completed his work,” Andries explains. This detailed production timeline quells any anxiety the client may have around completion of the project and in turn, builds trust with the company.

This, along with close collaboration between the manufacturer’s design team and the client, forms the basis of a sound brief that is tailored specifically to the client’s specifications. Nothing is standardised or ‘off-the-shelf’.

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and once again, word-of-mouth gets us a fair share of contract work as well.”

**Suppliers**

At its Kya Sands facility, Optima Kitchens cuts about 300m² per week of the “basic, carcass material” which is white Melamine, equating to about 60 boards measuring 2 750mm x 1 830mm. “Depending on colour and type, it varies, but for the door material, we cut about the same amount per week,” Andries adds.

Materials are sourced from various local suppliers, with solid timber mainly coming from Country Woods and Silverton Timber.

Comprising the largest share of the orderbook, the Melamine board is supplied by Kayreed Board & Timber and Mr Board, while the veneer and superwood materials are supplied by Mitre Veneering.

“While we also get edging from all our suppliers, our main supplier is National Edging,” Andries says.

All the functional fittings, runners, hinges and lift systems are supplied by the Eclipse Group, agents for Blum, a European company “Because the Austrian engineering is unbeatable,” he comments.

Andries clarifies that the company doesn’t produce different ‘ranges’ of installations, but rather works to a client’s budget. “What a client wants is what we give them, as most clients are discerning and know the various brands and hardware, they know what timber they want, what drawer system etc. as they do research online and come away informed.”

To produce the units, the factory has a mixed fleet of machine brands including a Brandt edging machine from Germany, which is 18-years-old and still in perfect running order, he assures.

The two main panel saws at the Kaya Sands factory are German Striebigs, supplied by local agent Austro, and a

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Included in the mix is an Austro DGC2609 CNC Router for drilling, grooving and routing of panels.

Andries says that upskilling of the 34-strong factory floor staff is an ongoing process where in-house training is conducted, along with attending training sessions at the company’s various suppliers.

**Markets**

Optima Kitchens exports to most of the neighbouring countries, as well as Angola and as far afield as Cameroon.

The company has completed work for many high-profile dignitaries.

In conclusion Andries comments: “The greatest challenge in such a competitive industry is to keep up with the latest architectural designs, because, I always say, ‘Architects believe in a sky-hook’,” he adds with a grin.

“It’s one thing to draw something, but to create the reality and install it, as it was visualised, is another thing entirely” – and that is where Optima Kitchens excels.

“What a client wants is what we give them, as most clients are discerning and know the various brands and hardware, they know what timber they want, what drawer system etc. as they do research online and come away informed.”
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What’s cooking… in kitchen design

Gone is the tendency to separate the dining area from the kitchen as apartment living becomes the norm, necessitating a change in design approach, allowing for a seamless merging of the eating, cooking and living areas.

Stone is in, as are clean lines, splashes of colour, industrial, loft-like designs, natural materials and metal finishes. In other words, a veritable smorgasbord of creativity.

Wood SA spoke to members of the Kitchen Specialists Association (KSA), all recognised leaders in kitchen design, to hear what the trends are within this most important area of any home.

Trends
Cape Town-based Space Solutions’ kitchen and plan were chosen to be on the front cover of the KSA 2019 Consumer Guide and Heather Cresswell, director, shares her insights.

She describes how design will be affected as the kitchen is incorporated into a ‘living’ room: “The focus is on keeping the more functional aspects (of the kitchen) hidden. Design will be on sliding doors, moving countertops that double up as eating tables and hidden pockets for the messier aspects of kitchen life. Hidden taps make their debut as we keep lines clean and clutter-free.

Space optimisation is key as we pare down our living space and rediscover ways to live more simply and authentically,” she says.

“Handle-less kitchens and cabinets will remain popular as the market moves away from traditional cabinetry. This allows designers to create very elegant and flowing lines,” Wimpie Schutte, co-owner of Cupboard Craft adds.

Family-owned business cabinetry specialists, Cupboard Craft, has been making fine cabinets since 1982 and with almost three decades of knowledge and expertise to call on, the company enjoys the respect of industry peers.

Wimpie continues: “Textures and combinations of different material elements seem to be the main design focus at the moment,” he says and adds that the move has been away from shiny finishes to more matte/powder-coated steel.
Austrian company Blum’s lifting accessories have found widespread favour in the kitchen manufacturing sector.

“This element is also widely used as worktop and shelf supports, and as surrounds,” Wimpie adds.

In addition, natural wood tones, such as white oak and ash continue to be popular: “Almost always in a matte/natural finish, moving away from the traditional sheen/shiny wood look,” he emphasises.

Another leader in kitchen design, Optima Kitchens, established in 1991, has become an authority in the kitchen industry and Dave Nemeth, CEO underscores that natural materials remain essential, as wood grain surfaces, concrete, slate and stone come into their own, with marble and terrazzo making a return in kitchen design.

“Brass and copper are key metals for detailing and where there are limited budget restraints, these are also being used as cladding for cupboard doors,” he says and comments, “Solid wood and metal cladding remain out of reach for many due to the cost of these materials, yet there are a host of innovative brands creating laminated products which replicate the texture and aesthetic beauty.”

In this regard, Sonae Arauco’s Silhouette range offers a linear embossed wood-like finish that provides a deep-matte effect, creating a highly authentic wood grain, perfect for all applications, while the Alpine selection brings woodgrains to life and is also suitable for most applications.

Managing director Andrew Hatt of Infin8 Surfacing, says to look out for thinner 12mm front-edge worktops: “They aesthetically minimise the bulkiness of a room and accentuate the modern, sleek, straight-lined appeal of a modern-day kitchen,” he explains.

“At the same time as technology is becoming ubiquitous and deeply embedded in all aspects of our lives, we see the materiality of objects being emphasised in kitchen design,” Andrew notes.

He says rather than the lighter, Scandinavian-inspired colours of previous years, the use of dark timbers and stone tops as well as dark metallics, are becoming more prevalent in the kitchens of today.

According to Andries Kruger, COO of Optima Kitchens, the trend is moving towards two-tone; a mixture between Duxcoed surfaces and mainly white oak, with a mono coat stain and oil.

This creates a contrast of textures. He says, “On our side, the offering that has served us well over the years is the satin-painted finishes and high-gloss painted finishes which now, in combination with the range of veneers, is gaining momentum.”

Modern industrial-style kitchens are also a growing phenomenon.

This trend has roots in the mid-century modern design in the USA, which became popular during the ’70s in Europe too: it was a style which drew its origins from the stark aesthetic of old warehouses’ used for industrial product or material storage.

Cupboard Craft’s expert Wimpie, adds, “New additions to the market such as Sonae Arauco’s Stucco range is also hugely exciting.

The Stucco finish is a highly tactile surface inspired by industrial environments, urban lofts and natural origin materials.

“Look out for backsplashes that are coved and extend to the underside of the high-level cupboard,” says Infin8 Surfacing’s MD. “Many designers are incorporating a transition from countertop top to splash back, which extends up to the cupboard space above, in finishes The Stucco finish is a highly tactile surface inspired by industrial environments, urban lofts and natural origin materials.

“Look out for backsplashes that are coved and extend to the underside of the high-level cupboard,” says Infin8 Surfacing’s MD. “Many designers are incorporating a transition from countertop top to splash back, which extends up to the cupboard space above, in finishes
including an industrial concrete look.” In addition, Nature also plays a crucial role in the current design, Dave from Optima comments, and adds, “We are seeing plants and herbs becoming an integral part of kitchen design.

This mindset also explains why we are seeing more natural materials being used.”

Heather’s opinion mirrors this observation and she says with insight: “Just as we create kitchens as living spaces in which we interact, so are we wanting that interaction of natural light and greenery in our internal living environments.

Bronze and grey mirrors bring the outside in, creating subtle reflections of nature, light and sky.

As we move to more organic shapes, softer lines appear in kitchen and living spaces.”

Optima’s CEO observes that, rather than simply following trends, consumers are looking for unique designs that suit their lifestyles and personal taste and thus bespoke designs will continue as “individuality is key in the age of technology and mass production” he notes.

He muses: “The sterile white kitchen has seemed to have reached the end of its lifespan as have ultra-bright colours as accents. Lime green, red and other bold colours are no longer seen as edgy and on trend. We however see a bold move to dark coloured kitchens including black.”

“Legs extending down to the ground on the side of open cupboards or the sides of kitchen islands are big,” adds Andrew and comments: “Aesthetically, they box a kitchen unit with a seamless integrated look and feel, but functionally, it finishes the side of a joinery unit to make it durable and everlasting.”

This look popped up all over kitchen shows in 2018, including at Eurocucina, the biennial international kitchen exhibition, held in Spain.

Established in 1994, CHC Kitchens designs’ managing director Francois Engels, says with enthusiasm: “Mix in a rough, rustic and vintage-looking wood finish with grains and knots and you have a lively yet neutral and warm space that speaks of elegance and timelessness.

Other favourite trends include mixing not only bold and complimentary colour tones but also mixing finishes: velvet-like matte finishes create dimension with polished surfaces, along with those rough and rustic wooden finishes, that have their own linear or wooden textures.”
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Stone working surfaces have come into their own with the latest kitchen trends.

Heather adds: “Blue continues as the new black, but count on bursts of colour with chartreuse, reds and oranges to brighten up the look, tempered with whites, delft patterns and the layering of natural textiles.”

Emphasising Heather’s earlier observation about clean lines and concealing taps etc, Wimpie says that lifts and vertical openers are gaining popularity and comments that with all the different options available on the market, “customers are spoilt for choice”.

Nevertheless, Austrian company Blum offers a vast selection and appears to be the supplier of choice among many of the kitchen specialists.

Blum in South Africa is distributed through Eclipse and also offers an option to have cabinets open electrically “by the mere push of a button”, Wimpie notes.

These lift systems also make it possible to create long horizontal lines in the kitchen design, as surfaces are not visually interrupted or ‘broken’ by handles.

Manufacturing
Automation remains the name of the game for modern cabinet makers, says Cupboard Craft’s expert and adds, “Modern systems allow users to optimise, cut and cost directly from the design software.

Further on, this can be pulled into a bar-coding system that labels each individual component, with the bar code indicating edging details and CNC drilling patterns,” Wimpie explains.

The machine operator simply scans the component, after which, the relevant machine sets itself up with the correct edging or drilling pattern.

“This helps eliminate human error and brings down programming time and machine set-up. Biesse is a leader in this technology in the industry,” he observes.

CHC’s MD Francois, says that to enhance their cabinetry production process, the company uses a Lohmeyer/Nanxing edge-bander machine which has a pre-milling capability that improves the quality of the edging.

“We also have a Biesse CNC machine doing the precise cutting for the knockdown fittings, back panels and drilling for shelving.”

Space Solutions’ expert Heather observes: “We pride ourselves on having our own manufacturing facility that ensures delivery of the highest quality.”

Commenting on manufacturing trends, she adds: “There are fantastic software platforms changing the face of kitchen manufacture, eliminating human error in cutting lists and material optimisation.

Design software that integrates with CNC machinery ensures exceptional design delivery, breaking the boundaries of what the industry was previously able to manufacture.”

Infin8 Surfacing’s MD Andrew emphasises that by using design software and digital technology it has made it possible for customers to engage directly with the design of their own kitchens. “Nowadays there are new materials available as well as software programmes that allow us to select different finishes – with the click of a button – that show various finishes on a kitchen so that we can better visualise how our custom kitchen will look.

This also allows our customers the opportunity to envisage the combination of finishes first-hand,” he shares. “We have completely changed our entire production process by creating the pre-fabrication area which houses our automated machinery, a CNC router-driven machine and a V/coving groover machine.”
Sonae Arauco offers a selection of kitchen surfaces that emulate a natural touch, reminiscent of wood worked by hand.

These machines create accuracy, efficiency and save us labour time, enabling us to be aggressive in the market regarding our pricing. “The other machine that we house, is our hydraulic press and that machine presses all our shaped basins for the domestic market,” Andrew explains.

Materials
Francois says that CHC prefers Sonae supreme white ‘A’ grade boards, as well as PG Bison boards which supply the various colours. “These would also include the super gloss texture,” he clarifies. “We enjoy trends that radiate...”
Stone is becoming increasingly popular in kitchen design with a variety of types and textures to choose from. “We particularly enjoy a mix of masculine, strong and bold grey or black tones in a matte finish, contrasting against a more feminine marble or Calacatta-like polished stone for use of worktops, splash panels or down stands.

Stone need not only be used for worktops,” Francois adds.

Surface producers like Caesarstone and Cosentino's Dekton also produce matte/rough surfaces, “tying into the industrial-look trend very nicely” says Wimpie. In addition to being more cost effective, another benefit of opting for quartz and ceramic-based marble-inspired countertops is that they're more durable and don't require the maintenance associated with marble, which is porous and can be affected by acidic ingredients.

In conclusion
Andrew Hatt of Infin8 Surfacing has the last word: “In a world of mass consumption and consumerism, people want to create bespoke spaces that are unique to who they are and their significance as individuals through their own creativity,” he says.

“The next development in personalised design is a new role for manufacturers, in which we become more like advisors or teachers, and customers actually want a learning experience in which they design and create their own spaces.”
International roots

Also a KSA member, Diva Cucine Johannesburg is home to the Colombini Brand – an Italian global brand – trading under the name and style of the Colombini Group.

Having partnered with a turnkey brand, Diva Cucine offers everything from kitchens, wardrobes, and custom-made lifestyle furnishings to meet each client’s individual style and needs. Annually working and attending the world’s largest Salone del Mobile Fair in Milan – Diva Cucine is assured of remaining leaders in their field with their up-to-date trends and designs.

The Colombini Group was founded in 1965 and is now one of the frontrunners in Italy’s competitive furniture industry. With a production area of about 250 thousand square metres (six floors underground), 85% automated (600 full time employees) and more than 1 000 direct and indirect collaborators, the group distributes its products in Italy and abroad. The company’s main ethos includes ‘passion for Italian design’, determination, and an emphasis on integrity and respect for people and the environment. Three brands within the Colombini Group umbrella are Colombini Casa, Febal Casa, and Rossana. From their fusion comes a variety of products able to satisfy every single customer’s needs in terms of style and budget.

Some brand facts:
- 53 years of Italian design and production
- Supplying 8,029 retailers.
- Approximately 260,000 home areas produced annually.
- 164 partnered single-brand stores worldwide
- 15 new complete collections launched annually
- 350 furnishing consultants available all over the world.

A team of professionals that assure consistent quality includes engineers, specialised technicians, designers, architects, and marketing experts, who work side by side to create attractive lines of superior product. A team of technicians constantly checks quality control on every single product, which must meet the highest standards as required by the certified management systems ISO 9001:2008 and ISO 14001:2004.

The company considers that attention to the environment and sustainability is not a matter of compliance with regulations, but a choice of the Colombini Group and comprises clear planning and widespread implementation. This includes continuous monitoring and actions aimed at business improvement: a defined climate strategy, optimisation of energy resources, reuse of production waste and the use of 100% recyclable materials.
Woodworking

Wood lives and breathes, more so in the hands of a creative... Carel van der Merwe from Creative Turning describes how he brings wood to life in his artworks

I regard myself as an artistic woodturner and like to explore the natural beauty of wood and to create features from natural flaws in wood.

The ideal is to find wood with ‘burl’ growth, which is a tree growth in which the grain has grown in a deformed manner. It is commonly found in the form of a rounded outgrowth on a tree trunk or branch that is filled with small knots from dormant buds.

Burls attached to the roots of trees are of special interest owing to the effects that can be achieved by using these root burls. In some cases, other decorative effects like engraving, burning and colouring are added to enhance the natural beauty of the wood.

I enjoy making hollow forms and natural edge items which are normally non-functional and sold in art galleries and to interior decorators, to enhance a setting.

Type of wood used:
I mainly use indigenous South African woods which are normally remains from trees that were burnt or blown down in a storm.

My preference is to turn the wood before it is completely dry, as the movement of the wood during the drying process can be also be used as a feature of the turned piece.

For some pieces I use wood that is generally available, like jacaranda, which can be coloured and decorated as it is a light-coloured wood, and oak, where the open grain can be exploited to its creative maximum.

For my artistic turnings I mainly use rare burls sourced in the Mpumalanga province. Some of them are not well known, in fact, they are quite scarce, but produce beautiful turned items:

- Skunkbush (Premna mooiensis)
- Hairy fingerleaf (Vitex obovate)
- Red Currant (Rhus chirindensis)
- Wild olive (Olea europaea) Specifically from dry areas where they grow very slow
- Sneezewood (Ptaeroxylon obliquum)

Tools used:
For harvesting the wood and cutting it to workable pieces, I use a Stihl MS381 chain saw. A big heavy wood lathe is required for the large items I design, for which I use an Australian Vicmarc VL300 lathe.

Turning tools are from Sheffield in the UK and mainly from Hamlet.

For the hollow forms I use equipment from the UK supplier, Simon Hope.

Samples of work

Painted Feathers was turned from Skunkbush (Premna mooiensis). The piece is in fact the roots with the burl growth on the roots and it stands on the stem where it came out of the ground.

In other words, the piece is upside down from the way it grew. Turning a piece like this is quite difficult as it is not the same as turning a solid bowl, in this case the wood is interrupted by gaps where you do not have any support for the turning tools.

Due to all the cracks it can also fly apart very easily. The diameter is 40cm with a height of 18cm. This piece was only finished recently and is still with me.

Burnt Remains was turned from Red Currant (Rhus chirindensis) burl. The orientation of this bowl was selected...
to get the maximum effect from the natural edge of the
tree which was damaged in a fire.

These burnt areas were used to enhance the natural edge of
the bowl. The piece is about 30cm diameter and 15cm high.
It was sold at my last exhibition.

The better half is also from Skunkbush (Premna mooiensis)
burl. It is a form which was hollowed out through the hole
at the top.

I include another piece which is also quite interesting,
Broken world from Hairy fingerleaf (Vitex obovate). It is a
ball shape with natural holes that give it the shape of the
earth.

The orientation of the piece was done in a way that the side
opened up during turning in order to see the inside of the
hollow form. Size is 30cm diameter with 18cm high.

It was also hollowed through a small hole at the top and
needs to be turned very carefully to ensure that it does not
come apart during turning. Size is 20cm diameter and was sold.
CIFM/interzum guangzhou 2019

Asia’s largest and most comprehensive trade fair for the woodworking and upholstery machinery, furniture materials and interior decoration industry is FULL

Due take place from 28 to 31 March, 2019 at the China Import and Export Fair Complex (Pazhou Complex), CIFM/interzum guangzhou will run in tandem to the China International Furniture Fair (CIFF) – Asia’s most respected trade event in its category.

CIFM/interzum guangzhou is recognised as the leading forum for trade, displaying and introducing new products for the region’s furniture manufacturing industry. This year’s edition will cover 17 halls across Area B and C of the venue, occupying 150 000m2, showcasing the latest products and technologies from over 1 500 exhibiting companies from more than 38 countries and regions. The much-anticipated event is set to draw 85 000 visitors.

During the event, attendees will have access to a series of forums, seminars, product launches and buyer salon activities, as well as being afforded the opportunity to participate in discussions and exchanges with industry experts, including designers and brand representatives from around the world.

The South Korea pavilion, boasting eight national pavilions, is slated to make a strong comeback after a short break from CIFM/interzum Guangzhou. An additional seven pavilions will be represented by Germany, Turkey, US/Canada, Italy, the American Hardwood Export Council (AHEC), Canada Wood and French Timber. Included in the exhibitions will be several brands that will be appearing in Asia for the first time.

Some key brands to be featured include:

**Woodworking Machinery & Cutting Tools:**
IMA, Leitz, Vollmer, GreCon, LEUCO, Hans Weber (Germany), Homag, Nanxing (China), SCM, Biesse, Ferwood, Freud, Paolino Bacci (Italy), Woodtron (Australia) and Felder (Austria).

**Upholstery Machinery & Pneumatic Components:**
Duerkopp, PFAFF, Adler, Mammut, OKIN, Limoss (Germany), Leggett & Platt (US), Lianrou, Yuantian (China), Elektroteks (Turkey), LINAK (Denmark), TIMOTION (Taiwan), Lion Rock (UK) and ALFA (Switzerland).

**Accessories for Upholstery Furniture:**
Aydin, Boyteks Tekstil, Comfytex (Turkey), Xinyada (China), Bekaert Deslee, Artilot/Global Textile Alliance (Belgium) and Jacquard Textile (Thailand).

**Hardware & Components:**
Italiana Ferramenta, FGV, Sige, SERVETTO, CINETTO (Italy), Nan Juen/Repon, King Slide, (Taiwan), Titus (UK), Cyber Lock (Thailand), DTC (China), Sugatsune (Japan), FREITAS IRMÃOS (Portugal), Samet (Turkey), LEHMANN, LS Lighting and Suspa (Germany).

**Wood Products & Adhesives:**
Urufor (Uruguay), Pollmeier, Henkel, Kleberit (Germany), American Softwoods, H. B. Fuller (US), French Timber (France), KRAUSS (Latvia) and Saveplac (Italy).

**Interior Decoration & Accessories:**
Impress, Schattdecor, RENOLIT, Germantops, Klöckner Pentaplast (Germany), Alvic, Lamigraf (Spain), ICA (Italy), Fritz Egger, TZ AUSTRIA (Austria), Kastamonu and Lignadecor (Turkey).

To learn more about CIFM/interzum guangzhou 2019, visit www.interzum-guangzhou.com.

Contacts:
Monique Fan
Tel: + 86 20 8755 2468 ext 16
Fax: + 86 20 8755 2970
Email: m.fan@koelnmesse.cn

Karen Lee
Tel: + 86 20 8755 2468 ext 12
Fax: + 86 20 8755 2970
Email: k.lee@koelnmesse.cn

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Asia's Leading Furniture Production Fair

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**KLEBCHEMIE M. G. Becker GmbH & Co. KG**
Johannesburg • Durban • Cape Town • Germany • United Kingdom
Phone JHB: 010 500 9165
Email: sales.safrica@kleiberit.com

[www.kleiberit.com](http://www.kleiberit.com)