

AWISA THE MAGAZINE



FOR THE CABINET, JOINERY, FURNITURE, TIMBER AND PANEL INDUSTRIES



PUBLISHED BY THE AUSTRALIAN WOODWORKING INDUSTRY SUPPLIERS ASSOCIATION LIMITED



Introducing **SERVO-DRIVE**
for **AVENTOS HK top**

  @blumaustralia #AVENTOS



Easy drive unit fixing

After installing the lift system, the drive unit can simply be clipped onto the AVENTOS HK top lift mechanism without tools.



Assisted start-up

Colour signals on the drive unit and wireless switch take you through start-up step by step. The SERVO-DRIVE unit automatically checks whether the front weight has been correctly balanced and confirms that settings are correct.

MULTICAM

CNC ROUTING MACHINERY

Forever evolving solutions for cabinetmakers

Local Service



Local Support



Local Knowledge

*In difficult times, we
support Australian made.*



NSW Office:
60 Enterprise Dr,
Beresfield, 2322
☎ 02 4964 1900

VIC Office:
11/40 Ricketts Rd,
Mt Waverley, 3149
☎ 03 9558 8022

QLD Office:
8/42 Trade St,
Lytton, 4178
☎ 07 3348 7866

@ sales@multicam.com.au
🌐 www.multicam.com.au

AWISA THE MAGAZINE

Read THE MAGAZINE at www.awisa.com

Published by the Australian
Woodworking Industry Suppliers
Association Limited
ABN 44 134 548 253

EDITOR AND PUBLISHER

Geoff Holland
General manager, AWISA Ltd
Phone 02 4861 7040
Email: info@awisa.com

CONTRIBUTING WRITERS

Rob Ditessa, John Halkett,
Simon Hodgson, and Rick Lee.

DESIGN

Felicity Carruthers

PRINTER

Major Graphics Printers Pty Ltd

Post all correspondence to:

AWISA Ltd
P.O. Box 895
Bowral NSW 2576

Copyright AWISA. All rights reserved.
Magazine or part thereof may not be copied
or reproduced without written permission by
the publisher. Contained specifications and
claims are those of the manufacturer.

Disclaimer: Advertising statements and
editorial opinion and contributors' comments
are not necessarily those of AWISA Ltd or
its members unless expressly stated. The
publisher and editor assume no responsibility
for errors or omissions or any consequence of
reliance on this publication.

The Australian Woodworking Industry
Suppliers Association Ltd is a trade
association that represents the interests of
suppliers to the cabinet, kitchen, joinery,
furniture, fit-out, and other wood, timber,
aluminium, plastic, stone and panel
processing industries. Members include
suppliers of machinery, materials, fittings,
software and services. Membership and
advertising enquiries are welcome.

DEAR READER,

The disappointing news is that the AWISA exhibition
planned for July has been postponed. See page 9. Updates
will be at www.awisa.com/exhibition.

The coronavirus has seemed to strike the very countries that
are significant contributors of products at the exhibition.
The prime reason for the decision is concern for the health
and safety of all attendees. But Australia has some unique
problems resulting from our distance from Europe. And that
is why we have made the decision earlier than some may
think it needed to be made.

We know that many exhibitors will simply not be able to
get deliveries in time for the exhibition. While European
manufacturers, unlike Chinese manufacturers, have not had
to shut factories there is a shortage of some components.
Machinery exhibitors at AWISA exhibitions always
concentrate on the new and the different, not the stock
machines that they have in their showrooms, and in some
cases manufacture of machines needed for the exhibition
has not even been able to start. And surprisingly there is a
shortage of shipping containers. Normally containers come
and go, and a pool of empty containers is always available.
But with low numbers of containers coming out of China to
Europe, the normal pool of empty containers does not exist.
Also, AWISA had to take into account that about 200
technicians, product specialists and senior management
come to the show from overseas. They are essential to the
building and operating of the event.

Let's finish on a positive note. This issue has a slightly
trans-Tasman feel to it, with great stories about international
award-winning designer Davinia Sutton, and about New
Zealand chair designer/maker David Haig. Come on
Australia - send me details about the similarly competent
Australian specialists and we'll run stories about them.

Geoff Holland
General manager
Australian Woodworking Industry
Suppliers Association Limited

FRONT COVER:

Manual and automated finishing is now
available in the one machine, such as the
Sprayteq S-100. Photo courtesy of Homag.

CONTENTS

- 6. **DESIGN:** International design winner.
 - 9. **EXHIBITION:** AWISA show news.
 - 10. **GALLERY:** Brisbane restoration studio.
 - 12. **ECONOMY:** Impact of bushfires.
 - 14. **CONSTRUCTION:** High beams.
 - 18. **MACHINERY:** No rules.
 - 20. **MACHINERY:** The digital workshop.
 - 25. **HARDWARE:** New assembly dimension.
 - 26. **SOFTWARE:** For manufacturing.
 - 28. **TIMBER:** Supplies after bushfires.
 - 30. **VACUUM:** Trouble-free palletising.
 - 32. **MEASURING:** Next level site measuring.
 - 35. **LAUNDRY:** Raising the bar.
 - 38. **HARDWARE:** Setting new standards.
 - 40. **CHAIRS:** Flexibility and connectivity.
 - 46. **BINS:** New cinder range.
 - 48. **MACHINERY:** Building up business.
 - 50. **EXHIBITION:** Creativity at the edge.
 - 55. **HARDWARE:** Premium wire ware.
 - 56. **MACHINERY:** A genuine asset.
 - 61. **HARDWARE:** New shelving range.
 - 62. **MACHINERY:** Production in digital age.
 - 68. **HORSES:** Rocking horses popular.
 - 70. **HARDWARE:** Sleek storage and doors.
- Plus other industry and product news.

www.awisa.com



New Zealand designer wins International Design of the Year

CHRISTCHURCH DESIGNER Davinia Sutton recently won the International Design of the Year Award at the UK Designer Kitchen and Bathroom Awards in London. She talks about her winning design.

OUR CLIENTS wanted a kitchen design that was uncluttered, a chic smooth space with an urban edge, using hardy, bold materials. They also requested an area that was separate from the main body of the kitchen, "to make lots of mess" whilst entertaining, as well as providing ample storage.

As the main feature of an architecturally designed home, this kitchen is situated in the main living pavilion, with access to dual interior and exterior entertaining areas.

As the kitchen was to be on display and hold a strong presence within the pavilion, it had to be strong in form, flow effortlessly within the space, and retain an open, clean lined aesthetic. Formed around the concept of a 'front and rear kitchen', it is created around a central element of a mid-stain veneer wall linking the two zones, intercepted with a layered island in the foreground of the space.

The front zone serves the day to day needs of a functional kitchen - a prep and cooking zone is positioned to the front island, to allow interaction and connection to the main pavilion, which services an outdoor barbecue courtyard and the adjacent family/dining rooms. The wash zone is placed

to the mid-section wall, allowing clean up and prep to be slightly removed from focus. The rear walk in pantry provides overflow space along with additional prep zones, appliances and valuable storage.

A striking bold palette of ¼ cut American white oak veneer finished with a matt warm stain, contrasted by Matt Black Fenix Ply doors and Natural honed textured black granite bench surfaces, was chosen to accentuate the strong architectural form of the cedar clad interior and boldness of volume within the space.

A sharp contrasting change of level enhanced by a crisp 'Pure White' Caesarstone bench was used to emphasise the 'seating space' joinery element to the front of the main island and central cook zone. The stained veneered façade resting beneath blends with the rear kitchen joinery, to enhance a sense of hierarchy for the front and rear zones.

Integrated appliances were carefully selected to enhance the streamlined approach to the detailing of the kitchen. Lighting was also kept practical and restrained, with the prominent use of down lighting and task LED ribbon. This approach helps deliver a sense of grand stature in the steel rangehood with its LED lighting.

Play on detail such as mitred corners, layering of form, contrast of scale and texture, and the striking feature of the







- black custom-made raw steel rangehood helps to accentuate the modern approach of this kitchen, whilst reinforcing a solid form which is reflective of the overall feel of the architecture.

Through the interesting play of form and mix of materials, a kitchen with the desired boldness is achieved. The final result is a design that is uncluttered, which has an urban edge, and points its focus towards a large entertaining area. It has dual consideration for the architecture and the owners' mix of contemporary lifestyle and surrounds.

Credits

Design: Detail by Davinia Sutton Joiners: Woodshack Kitchens Carcasses: 'White Gloss' by Prime Panels Hardware & Drawers: Blum 'Legrabox Pure' Door/drawer style: Prime laminate 'Black' soft matt on ply Handles: Elite Hardware Bench Surface: 'Absolute Black' textured Granite by Artisan Stone Sinks: two Heritage Hardware Robiq Island benchtop: Caesarstone Finish: 'Snow' Cabinetry door/drawer style: American White Oak veneer, quarter cut in medium stain finish Appliances: Miele oven, Combi oven, Induction Hob, Dishwasher and Fully integrated fridge/freezer Custom Extraction: Instant Installs Accessories: Pullout bin system: Blum Portero Cleaning agent pullout & Chrome wire vege basket: Hafele Wingline bifold track: Hettich Lighting: 'Loox' by Hafele Flooring: American White Oak timber. ■

This article first appeared in Joiners Magazine in New Zealand. AWISA thanks Joiners Magazine for allowing AWISA to publish the article.

Davinia Sutton - The Designer

Davinia's recent win in the UK based Designer Kitchen & Bathroom Awards in London with her Heaton St Kitchen is just the latest in what has been a stellar career to date. Her background makes for interesting reading as well. Describing herself as a 'design geek' she started off by gaining a Diploma in Interior Design back in 1999 which she then cross credited (the first to do so) into a design degree at CPIT followed by a



further two years of design study before gaining a BA in Spatial Design in 2001. With work thin on the ground her first break came working at Ingrid Geldof Design. "This was a really good experience for me. It led to meeting and networking with other designers and architects. My time with Ingrid was enviable in my career journey. Here I really cut my teeth and had a steep learning curve at the same time."

Three years later it was time to broaden her career and start a new adventure. Along with fellow designer John Gaynor they launched InDesign Architecture Ltd in 2004. "Success is like a mountain that keeps growing ahead of you as you hike" she remarks. With this venture she set a benchmark, gained credibility in the industry with several published works, a few national awards and a growing list of clientele.

In 2009 she launched Detail by Davinia Sutton and has never looked back since. "I have been in the industry some eighteen years now." Her design practice, based in Merivale, Christchurch, is a high end bespoke interior architecture business with projects across New Zealand and Australia specialising in the 'hard spaces in the home' as she puts it: kitchens, bathrooms, laundries, dressing rooms, media rooms and study areas to name a few. She has gathered some seventy three awards since 2007 including four on the international stage.

Davinia's experience plays a great significance in her role as key designer and director of a business with six staff and still growing. She believes that engaging a designer is an investment and that her studio's success has been achieved through their collective ability to listen to their client's needs. At a recent graduation ceremony she offered an insight to her success: "Don't let anyone define who you are...What you can conceive in your mind, believe in your heart, you can achieve with your efforts. Nothing is impossible. It's just the degree of difficulty. And it's here that I'll let you in on a little secret: my career path didn't turn out quite the way I planned, I didn't get the chance to work in a large architectural practice, do an OE or work in an international design practice let alone work on large commercial projects with multi million dollar budgets. But, on reflection, I don't regret any of the twists in my journey - I've adapted, I've found what makes the journey worth the while: the passion and drive and finding that top gear."

AWISA exhibition postponement

AT THE AWISA LTD BOARD MEETING ON FRIDAY 6 MARCH THE DECISION WAS MADE TO POSTPONE THE AWISA EXHIBITION PLANNED FOR 1-4 JULY 2020.

The reasons all relate to coronavirus.

The board first and foremost considered the health and safety of visitors and the staff of exhibiting companies. It is clear that in Australia the coronavirus is only in its early stages, and on the basis of the experience in China and other countries it still has many weeks or months to run its course.

Normally an AWISA exhibition has a combined attendance in the order of 12,000, both visitors and exhibitors. At the moment, such gatherings are allowed but that may change. Then there is the subject of the confidence that people may have in planning travel in 15 weeks time. This confidence is already suffering.

AWISA has never been in the business of running half-hearted exhibitions. The association did not hold an event in 2010 because of the GFC, and the board feels that the circumstances today have similarities. In the board's view, the shows that followed 2010 were far stronger than if a diminished 2010 exhibition had taken place.

Then the board considered the effect of coronavirus on the woodworking industry worldwide. Three of the key countries that contribute products to AWISA exhibitions are Germany, Italy and China. All have cancelled or postponed exhibitions in the last few weeks.

Many AWISA members are experiencing difficulty sourcing products from overseas in time for the planned July dates. Especially China where factories have been shut for weeks.

Worldwide, there are shortages of components and of shipping containers, and in some cases products are not allowed to be moved within, or out of countries.

There is also the problem of getting technicians and product specialists to travel to Australia - all essential to the running of the exhibition. Some companies and unions in Europe have banned international travel. Such travel is also currently uninsurable. Many major AWISA exhibitors bring between 10 and 25 technicians and other staff to the show. All of them are essential to the running of a show of AWISA's size.

This decision has not been taken lightly. It is not a panicked or hysterical reaction, but a business-like reaction to what is actually happening in other parts of the world, and to what is highly likely to happen in Australia.

The board is bitterly disappointed that this decision has had to be made. AWISA 2020 was close to being sold out with only 200 square metres of the available 14,000+ square metres still to be sold.

The decision to postpone was made just as this magazine issue was about to go to print, and discussions were about to be held with the venue regarding dates a few months later than originally planned.

Up to date information will be available at www.awisa.com/exhibition. ■



Renaissance painter would be proud

of this unique frame restoration studio in Brisbane

VENETIAN ARTIST Jacopo Tintoretto, born 500 years ago, was one of the most famous painters of the late Renaissance. One of his oil paintings was sold at auction in the US last year for more than \$4 million. Another of the Italian master's works hangs at the Queensland Art Gallery in South Brisbane and the frame that secures this treasured painting, and many of those by other European and Australian artists between the 16th and 21st century, have been restored or replicated by a small band of experts at the gallery's Conservation Frames and Furniture Studio.

Oils, a palette, brushes and imagination were the only creative tools Tintoretto needed. But for the studio's staff of three – Robert Zilli, Alex Forrest and Damian Buckley – a remarkable collection of precision machinery has been carefully selected for the multiple restoration tasks at the studio ... machines from Stegherr and Otto Martin in Germany, Centauro in Italy, Cassese in France and Marunaka in Japan.

Each machine has a set task; they include a double mitre saw, sliding table saw, surface planer-jointer, thicknesser and spindle moulder. The studio also uses specialty timbers for framing and restoration work, and custom-designed overhead collection system to minimise dust, the bugbear of frame renovation. Adhesives and screws that in time could have damaged a work of art have made way for the ancient Japanese craft of seamless interlocking joints to connect wood.

The studio staff led AWISA magazine through the workshop to spotlessly clean areas used for conservation and restoration, traditional frame making and assembly and an office that houses reference books and meticulously kept records of completed work.

The studio adheres to strict timelines set by the gallery's exhibition and loans program. Both paintings and frames are treated at the same time. While the painting conservators undertake the delicate and exacting task of restoring the painting. The frame, if original, is also restored with all treatments adhering to the Australian Institute for the Conservation of Cultural Materials (AICCM) code of ethics and practice. If the painting's existing frame is not original to the artwork or not from the same historical period, a replica will be made.

When making replica frames, decisions are not based on personal tastes but are relative to the historical context of the artworks they hold.

In-depth research is undertaken to determine the most suitable style of frame in consultation with gallery curators. The same traditional techniques and materials used centuries ago are employed in creating the replicas, including carving, applied ornament composition, gilding and painted finishes.

In the frame at the Queensland Art Gallery conservation studio... Damian Buckley, Alex Forrest and Robert Zilli.





Alex Forrest prepares to work on a Stegherr saw machine.



Damian Buckley demonstrates the ancient craft of seamless interlocking joints to connect wood.



Alex Forrest, Robert Zilli and Damian Buckley in the Conservation Frames and Furniture Studio workshop at the Queensland Art Gallery.

"Here are some of the specialty timbers used for all our framing and restoration work," said studio manager Robert Zilli, pointing to stacks of native Australian species in the workshop, including red cedar, white beech, Queensland maple, blackwood and hoop and bunya pine.

Western red cedar from North America is also kept for use in stretcher bar manufacturing and the studio is trialling lightweight balsa-like paulownia wood, descended from native Asia and now an Australian plantation timber, as an alternative.

A conservation framer and cabinetmaker, Robert Zilli came to the gallery as a volunteer in 1993, after completing two years' study in furniture restoration in Italy. He was awarded an International Specialised Skills Institute fellowship to research heritage skills deficiencies in conservation gilding and was the recipient of a Churchill Fellowship, studying traditional framing at the National Gallery in London.

Damian Buckley is a conservation framing technician, cabinetmaker and accomplished visual artist with an education degree, majoring in painting and sculpture.

Conservation workshop technician Alex Forrest has a degree majoring in jewellery and small objects and is responsible for the manufacture of standard and custom works on paper frames and stretcher bars for works on canvas. He also assists with preventative conservation on historical frames.

Bellissimo. The Italian masters would be proud. ■



Robert Zilli with his collection of specialty timbers used for framing and restoration work.

Decisions are based on historical context of the artworks they hold

by Angela Lillicrap,
Economist, Housing Industry Association

Impact of the bushfires on homebuilding



This summer's bushfires have destroyed approximately 2,700 homes across the country. For the national homebuilding industry, that recently built over 230,000 homes in a single year, this is a relatively small quantity of new homes to be built and will not tangibly impact product suppliers or builders.

However, for the individual regions that have been devastated by the fires, the scale of the rebuild will be much more significant. The number of homes lost in some of these areas accounts for over 50 per cent of what they typically build in a year. In the Bega Valley Shire, 383 houses have been reported as completely destroyed – which is more than they typically build in a year.

This does not take into account outbuildings or homes that were not destroyed but will require renovations in order to return them to their previous conditions. These renovations will range in complexity from a new fence or a paint job to entire new buildings and will add to the total cost of rebuilding.

Fortunately, the construction industry is highly mobile. This was demonstrated after the 2019 Townsville floods when over 3,300 properties were damaged with almost half of these rendered uninhabitable. Many builders and trades people were able to relocate in order to assist with rebuilding.

Residential construction in fire affected areas along with the rebuilding of key infrastructure will absorb excess labour from areas with less construction work in the pipeline such as the Northern Territory and parts of Queensland.

In the short term there will be a shortage of appropriate housing as families who lost their homes and workers moving to the area to help rebuild will require somewhere to live. This will put upwards pressure in the short term on both rental prices and house prices. Over the medium term there will be positive economic impacts for the affected regions as the workers and their families that initially relocated to the area build their own houses and shop at local businesses which in turn creates more jobs and stimulates the local economy.

The other major segment of the homebuilding industry that will be impacted by the bushfires is the timber industry. Prior to the bushfires, Australia was already importing timber to meet a domestic shortfall. The additional damage to saw mills and pine plantations is likely to worsen this equation.

Timber is an internationally traded commodity, so shortages in the domestic market can be met by importing timber from overseas but this will likely to put upwards pressure on prices. An increase in the cost of timber will have a flow on effect on the cost of building a house, not just for those rebuilding after the fires but on the entire industry.

It is estimated that 20 per cent of New South Wales' pine trees have been damaged by the fire as well as large areas burnt in Victoria and South Australia. There are fortunately no reports of significant damage in the 'green triangle' region surrounding Mount Gambier, which is one of Australia's major forest plantations.

While the impacts on the timber industry will not be felt immediately as some of the burnt plantations are able to be processed, there is now a clock ticking on how long they are viable to be processed. The burnt trees will also cost more to process and will not produce the same volume of timber as they are harvested before their original harvest date.

The potential shortages of timber will become increasingly apparent as information becomes available on the age of the damaged plantations. If the plantations were close to harvest, then the impact will flow through quickly in the form of higher prices. If the plantations were still a decade from harvest then the impacts will be muted.

The initial rebuilding phase from the bushfires will stretch the abilities of local councils and their building approvals and planning systems. Their ability to adapt to the increased demand will determine how quickly and efficiently communities are able to return to business as usual. If local councils are unable to adapt they risk stifling future economic growth. ■



FREE SPACE

ENGINEERED BY HÄFELE



MODERN, COMPACT DESIGN

Minimal installation depth of 63 mm with an installation height of 172 mm noticeably leaves more usable storage space in the cabinet.



OPTIMISED LOGISTICS AND PROCESSING

Less components reduces transport and storage space. At the same time installation is less complex and more time-efficient.



SELF-EXPLANATORY ADJUSTMENTS

Intuitive and comfortable tension adjustment from the front. 3D flap alignment with generous adjustment range. Integrated opening angle limiter 107° to 90°.



EASY PUSH-ON MOUNTING OF FRONT PANEL

Front panels can be installed and removed quick and easy with toolless installation.



COMPATIBLE DRILL PATTERN

The plug-in pins on the base plate suit standard 32/37 mm line boring dimensions on the side wall and allow for a pre-installation of the fitting with just one hand.



HIGH VERSATILITY IN PLANNING AND PRODUCTION

One model series with a sustaining capacity of up to 10.7 kg for 400 mm high flaps allows for a wide application range.



reddot design award
winner 2019

interzum



High beams in the Highlands

A COUPLE of eastern grey kangaroos check me out before bouncing off at speed across the straw-coloured paddock. There has been no green growth for months and the grazing is almost non-existent. The rugged landscape seems a fitting place for the rustic rural industry of Chris Nance's Marulan-based company, Traditional Timber Frames. At the workshop I'm greeted by Chris whose four-man team are hard at work on some massive trusses, laying out the timbers and cutting joints before assembly. Chris explains that these will form part of the structure for a straw-bale home, an eco-friendly construction that pairs perfectly with his traditional timber frames.

At 33 years old Chris is a country lad, growing up in Buxton where his grandfather had a large timber yard, and has lived and worked in and around the Southern Highlands of NSW for most of his life. "I used to watch my Pop working with wood and picked up that same love for timber. He taught me the basics of woodwork and I'd spend hours making things at his side. I've never really wanted to do anything else."

There's a smell of cypress pine in the air, but Chris uses a variety of timbers. "Cypress pine is a smaller tree, so we need to source and colour match various species of hardwood for the massive dimensions needed for some of our work," says Chris, running his hand over a twelve metre cross beam.

Traditional Timber Frames is a rarity, and Chris believes he's one of only two in Australia, specialising in house frames using all Australian timber and traditional construction methods. I ask him how he started in such a niche business and he tells me of his apprenticeship with Evalock Joinery in Mittagong, KMC Builders in Bowral and his three years at Campbelltown TAFE.

While attending TAFE, the seeds were sown for a future in traditional timber construction. At the urging of a teacher, Chris entered the World Skills Australia national apprentice event, winning a gold medal in carpentry, and more importantly, the opportunity of a lifetime. His prize was a scholarship in the UK for outstanding young Australians, sponsored by BBM Youth Support.

"I spent two years in south Wales, learning my craft from traditional frame builder, Alan Ritchie. He taught me all the old ways of joining timber using ancient methods, techniques that had been used over hundreds of years in Europe. We used a variety of mortice and tenons with pegs, and these are the methods I use now on all our work; we don't use any nails or fasteners." Chris says he enjoyed his time in the UK, especially when working on restorations where the original carpentry had stood for centuries, but he was glad to be back in Australia. "We had a lot of rain and working in the wet, so it was nice to get home" he says, then grins as we step over a muddy puddle





that covers most of the yard; it's rained for the last week here in the Highlands, a welcome relief from the bushfires and drought.

While the work can appear simple and rustic, there's no room for error, Chris explains. Joints are cut to exact specifications, and with the complexity of some joints, there's no way to test before assembly, so the work has to be right. Complicated scarf joints, joining structural beams into wide spans, fit like monkey puzzles, and with dimensions of 300mm to 400mm square, these massive beams can weigh many tons, needing large cranes to hoist them into position. Chris has just returned from a 'barn raising' in Northern NSW. "It's one of the biggest jobs we've ever constructed. There's great satisfaction, and a little relief, when everything goes together as planned. We often get asked if we're Amish when on site, referring of course to the traditional way they construct their barns in North America. This particular barn was for a couple who had lived in ►



While the work can appear simple and rustic, there's no room for error,



► America and wanted to recreate one of the beautiful rural barns on their farm."

While his timber frames and his methods are truly from another era, the aesthetics of these beautiful constructions harmonise perfectly with modern materials like concrete, glass and steel. "We worked on the roof of a family chapel in Bungonia. The entire construction was poured concrete, making the huge wooden beams such a standout feature of the design. The builder was from an Italian family. Like most Italian builders, concrete is in the blood. We were amazed at how wonderfully the timber and concrete came together to create something so elegant and dignified." Chris says that his timber frames are sought by architects from all over the country for both modern and restoration projects, and there's no challenge he doesn't relish.

I ask Chris if he has a favourite creation, but he says each one has its unique satisfaction. "The newly constructed barn stands out, not just because of its scale, but because of the challenge it presented, but small jobs can give you as much pleasure," says Chris. "We enjoy what we do, and I for one can't see myself doing anything else."

I leave Chris to get back to his work. There's no sign of the kangaroos as I drive out the gate, but there's no doubt that after the rain the grass will soon be green again. When it does, I can't help wonder if Chris will be reminded of the soggy green fields of south Wales, and remember where it all began. ■



Your solution for the digital future.

```
N0101 #BEGINWORKPIECE [];  
N0102 #LOCK;  
N0103 #V.G.VAR[10]=1;  
N0104 #START [CNC, Channel=1, CndID=0, Cnd="INIT=1,PRG=.SIMULSCENE_START"];
```



0.0401 601 X420.3770 Y174.4666 Z15.5804

No rules

So Watt is the unique venture of business partners Sophie Bain and Jonathan Biet. Tucked away in a narrow Marrickville street, directly in line with a runway at Sydney airport, the occasionally noisy premises are alive with ideas and inspiration. It's not your normal 'run-of-the-mill' business. It's a mix of creative design and modern, highly functional and often artistic furniture built with alternate, long-lasting materials. It's a new approach to 'Aussie Made' that has already received worldwide recognition, being longlisted in the International Dezeen Design Awards for their 'Rover' team table made with Birch plywood and Fenix NTM laminate, the only Australian product selected from thousands of entries world-wide.

The team table was named after their new Biesse Rover K FT CNC machine Sophie and Jono installed two and a half years ago, when they moved to their current premises from a small unit in nearby Alexandria. At the time they were using a Chinese CNC machine they'd bought and imported themselves at a cost of only fifteen thousand dollars. Sophie said, "We had to teach ourselves how to use it to make furniture but because it was so cheap, it was OK if we broke it. We had it for eighteen months and sold it for five thousand dollars, replacing it with the Biesse Rover K FT when we moved to Marrickville." Jono had always thought highly of the Biesse brand. He often said, "One day we'll get one of those;" and they did.

Sophie and Jono are both qualified industrial designers. Sophie studied at RMIT in Melbourne and Jono at University of NSW. They met during a student exchange semester at the Technical University in Delft in the Netherlands where they both spent six months studying industrial design, bordering on engineering. There were a lot of Australians there; the University has a great



reputation and works with leading companies such as Phillips and the Virgin Atlantis Space Program. Sophie and Jono kept in touch when they returned to Australia and eventually decided to start a business of their own.

They started from 'home' making domestic lighting products, hence their playful business name, So Watt. Sophie had experience in the workplace furniture industry and Jono had started out as a freelance designer. After discovering the prohibitive costs of lighting certification, they decided to move into furniture. They had done work in shop fit outs for a few leading retail outlets such as General Pants and Zanele men's fashion, designing and making interesting displays; eye-catching, almost sculptural pieces. They'd travelled to the London Design Festival and were inspired by the use of plywood and OSB in furniture. In fact, they spent the rest of the 'holiday' sketching designs and came up with their first range of products there.

Their Chinese machine wasn't 'cutting it' anymore and Sophie and Jono decided it was time to invest in a machine that could take their fledgling business to the next level. They considered a flat bed router Sophie had worked on with an indigenous furniture maker in Melbourne; and the Biesse, a brand Jono had researched extensively on blogs; YouTube; trade shows and everywhere possible. He was very impressed with the brand but they both thought the Biesse would be too expensive. Sophie said, "We believe you get what you pay for and we were prepared to pay more for the Biesse but in the end the difference was marginal. The people at Biesse made the machine very affordable."

Jono added, "The most important thing for us was to find a supplier we could partner with and who we could rely on. Brand reputation was essential but the fact Biesse makes a wide range of machines for a broad range of materials was an important factor for us, and Biesse is a brand everyone in the industry knows." Getting what you paid for has certainly paid





off for Sophie and Jono. Their Clark Media Unit used to take 35 minutes to machine from one piece of plywood; with the Biesse Rover K FT it takes between seven and nine minutes. All of a sudden, their production tripled, and they were able to devote more effort developing new products, something they previously didn't have time for. Sophie and Jono have thirty designs they would like to release and the Biesse will help them realise this goal.

So Watt's Biesse Rover K FT is key to Sophie and Jono's success. It's pivotal to their entire production, so it has to be versatile, easy to set up and program, and run reliably. The fast and professional service provided by the Biesse Group means the machine is always ready for action. Jono is hands-on and runs the machine with help from Sam, an artist who enjoys working with them. Not being trades people, none of them are bound by trade practices so they are able to fully explore the machine without constraints. They've found it to be extremely productive and adaptable to their varied projects. Jono said, "The Rover can chew through anything we throw at it. We currently work with Birch and Okoume plywood, pallet grade plywood, OSB and form plywood. Also cork, brass, aluminium composites, copper, aluminium, foamboard, acrylics and polypropylene."

So Watt is all about getting the job done efficiently, on time and without compromising quality. Where possible they use local, reusable, recycled and low-emission materials and parts. They believe the future of manufacturing is ethical, local and inspirational. They're of the 'buy-it-once' school of manufacture. Their pieces can be repaired or adapted to last a lifetime so the quality and fit of each part made on the Biesse is vital to achieving these outcomes. As one of their customers said, "There isn't anything these guys can't manage, build, install, produce or make happen - all the way with a smile on their face: big ups to Sophie and Jono."

So Watt creates and manufactures striking functional furniture, products and spaces. Sophie says, "Companies generally

produce for either commercial or residential clients. We do both, people who work in offices don't want to feel like they're at work so our products can be used in both situations." Everything So Watt produces has to be multi-purpose to suit the changing lifestyles of their customers. Sophie feels that people are moving away from having 'too much stuff' so their products are ideal for smaller spaces and modern, apartment living. They must be doing something right, to be listed next to the likes of Flokk; Gensler; Wilkhahn and even furniture legend Fritz Hansen in the Dezeen awards is an amazing achievement for their small team.

Sophie and Jono are inspired by the materials they work with; the inherent properties of the plywoods, OSB and other interesting materials. They ask, "What can we do with this." They are always experimenting with new ways of producing on their Biesse Rover K FT and new ways of joining the material. They say, "Without the rigid science behind our experimentation, we wouldn't contribute anything new to the world; and without that experimentation, we wouldn't be us." They have a powerful curiosity about their materials, their product and their Biesse. If rules were meant to be broken, So Watt and Biesse have the resolve to do just that.

BIESSE GROUP AUSTRALIA
Phone 1300 BIESSE (243 773)
www.biesse.com.au



Holistic customer solutions

Concepts for the digital workshop

At HOLZ-HANDWERK to be held later this year, HOMAG will show woodworking shops the specific opportunities that digitalisation already offers. Clever aids support work processes and simplify the user's working life with small steps. The entry barrier to the digital workshop is very low, as there are no investment obstacles to be overcome. This means that digital solutions are also becoming increasingly relevant for woodworking shops.

digitalisation offers specific opportunities

Two proven, integrated concepts that consist of machines, smart hardware and apps will be displayed. These demonstrate holistic customer solutions for the networked, digital workshop.

HOMAG will show how to use the indispensable digital assistants - in the form of apps or intelligent racks - at the different workstations. Visitors

will see how, with immediate effect, that simpler workflows and more efficient work steps can be created for employees in the workshop. Depending on the requirements in the specific business, each of the digital assistants can be used as an individual module. This means that users can decide on individual digital assistants according to requirements and integrate them easily into the existing working environment in their workshops. All HOMAG apps can be tested free of charge for 30 days in advance and can then be booked on a monthly basis as required (Software as a Service).

CONCEPT 1: Introduction to digitalisation

With the "Introduction to digitalisation" workshop concept, HOMAG will present simple entry-level solutions that allow the user to increase transparency in their production, recognise potential for optimisation and improve existing production processes.

HOMAG offers the following digital assistants to support the production process:

1. Configuring furniture easily: cabinetCreator

This furniture configurator allows users to quickly and easily configure the furniture they want using their tablet, laptop or desktop PC. As part of a step-by-step process, they can draw on a selection of pre-defined basic forms, which adapt intuitively to construction parameters entered by the user. Users can also create their own libraries consisting of their cabinet models. They can also save their own design rules and use them later for new models.



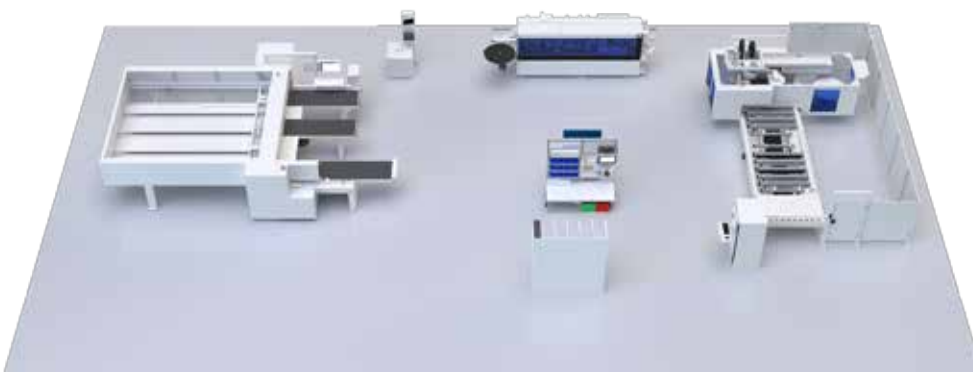
With the "cabinetCreator" furniture configurator, users can configure individual items of furniture easily - without even having to install any software.

2. All production data at a glance: productionManager (digital job folder)

Many businesses still use handwritten parts lists and drawings in paper form. The productionManager - the digital job folder - is used to ensure that the data is used consistently from the foreman's office, through production and up to the bench room. It summarises all production-related data and replaces the individual paper documents.



The productionManager - the digital job folder - summarises all production-related data and replaces the individual paper documents in the workshop.



3. Optimising cutting patterns: intelliDivide cutting

This optimisation software creates cutting patterns based on different criteria (e.g. low waste, optimal use of offcuts or simple material handling) and issues a parts list, regardless of the type of saw.

4. Label printing at the manual saw too: productionAssist Cutting

With this cutting assistant, users have a digital assistant that supports them directly at the saw in the workshop. The assistant can be used flexibly in conjunction with circular saws as well as upright and horizontal panel saws - irrespective of the type, age and manufacturer.



Integrated and efficient: productionAssist Cutting enables label printing (even at a manual saw), including all important information for the subsequent processing machines.

5. There's a slot for every part: productionAssist Sorting

ProductionAssist Sorting is the digital assistant for sorting furniture and components at the workstation in the workshop. The assistant has two decisive benefits: it ensures that all parts for the assembly in the bench room are complete and avoids time-consuming searching for components.



Into which compartment in the sorting rack should the part be sorted? The sorting assistant suggests the slot. LED strips on the rack identify the corresponding compartment. The parts are optimally prepared for the bench room.

At HOLZ-HANDWERK, HOMAG will showcase these new features in a workshop with the following machine technology:

Precision saw: SAWTEQ B-130

The SAWTEQ B-130 is the smallest HOMAG panel dividing saw. It costs little more than a well-equipped circular saw while providing a much more precise and efficient cutting process. A cutting length of 3800 mm is now available as an option. Amongst other things, the saw is equipped with CADmatic5, module45 and intelliGuide basic.

Edge banding: EDGETEQ S-200 (MODEL 1130 FC)

This entry-level model can process edges up to a thickness of 5 mm and workpieces up to a thickness of 60 mm. Glue application can switch flexibly between EVA and PUR according to requirements.

Comprehensive CNC processing: CENTATEQ P-110

Sawing, drilling, trimming: the CNC machine can be used universally for different materials, whether they are panel materials or solid wood.





► CONCEPT 2: Networked, digital workshop

In the "Networked digital workshop" concept, each machine is operated by one employee. This concept is organised so that the work preparation, machinery and bench room areas are separate from one another. Some of the job data is available to machine users in digital form.

HOMAG has a range of digital assistants to support the production process:

1. HOMAG iX: easy, efficient, impressive

HOMAG iX offers precisely the flexibility that is required to implement customer wishes quickly, individually, at a high quality and cost effectively. The 3D software developed for constructing furniture and interior fittings connects all important work steps



From idea to product: the user-friendly user interface means design is easy and, with the design tools available, users can quickly complete even complex tasks in furniture construction

2. All production data at a glance: productionManager (digital job folder)

Many businesses still use handwritten parts lists and drawings in paper form. The productionManager - the digital job folder - is used to ensure that the data is used consistently from the foreman's office, through production and up to the bench room. It summarises all production-related data and replaces the individual paper documents.



With just a click, users can easily import all of the data for their furniture into the "digital job folder" and thus access the data at any time, anywhere via the tablet.

3. Optimising nesting patterns: intelliDivide Nesting

Optimisation of cutting patterns is worthwhile for more than just panel dividing on saws. With the right optimisation, significant cost savings are now also possible in the nesting process in particular. With the intelliDivide Nesting digital assistant for dividing panels in the nesting process, users can get optimised nesting results for their CNC machine with just a few clicks.



Image: intelliDivide Nesting generates optimised panel dividing patterns and provides the data for the nesting processing centre, including key figures for the nesting process.

4. All edges at a glance: the Edgeband Management Set

"How can I store my edgebands in a way that is clear, clean and tidy?" This is an issue that concerns a lot of woodworking shops, regardless of size. The solution is the Edgeband Management Set, which gives users a complete overview of all the information about their edge material.

With the Edgeband Management Set, users always have an overview of their edgebands.



Image source: HOMAG Group AG

5. There's a slot for every part: productionAssist Sorting

ProductionAssist Sorting is the digital assistant for sorting furniture and components at the workstation in the workshop. The assistant has two decisive benefits: it ensures that all parts for the assembly in the bench room are complete and avoids time-consuming searching for components. The prerequisite for using this sorting assistant is a special sorting rack.



Into which compartment in the sorting rack should the part be sorted? The sorting assistant suggests the slot. LED strips on the rack identify the corresponding compartment. The parts are optimally prepared for the bench room.

6. Support in assembly: the productionManager

The productionManager, the digital job folder, supports employees in the assembly of the furniture. In the first step, users can easily see which parts belong to the next cabinet they want to assemble. With the productionManager, they also have access to the required exploded-view drawings and part drawings and the 3D drawing of the furniture.



The productionManager also helps with furniture assembly: users have access to the required exploded-view drawings and part drawings and the 3D drawing of the furniture.

At HOLZ-HANDWERK, HOMAG will showcase these new features in a workshop with the following machine technology:

Everything except edging: nesting with CENTATEQ N-600

The CENTATEQ N-600 nesting machine processes workpieces or unprocessed panels - with five-axis technology too, where required. On the CENTATEQ N-600, the machine control unit and printer and data handling software have been updated.

Horizontal drilling, trimming and dowel-driving: DRILLTEQ D-510.

With effect from HOLZ-HANDWERK, the DRILLTEQ D-510 drilling and dowel supply machine can now perform trimming and thus execute processes for all current connector fixtures. The IntelliGuide operator assistance system provides support with all work steps.

Enhancement of the technical equipment of EDGETEQ S-380 model 1660 E

Perfect jointing, easy handling and full automation set this model apart with two gluing processes, automatic glue quantity metering, motorised top roll pressure unit and small parts package, full automation and easy handling.

Sanding machine: SANDTEQ W-200

The SANDTEQ W-200 is a compact entry-level model with high quality equipment. It has a flexible range of applications and can handle calibration, fine sanding and intermediate varnish sanding, and features pressure beam eps®.

Assembly assistant for pressing furniture bodies: CABTEQ S-250

Even inexperienced personnel can use the carcass clamp easily. The top roll pressure has been designed to be 20% stronger, resulting in greater rigidity. The integrated tolerance compensation ensures an even distribution of pressure. Assembly duration is 1 to 2 minutes per standard cabinet.

Cardboard cutting machine: PAQTEQ C-250

The PAQTEQ C-250 cardboard cutting machine enables individual, customized cardboard packaging for a product - just in time - for optimal product protection. With a width of just 1500 mm, the PAQTEQ C-250 fits in every workshop.

HOMAG
Phone 1800 355 635
www.homag.com



State of the Art CNC Woodworking Machinery

- We use only the highest quality engineered components
- At Woodtron we design and manufacture all of our own CNC machines
- We can provide fully customisable solutions for your needs
- After sales service and support is our highest priority
- We carry a full inventory of spare parts in Melbourne



Woodtron Head Office 1/20 Malibu Circuit, Carrum Downs , VIC 3201 Australia | (03) 9775 4100

NSW Office (02) 9569-5867 | WA Agent : I&J Machinery (08) 9478-1911

info@woodtron.com.au | www.woodtron.com.au | @woodtronic

EASYSTICK by Blum - the new dimension in assembly



When it comes to the assembly and installation of furniture fittings, precision is a must for them to function smoothly.

EASYSTICK is the new ruler system from Blum. Thanks to a straightedge with automated stops and a touch screen display, the new drilling tool facilitates the entire assembly process by offering fast and simple set-up and perfect drilling patterns.

Optimises the entire assembly process

Tool-free, easily adjustable and easy to understand, EASYSTICK supports the precise and convenient assembly of Blum fittings. Eliminating the need for manual adjustment of the stops, cabinet dimensions can simply be entered into the EASYSTICK touch screen, drilling positions are then digitally calculated and stops move automatically to the correct position.

Cabinets can also be planned in Blum's Cabinet Configurator and DYNAPLAN applications, transferred to EASYSTICK and manufactured directly with MINIPRESS.

EASYSTICK combined with MINIPRESS P and MINIPRESS PRO

Blum's EASYSTICK will be offered for drilling and insertion machines - MINIPRESS PRO and MINIPRESS P. Existing MINIPRESS users are able to have EASYSTICK retro-fitted to their machines from 2005 onwards.

Cabinet Configurator - detailed planning results in just a few clicks

Now available in the Australian market, Blum's newest E-SERVICE, Cabinet Configurator is designed to provide support throughout the planning and assembly process. It's easy to use, free for Blum customers and is available from the Blum website.

Some of the benefits of the new planning software include:

- Plan cabinet and fittings in 3D.
- Precise and error-free configurations using the integrated collision check.
- Let the cabinet configurator calculate the drilling positions, fittings part lists, cutting dimensions and drawings.
- Export plans to other design software programs as required.
- Use the BXF format and EASYSTICK to transfer drilling patterns to MINIPRESS.



Enter drilling positions directly into EASYSTICK
Stops move automatically to the right position
Illuminated markers indicate drilling positions

BLUM AUSTRALIA
Phone 1800 179 186
www.blum.com

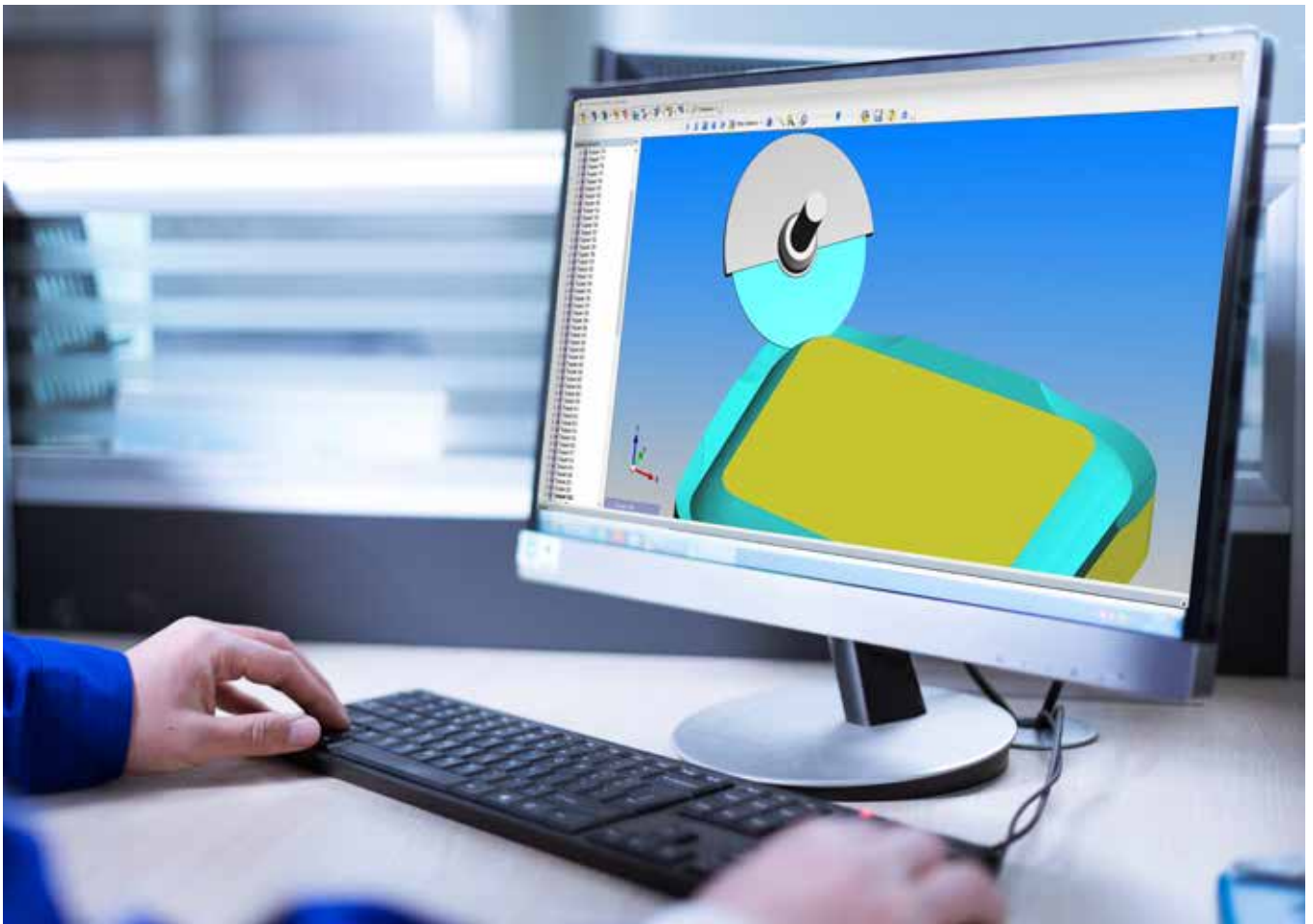
Manufacturing with ALPHACAM

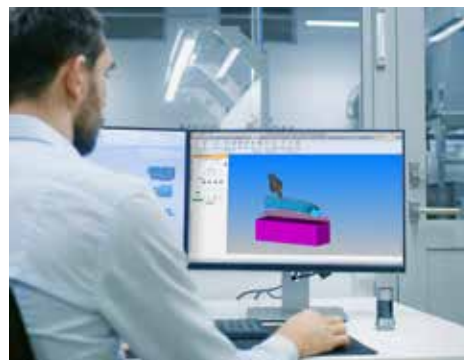
ALPHACAM is an industry leading CAD CAM software solution that intelligently processes files for production on CNC machines. AC Australia CAD CAM Solutions Pty Ltd is the authorised reseller for ALPHACAM in Australia.

ALPHACAM's intelligent ability to dissect and process CAD files is why it's used widely within the manufacturing sector right across the globe. ALPHACAM can import various file formats of drawings from STEP files to DXF files and automates the generation of output G-code to various types of machines. ALPHACAM connects to CNC based machines, from the likes of milling and lathe machines, right through to multi-axis CNC routers. This technology is adaptable across multiple materials, such as metal, stone, wood and plastic composites.

National Brand Manager for AC Australia, Blake McCrossen, explains that "ALPHACAM is a completely adaptable system that can be developed to generate and produce machining files. It can be customised to suit each individual companies' approach by the use of macros and styles within the system. This allows AC Australia to provide a tailored solution, improving manufacturing processes to ensure our customers gain the most out of their software investment".

Across the globe, ALPHACAM is known for having an industry leading nesting engine. The nesting engine gives users a better yield out of their material, important for monitoring costs, as well as being time saving and efficient with its advanced machining strategies. Combined with ALPHACAM's





Automation Manager, users can increase the workload and through-put of their CNC, with ALPHACAM taking care of processing the project.

The power of ALPHACAM is proven through its ability to produce 5-axis simultaneous machining. ALPHACAM's 5-axis machining strategies gives users greater control of their machine, allowing better finishes and resulting in better products. Users of ALPHACAM benefit from the improved efficiency found by faster production times, ease of machining and generation of G-Code. ALPHACAM's Global Network means there is ongoing development with post processes that will continually integrate with the latest CNC technology.

ALPHACAM's ability to integrate with other modelling and design packages gives ALPHACAM users the greater flexibility they need and provides a leading solution for design to manufacturing.

ALPHACAM
Phone 02 8543 6690
www.au.alphacam.com

GO BEYOND WITH CDK STONE



THE ONE PARTNER YOU NEED FOR STONE

CDK Stone have sourced the finest equipment from around the globe. Tried, tested and trusted, these products will take your business to the next level.

Learn more at :
www.cdkstone.com.au/AWISA



MACHINERY | TOOLS + EQUIPMENT | SERVICE | FINANCE | NATURAL STONE | NEOLITH | NORTHSTONE | STONE CARE

Melbourne 03 8552 6000 | Sydney 02 9822 5155 | Gold Coast 07 5537 3222 | Adelaide 08 8340 2877 | Perth 08 9406 3100 | Auckland +64 9475 0495 | Christchurch +64 3928 2303

by John Halkett

Timber supplies after the bushfires

IN THE WAKE of the devastating, unprecedented bushfires, among the many issues that will need attention will be from where will Australia get its future timber? While it is vitally important that the domestic timber industry bounce back as quickly as possible, further imported timber supplies are most likely to be needed.

The Australian Timber Importers Federation (ATIF) says timber importers and wholesalers have been horrified by the extent of the bushfires and their impact on forestry assets and the domestic timber industry. The Federation says the bottom line must be a continuation of both domestic softwood and hardwood timber industries, and that this will be essential to maintain supplies of timber products to building and construction industries across the country.

ATIF stresses that there are not substantial volumes of readily accessible timber just sitting around overseas that can easily be made available to the Australian market. Further, supplies of structural softwoods will most likely need to be obtained from Northern Hemisphere suppliers.

ATIF states that the development of even a modest supply of structural MGP 10 lodgepole pine from Canada in 2019 remains challenging, because of the need to produce to Australian specifications and to comply with complex statutory and biosecurity requirements.

Finding further supplies of structural softwoods that comply with the requirements of the Australian Building Code, and other statutory requirements is likely to prove exceedingly difficult. At this stage Canada, Germany and Russia may be the best bets for additional supplies that meet Australia's compliance requirements.

The situation in relation to hardwoods is also demanding, with past pressure on forest resources in Indonesia and Malaysia

possibly limiting the capacity of these countries to expand on current supply levels. So, Southeast Asian hardwood suppliers are likely to find it difficult to expand their current levels of supply.

ATIF also advises that Russia is firming up as a realistic option for future structural softwood supplies, notwithstanding challenges around supply certainty and with meeting Australia's stringent compliance requirements.

There is some really promising news from the Russian front with True Blue Timber in Sydney's West having addressed and solved some key issues associated with a steady, certified, compliant supply of structural softwoods from northern Russia.

True Blue Timber is now able to offer a range of red Baltic pine structural timber products, both treated and untreated, in association with its affiliated companies in Finland and Russia.

Managing director Ryan Yari, the company imports red Baltic block stacked and FSC certified. "We then grade the timber through our own machine grading line that is supported by independent testing. We are also able to treat to H2 using our in-house pressure treatment facility."

"Our product range has been developed to meet the needs of our client's quality and strict building standards and codes specifications, as well as other statutory obligations," said Mr Yari.

Looking to the probable future demand for structural softwood timber in Australia the connections and supply arrangements True Blue Timber has established with Russian sawmills and supply chains are likely to be a key component of delivering certified, compliant, structural softwood timber for Australia's building and construction industries. ■

Left: The development of even a modest supply of structural MGP 10 lodgepole pine from Canada remains challenging, because of the need to produce to Australian specifications and to comply with complex statutory and biosecurity requirements.

Below: Ryan Yari checks out his machine grading line producing MGP10 Russian-sourced red Baltic pine.





INTRODUCING THE NEW PEKA PECASA MODULAR SHELVING SYSTEM.

Consisting of a few simple, but highly versatile components that can be combined in an infinite variety of ways, the Pecasa system makes an elegant and practical addition to any room in your home.

The system is built around a central wall profile to which shelves and storage boxes can be attached in a variety of configurations to create personalised furniture solutions.

Pecasa's stylish design and outstanding flexibility make it a winning solution for living areas, offices, bedrooms, wardrobes, hallways, and even commercial applications.

Visit our website to order online www.wilbrad.com.au
Call us direct on **1800 633 507**
Make an enquiry at: sales@wilbrad.com.au

    @wilsonandbradley

Visit one of our nationwide showrooms:

MELBOURNE: 94 Bell Street, Preston, VIC 3072
SYDNEY: Unit 4, 3 Basalt Road, Greystanes, NSW 2145
BRISBANE: 105 Corymbia Place, Parkinson, QLD 4115
PERTH: 19 Christable Way, Landsdale, WA 6065
ADELAIDE: 79 Frederick Street, Welland, SA 5007

Trouble-free palletising of flat packages

The Danish company Tvilum is one of the largest manufacturers of flat pack furniture for self-assembly and sells eight million pieces of furniture a year all over the world through various furniture retail chains. In its highly automated production plants, Tvilum places great importance on process safety and economic efficiency. This is one reason why Tvilum has converted the vacuum supply for two of its palletising robots at its main plant to Busch's MINK claw vacuum technology. Palletising flat packages has thus become trouble-free and operating costs have been drastically reduced.

Tvilum was founded in 1965 as a family business. After various mergers, it now belongs to the Danish investor group with Viking Trading ApS, Kristiansen Properties and CEO Torben Porsholdt. Today, Tvilum manufactures flat pack furniture in various styles and designs and sells them worldwide. Tvilum's headquarters and main plant are in Faarvang, Denmark, with 450 employees. The remaining 700 employees work in two further production plants in Denmark and Poland.

At the main plant in Faarvang, the furniture parts packed in flat packages are palletised by two robots and prepared for shipping in a fully automatic process. Using both robots, the flat packages are held by vacuum via suction cups and stacked on pallets. In order to generate the necessary holding force, a dry-running rotary vane vacuum pump with a pumping speed of 140 cubic metres per hour was mounted on each of the two identical robots. However, they did not provide the required holding force, with the result that packages fell off several times

a day, causing the system to come to a standstill and requiring manual intervention by the staff. This also often resulted in material damage.

Peter Larsen, a maintenance technician, tried to make the automated handling process safer and added an additional rotary vane vacuum pump to each robot. These each had a pumping speed of 70 cubic metres per hour. As a result, the system became more reliable and the number of furniture packages that fell was reduced.

Another problem, however, was the noise of the rotary vane vacuum pumps. The vacuum pumps were positioned directly next to the robots and their noise level also affected nearby workstations. Peter Larsen tried to enclose the vacuum pumps, but this did not prove successful because the heat radiation from the vacuum pumps caused heat to build up inside the enclosure.

Peter Larsen then placed the vacuum pumps in a separate room and connected them to the robots via a pipeline. This solved the problem with noise and heat radiation in the packaging room, or at least moved it elsewhere. What remained was the elaborate and costly service work. Twice a year, the vacuum pumps were serviced and the vanes had to be replaced.

The rotary vane vacuum pumps used were what are known as dry-running pumps. With this type of vacuum pump, the rotating vanes in the pump casing are subject to high levels of wear because they grind directly along the inside wall of

Below: One of the two robots palletising flat packages

Right: Centralised vacuum supply with two MINK claw vacuum pumps



Images: Busch Vacuum Solutions

the casing. The vanes containing graphite have a certain self-lubricating capacity, which slows down the wear somewhat, but cannot prevent it. As these vanes wear, there is also a loss of performance in terms of pumping speed and vacuum performance.

Contact with Busch was established at a trade show where Busch presented a MINK claw vacuum pump that was adjustable via a frequency converter. As a result, Peter Larsen took a closer look at this type of vacuum technology. He believed it had the following advantages: MINK vacuum pumps compress the air completely contact-free. This means that the moving parts inside the vacuum pump do not come in contact with each other. In turn, this means that there is no wear that can adversely affect performance. The contact-free compression principle also has the advantage that it is extremely energy-efficient and requires less power than a dry-running rotary vane vacuum pump. Peter Larsen saw an additional advantage in the fact that MINK claw vacuum pumps are infinitely variable in the range between 10 and 60 Hertz via a frequency converter. This allows a preset vacuum level to be accurately maintained, and thus ensures a consistently high holding force regardless of the size of the package or whether leaks in the suction cup suck in more or less "leak air".

Peter Larsen was convinced by MINK claw vacuum technology and was given advice by vacuum experts from Busch. They recommended a vacuum system consisting of two MINK claw vacuum pumps, each with a pumping speed of 140 cubic metres per hour and connected in parallel with a demand-driven control system. They were installed in a separate room in January 2019 and connected to the two robots via a pipeline. Immediately after starting to use them, it became apparent to Peter Larsen that MINK claw vacuum pumps run much more quietly than dry-running rotary vane vacuum pumps. After one year in operation, he can also state with reassurance that not

Comparison vacuum supply	Rotary vane vacuum pumps running dry	MINK Claw vacuum pumps dry, contact free
Installed motor rating [at 50Hz]	2x 4kW 2x 2.4kW =12.8kW	2x 3.5kW =7kW
Operating time	24,000 h	
Energy consumption	307,200 kW/h	168,000 kW/h
Energy saving	139,200 kW/h = 54%	

a single package fell to the ground during this period due to insufficient holding force. In addition, the maintenance effort is minimal compared to the rotary vane vacuum pumps. The gear oil is only changed once a year just as a precaution. Since MINK claw vacuum pumps have no wearing parts, the costs for their replacement or purchase are completely eliminated.

Another positive effect were the energy savings. Peter Larsen estimates them to be over 50 percent. Whereas four rotary vane vacuum pumps with two 4 kW motors and two 2.4 kW motors were previously installed, the two MINK claw vacuum pumps each require 3.5 kW for 50 Hz operation. Since they are controlled according to demand, full power is not usually required – meaning that energy consumption is even lower than in the calculation.

Peter Larsen thus had another idea to save energy. He had previously used ejectors to generate vacuum on four insertion devices for package erectors. These devices insert the individual package sheets into the package erectors. The compressed air required by the ejectors for vacuum generation was supplied by a compressor. The ejectors were removed and all four package erectors were also connected to the Busch vacuum system. The system has enough reserves so that it also supplies these package erectors with vacuum and the previously used compressor is no longer needed, which again has a positive effect on the energy balance. Inspired by these successes in optimising process safety during packaging and the enormous energy savings, Peter Larsen is confident that he will be able to implement further optimisation measures in his company using MINK claw vacuum technology.

Calculation of the energy savings based on the nominal motor rating. The often considerably lower rotational speed of the vacuum pumps and the resulting lower power consumption are not taken into account. The omission of compressed air generation for the ejectors that were previously in operation on the insertion devices is also not taken into account.



BUSCH AUSTRALIA PTY LTD
Phone 1800 639 087
www.busch.com.au

One of four insertion devices that are also supplied with vacuum by the two MINK claw vacuum pumps.

Take site measuring to the next level

Picture this common scenario... that sought-after tender has been won and now the site measure needs to be done. Anxiety has just surged as there are some very complex measurements that need to be taken, many of them difficult to access with a tape measure or handheld laser distance meter. Many hours or even days will be devoted to accurately measure the site, not to mention the templates that will need to be scribed around all those curved and angular surfaces. Even when all

Every panel fitted perfectly. I could not believe it

this is done, the measured data still needs to be drawn in CAD software. The consequences of inaccurate site measurements is something that can haunt the user from previous projects. Then the thought strikes... 'there must be a better way'.

As is often the case, advances in technology can provide a remedy to such anxiety and a solution to achieve an accurate and efficient site measure. The German manufactured Flexijet 3D Laser Measuring System is a device that will do just that.

Flexijet 3D site measures and instantly creates a 3D (or 2D) CAD drawing. The drawings created are compatible with most CAD software used in the joinery industry thus providing a seamless workflow from site to CAD software. It is so versatile that it accomplishes site measuring tasks with a speed and accuracy that will astound many. It not only handles mundane

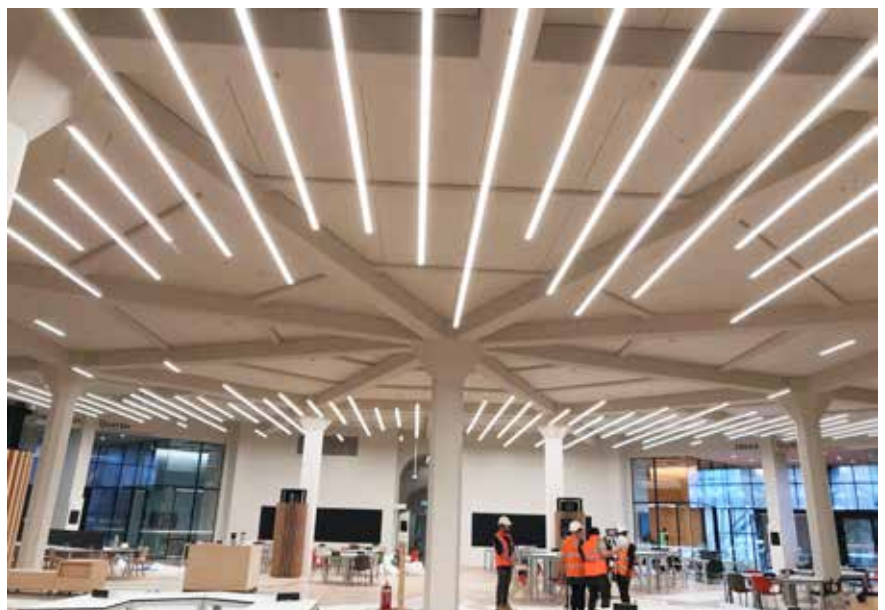
tasks like measuring walls, pipe penetrations, bulkheads, windows and many other elements with ease, but will handle the most demanding measuring assignments.

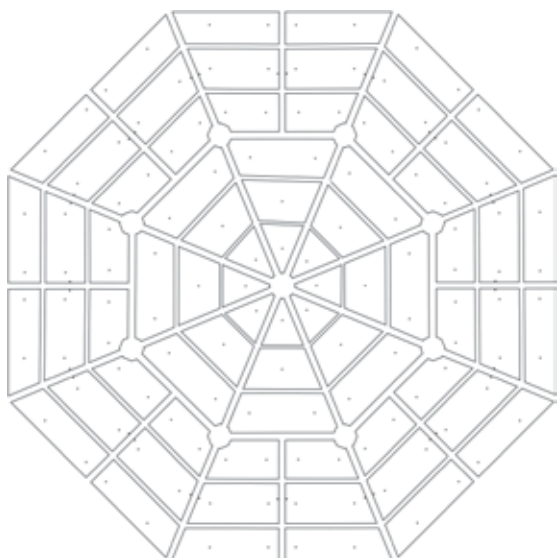
In the following example, Flexijet highlights a significant project undertaken with the recent refit at the State Library of Victoria. The Melbourne based team at LL Installations was tasked with the manufacture and installation of acoustic ceiling panels in "The Quad" information centre. The considerable expanse of this area, its height of approximately five metres and its octagonal shape provided substantial challenges for accurate site measuring using traditional methods.

Having used Flexijet 3D on many projects prior to this one, the team at LL Installations completed the site measure with a precision that even astounded them. All the measurements were performed at ground level (scaffolds or scissor lifts were not required), and this even included accurate positioning of all penetrations such as sprinkler heads. Director Luke Lawry commented that "I could not believe the accuracy of Flexijet 3D. When we imported the model into AutoCAD, we questioned many of the measurements as what we thought were straight edges, many had bumps and were not straight at all. However, we were confident in the model that Flexijet 3D gave us and we proceeded to production. The end result was that every panel fitted perfectly. I could not believe it. I am always amazed at the features and accuracy of Flexijet 3D."

In summary, Flexijet 3D is a measuring system that will revolutionise site measuring. The ability to not only measure,

The end result. Panels manufactured with millimetre precision.





The measured model with millimetre accuracy.

but to instantly create a CAD drawing on site is a huge leap from the days of deciphering handwritten measurements on a note pad. With a visual model to refer to while the measurements are being performed gives instant feedback and reduces the likelihood of missed measurements. How many times has someone had to travel back to site to get that measurement that was missed? The increase in efficiency and accuracy with Flexijet 3D will provide a return on investment in a very short time.

FLEXIJET AUSTRALIA
Phone 1300 077 977
www.flexijetaustralia.com

Flexijet 3D... in action on-site.



Cabinetry Labelling

Removable - No Residue

Download our Cabinetry Labelling Guide

DON'T PAY TOO MUCH,
We will beat any published price!

LABELS FOR BROTHER/DYMO

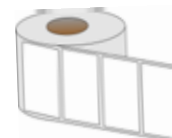
Removable - Various sizes



LABELS ON ROLLS

Thermal Removable labels made for
your printer, CNC, panel saw etc

80mm x 80mm - fr \$20.50 per 1000*
100mm x 73mm - fr \$20.50 per 1000*
102mm x 48mm - fr \$16.00 per 1000*
102mm x 63mm - fr \$17.50 per 1000*
102mm x 74mm - fr \$23.00 per 1000*
lots of other sizes also available

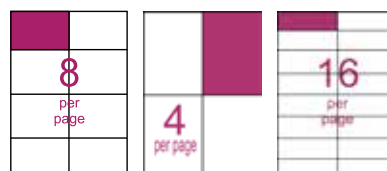


25/38/40/50/76/100mm core sizes

Lowest Prices, Fast Service!!

LABELS ON SHEETS

Lots of sizes - Removable \$85* for 500 sheets



LABEL PRINTERS

Printer and Label packages



- * Specialising in Cabinet Labels
- * Guaranteed Quality
- * Guaranteed Best price
- * All Pricing ex GST
- * Valid for limited time only

**ALL ABOUT
LABELS**

Phone: 1300 762 603

www.allaboutlabels.com.au/AWISA

cabinetrylabels@allaboutlabels.com.au

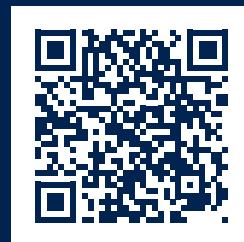
Australian
made

**BUY DIRECT
FROM THE MANUFACTURER**



HOMAG

**Go digital.
Intuitive.
Flexible.
Clear.**



Find out more about HOMAG software for efficient working on our website or ask.

www.homag.com

YOUR SOLUTION

New Concelo® Laundry raises the bar

Hideaway Bins has announced the arrival of the Concelo® Laundry hamper offering a premium laundry solution at an attractive price.

The Concelo Laundry hamper has been designed to run on the same platform as the Red Dot award winning Concelo waste bin. This means it is packed with innovative features, which raise the bar in what to expect from any laundry hamper.

The team at Hideaway Bins pride themselves on designing and manufacturing products that deliver solutions to common complaints raised by the trade, design community and the homeowner. So Concelo Laundry really stands out in the crowd as a leader in design and is not a 'me too' product.



Running on the high-quality German made Hafele Matrix runner, the smooth, synchronised concealed runner has over extension and the fluid damper ensures a seamless and very quiet closing action. The Concelo runner is equal to other premium drawers.

The aluminum framework that conceals the runners and holds the hamper is ridged and resists twisting. Concelo Laundry benefits from the advanced cam door adjustment giving true 6-way adjustment (+/- 2.5mm vertical and horizontal & +/- 0.75-degree pitch). Adding to this, the locking bolt system on the door brackets, ensures there will be no requirement to return to the job for door adjustments on Concelo products.



Unique to the Concelo Laundry hamper is a one-piece Clip n' Clean tray, providing easy access to the frame and the door for cleaning. No issue with rusting of the laundry hamper frame and no dirt trap between the door and the frame.

For easy and quick installation Concelo Laundry has been designed to side mount using System 32 drilling patterns. It also works with electronic push to open systems giving the homeowner a true hands-free laundry hamper solution.

It includes a 60 litre hamper and is designed to fit behind a 450mm door front. The Concelo Laundry is available in two colours, Arctic White or the increasingly popular cinder colour to complement the design trend towards dark cabinetry. Or why not install a white and a cinder side by side to make it easy for the homeowner to sort laundry, dark from whites.

Concelo is available nationwide from March 2020 through Hideaway's distribution partners Hafele, Nover and Galvin Hardware or visit hideawaybins.com.au/concelo.

HIDEAWAY BINS
Phone 1800 042 642
www.hideawaybins.com.au



Sawdust-free wood shop?

It's achievable with Leitz dust extraction solutions

Leitz uses dust flow control tool gullet designs (DFC) to neutralise dust velocity and trap it within the hood. Once the dust velocity is neutralised, Leitz aerodynamic dust hoods efficiently extract virtually all of the dust from the cutting process and send it into the dust collection system. Hoods are designed with easy tool access, and adjustable gate features, for ease of use and maximum encapsulation of the cutting process. Leitz dust hoods are also available with noise-cancelling technology, which reduces cutting related sound by as much as 5dB.

Sawdust is not only a daily clean-up and downtime issue, but excess dust can also lead to serious consequences for employees, equipment, facilities, productivity, and the quality of products. Within a facility dust is inhaled by employees, sucked into machine motors, and coats everything within the facility, all of which lead to serious health, maintenance, and safety issues.

Wood dust is considered carcinogenic and can cause cancer of the upper respiratory system and is linked to health issues related to the inhalation of bacteria, mould, or fungi. Wood dust is also associated with toxic effects, irritation of the eyes, nose and throat, dermatitis, and respiratory system effects which include decreased lung capacity and allergic reactions.

Dust on the workspace floor can cause slip and fall accidents, is highly combustible and can cause catastrophic explosions resulting in employee injury or death and destruction of facilities.

A company may have invested in the best dust collection system available, with automated gates and spark arresting technology, but the problem originates at the cutting tool. Most cutting tools are engineered to eject dust into the cutting path of the tool, and most machine 'tool hoods' fail to efficiently trap and extract dust from the cutting process. A large percentage of dust simply flows into the airstream around the tool and is ejected back into the workshop.

Leitz has long been a leader in engineering custom dust control solutions which provide a clean and safe environment for employees, improve product quality, and optimise process efficiency. Whether a manufacturer needs to upgrade existing machinery, or have new machines in the budget, they should put the 20 plus years of Leitz dust extraction engineering experience to work, ensuring the safest and most efficient tooling and dust extraction solutions possible.

LEITZ TOOLING SYSTEMS PTY LTD
Phone 1300 135 127
www.leitz.com.au



Solu

Handle Free & Floating
Hardware Solutions



T: (02) 9519 4618

F: (02) 9519 4609

E: sales@solu.com.au

www.solu.com.au

CAD+T

Interior Design &
Production Software

Software solutions
for bespoke
furniture design,
construction and
production

Up to 50%*
increase of
factory
productivity

Direct CNC
connection
within 1 week

Complete
ERP solution



* Figures based on our reference client
New Age Cabinet Design in Perth

CAD+T Australasia Pty Ltd

Level 5, 23-25 O'Connell Street
NSW, 2000 Sydney

Phone: +61 (2) 800 620 67

E-Mail: office@cadt-solutions.com

Web: www.cadt-solutions.com

Italian storage solutions in the kitchen with Lincoln Sentry

Gollinucci's Sous Chef is the latest addition to the kitchen that is designed to organise even the smallest of spaces. Ingeniously designed, the Sous Chef features a number of moveable and removable trays which can be freely positioned as needed to keep ingredients and accessories within easy reach.

The concept behind the design of the Sous Chef was to find a solution for those often-used items that don't require a large drawer but need to be close at hand for everyday use. Whether it's access to spices, sauces or oils, or cooking equipment and utensils such as spoons or measuring cups, the Sous Chef provides the perfect solution for kitchen organisation.

Each individual component can lift out and be placed on the benchtop while in use but

quickly and easily slotted back into the unit once work is complete. A variety of containers is available allowing the specification to meet the individual requirements of the homeowners. More details are available at lincolnsentry.com.au/products/1454305

The Sous Chef system is easy to install and is designed to work in with Blum LEGRABOX C height drawers. It suits a minimum internal cabinet height of 640mm and a minimum cabinet width of 300mm, and is available in white and grey finishes.

LINCOLN SENTRY
Phone 1300 551 919
www.lincolnsentry.com.au



Free Space sets new standards

with 63mm installation depth

Häfele has introduced an exciting new system for flap doors. The Free Space flap fitting is setting new standards in the industry. It's the smart connection of less is more.

Free Space was granted the Red Dot Award and the Interzum Award for its compact design and its versatile functionality. Aesthetically, the Free Space flap fitting places a higher value and more elegance on furniture. With feather-light operation and multi-position stop, Free Space increases efficiency and saves costs along the entire value chain offering more stability and wide but slim line front panels.

The fitting itself is one of the most powerful flap fittings in its class, having fewer variations and more applications, covering approximately 80% of all applications with a regular flap opening. One can see and reach into the cabinet from all sides. Being compact it allows for more storage space leaving more room in the cabinet as well as fitting into very shallow cabinets.

The modern-compact design requires a minimal installation depth of only 63 mm and installation height of 172 mm. Häfele's Free Space has a capacity of up to 10.7 kg for 400 mm high flaps and allows for a very wide application range. With intuitive and comfortable tension adjustment from the front,

3D flap alignment with generous adjustment ranges and an integrated opening angle limiter of 107° to 90°.

There are also many other advantages for the furniture manufacturer with a compatible drill pattern allowing for fast installation, coming equipped with just one pre-set fixing screw. The plug-in pins on the base plate suit standard 32/37 mm line boring dimensions on the side wall and allow for a pre-installation of the fitting with just one hand. Mounting is made easy as front panels can be installed and removed in a quick and easy fashion without any tools.

Overall logistically, fewer components reduce transport and storage volume resulting in time installation becoming less complex and more time efficient.

The Free Space expands the already proven Free product family. The basic functions as adjustability of the tension force, integrated soft-close or 'push-to-open' are just a given as are high reliability and quality from the Häfele plant.

HÄFELE AUSTRALIA PTY LTD
Phone 1300 659 728
www.hafele.com.au



NEW MORBIDELLI X200/X400 WE HAVE ALREADY DESIGNED THE FUTURE OF NESTING

The new generation of Nesting CNC machining centres meets the needs of a market increasingly oriented towards flexible and batch-1 production, combining excellent performance, maximum configurability with increased flexibility and productivity.

morbidelli x200 and x400 allow to execute **horizontal drilling, to use specific pods directly on the spoil-board** and are equipped with a work table divided into **vacuum zones that can be activated only when necessary**.

The ultimate solution to simplify work: cell version, available to configure the machine no matter the material flow required.



Embracing flexibility and connectivity in chair design

Furniture designer/maker and tutor David Haig – whose expertise in steam bending is most evident in his definitive and enduring Monogram rocker – is one of New Zealand's most successful craftspeople. He talked to AWISA about the intricacies of chair design, the evolution of his most successful creation, and communicating his woodworking skills to students worldwide.

Although Haig has completed a variety of commissioned works, he is especially interested in chair design. "I like to make them using only wood, without resorting to upholstery

or padding, and also to make them as light and airy as possible. My aim is to find the point where no more can be removed without compromising structural integrity. It's intuitive engineering, involving a lot of educated guesswork ... and I've learnt to embrace a certain amount of flexibility in my designs, which is, after all, one of timber's most wonderful properties."

Haig remembers, with equal amounts of fondness and frustration, his tentative first steps in the development of his signature rocker. "I designed the first Monogram chair in 1990,

when I moved to Australia for a year with my family ... to help a friend build a large stone house up in the Blue Mountains. I did no woodworking that year, but instead spent a lot of time thinking about and sketching for a new design of rocker."

"I'd been building a rocking chair I first designed in 1984. It was comfortable and had done quite well - but I'd taken the detailing in a sculptural sense as far as I could. I was getting tired of building it because, essentially, it was still just a chair sitting on rockers. What I was searching for was a design in which every part was related to the dynamic function of a rocking chair and its inherently flexible, fluid and curvaceous potential."

He freely admits that, at times, it drove him to distraction. "Then one bright morning over breakfast I sketched a few lines on a sheet of paper and a truly 'eureka' moment arrived.

Looking back, it was the connection of what was the arm support down through the side of the seat and back to the ends of the rockers that was the key element of connectivity I'd been looking for."

After the huge buzz of excitement had subsided, Haig was confronted with the incredibly difficult and challenging process of building the prototype. "I even visited George Ingham - head of the woodwork design school in the arts department at ANU - in the somewhat presumptuous hope that he would, in effect, allow me a period of postgraduate study to build the chair in his workshop. Though incredibly friendly and engaging when showing me around, his response to my stammered request was curt and memorable: "Even if Jim Krenov came to my workshop he'd have to do my two-year foundation course first."

That wasn't an option with a family of three young boys to support, so Haig paid a visit to David Upfill-Brown who was working nearby. "I'd been told he was a brilliant woodworker and that he would lend a sympathetic ear. I briefly informed him of my dilemma, and I remember him turning from what he'd been doing, fixing me with his piercing blue eyes for a moment, and simply saying, 'You can do it!' He has no memory of that encounter, but it was just the confidence booster I needed."

Haig and his family then returned to New Zealand - to his home and workshop in Cable Bay, near Nelson. Three months later, after much trial and error with steam bending, which was new to him - and a great deal of agonising and uncertainty as to jointing methods - he finally pulled off the first version.

He has been slightly altering and improving construction and detailing of the chair since the first one ... but the fundamentals of its curves and their interrelationships have hardly altered. "Initially I plotted the key points for balance and postural support, which I'd just about nailed in the previous rocking chair, and transferred them to sit within the lines of the new chair. As the first one turned out to have great balance, the changes I've made since have primarily involved increasing joint strength and improving the flow of the detailing."

Haig has, however, refined and rebuilt almost every jig - some several times, as is the nature of perfecting anything. "Also, there turns out to be an irreducible amount of handwork, particularly the detailing around the joints. Much of it is done using a small

*I was searching
for a design in
which every part
was related to the
dynamic function
of a rocking chair*

Japanese whittling knife with a very fine blade that can turn in sharp corners quite readily. And because the rockers and arms taper in both width and thickness, they require a lot of work involving spokeshaves, stock-scrapers and rasps."

Although the Monogram rocker was never meant for the display case (it is still a strong seller for Haig 30 years on), its iconic status prompted the national museum, Te Papa Tongarewa, to successfully bid for one at an estate auction. "As it turned out, the one they bought was made from a walnut tree, which was part of a grove planted in the 1890s by Richard Seddon - arguably our greatest Prime Minister."

Haig decided early on that he wanted to steam bend rather than laminate the rocker's main components. "In any lamination there is always the possibility of the glue failing as a result of severe humidity changes and subsequent differential movement of the thin laminated strips ... or simply stress from use.

"I really wanted the integrity of solid wood – and not having to cut through glue lines. With steam bending it's as if the tree grew that way, and you lose none of the readability of the grain patterns in shaping.

"Consequently my choices were somewhat limited because only a few species steam bend really well - i.e. to tight radiuses. It was a breakthrough when I discovered that my favourite timbers, walnut and sycamore, were both eminently suitable.

"The other limiting factor with steam-bent wood is that the timber should be air-dried, not kiln-dried - which immediately cuts out virtually all commercial timber suppliers. Fortunately, both walnut and sycamore grow very well in the Nelson region, and I've tracked down innumerable trees over the years, which I then mill and season slowly."



Monogram rocker: a definitive and enduring design
Photo credit: Daniel Allen

Folium chair: the thinness of the two angled leaves belies their strength.
Photo credit: Daniel Allen



V chair: solid sculpted seat with legs splayed for stability.
Photo credit: Digby Shaw



Hoop chest in New Zealand-grown walnut.



Jewellery box in rosewood with an Acacia koa top.



Folium chair: the thinness of the two angled leaves belies their strength.

Photo credit: Daniel Allen



David Haig in his home workshop at Cable Bay, near Nelson.

► Haig says that, fundamentally, the process of steam bending is simple and has hardly changed since the mid-19th century when German-Austrian cabinetmaker Michael Thonet invented the compression-strap method of bending.

"Unfortunately the most recent developments I've come across involve the use of plastics... so I'm somewhat ambivalent. What happens is the wood is shrink-wrapped after being soaked in cold water, so it is effectively steamed while being contained within a layer of closely held surface water. This helps in the transfer of heat deep into the wood and also prolongs the bending time after the wood is removed from the steam box. But it also means there is more plastic to throw away."

Among Haig's other successful creations is the wonderfully expressive Folium chair, which evolved, in part, from his three-legged V chair. "I sketched out a version of the latter using a leaf-shaped back. The back leg was the thick end of the tapering leaf stem, and the two opposing leaves – set at a slight angle to each other - looked supremely elegant. I kind of knew this was going to be a really strong design."

He says it was a huge honour and affirmation when his third Folium chair - built using sycamore with native matai for the leaves - won the supreme award at the AWR Studio Furniture 2018 Awards at Bungendore Wood Works Gallery just outside Canberra. (Monogram won a special award at a previous exhibition in 2010.)

Haig is also an experienced and widely respected teacher - having taught woodworking and design skills at the Centre

for Fine Woodworking (CFW) in Nelson since its humble beginnings in 2006. He has also crossed the Tasman several times to take courses in Perth and Melbourne.

"I've taught a number of very enjoyable and well-subscribed classes at the Perth Wood School on making my hoop stool design. It has proved to be a great way of introducing students to several key bending techniques, while also allowing them to take away a very useful and attractive piece of furniture.

"I also gave a one-day masterclass at the last 'Wood Dust' event in Melbourne on making a type of Japanese whittling knife, which I have found particularly useful in shaping areas with tight radiuses around jointed sections."

He will be back at the CFW in early June, before beginning a teaching stint in the States – most notably at the renowned Center for Furniture Craftsmanship in Rockport, Maine. "I'll be taking the last four weeks [curvature techniques] of an intensive 12-week course, alongside furniture master and marquetarian Brian Reid."

Haig is a confident communicator who appreciates the opportunity to impart his knowledge unencumbered by the restraints of a formal academic framework. "I have never been attracted to box-ticking teaching, where so-called 'competencies' are broken down into what often seem either ridiculously tight or absurdly wide open categories."

"Teaching and learning become warped when you try to pin down and contain the incredibly subtle and individual ways people look to understand something as complex as designing and making furniture." ■

QUALITY

BIESSE.COM

EDGEBANDING STARTS HERE.

The Akron 1100 is the smallest single-sided edgebanding machine in the range, meant for small producers who need to modernise their technology or for woodworkers who wish to automate production.



Akron 1100

NEW

 **BIESSE**

Dr Andreas Hettich to lead Hettich Group as Chair of the Advisory Board from 1 January 2020

On 1 January 2020 Dr Andreas Hettich (50), a fourth-generation company shareholder, will leave his operational management post at Hettich Holding GmbH & Co. oHG and join the Hettich Group Advisory Board.

After working for almost 20 years in the operational side of the business, 13 of which as Chairman of the Management Board, Dr Hettich will in future focus on the strategic management of the Group and will act as a link between the shareholders and Management Board. As a majority shareholder, he will continue to represent the Hettich Group with respect to customers and the general public. Jana Schönfeld and Sascha Groß, both successful members of the previous Management Board, will manage Hettich Holding as equal partners.

Dr Andreas Hettich commented: "Over the past few years we have consistently geared the Hettich Group towards profitable growth and established the organisational conditions required to do so. The entire Hettich team across the globe is working intensively on moving the organisation forwards to increase autonomy as a result of new collaborative approaches. I am delighted that the Group will be left in such good hands, and will play an active role in pursuing this objective from my position on the Advisory Board. By working together, we will be well equipped to rise to future challenges."

HETTICH AUSTRALIA
Phone 1800 687 789
www.hettich.com.au



Jana Schönfeld and Sascha Groß are now joint Managing Directors of Hettich Holding



Photo Hettich

As the new Chairman of the Advisory Board, Dr Andreas Hettich (3rd from the left) is looking forward to an intensive dialogue on the board. (From left to right) Dr Ralf Gärtner, Managing Director of Protiq GmbH; Rainer Hettich, shareholder of the Hettich Group; Dr Andreas Hettich; Georg Alexander Zeiss, Board Member of Fielmann AG, as deputy Chair of the Advisory Board; Alexander Hettich, shareholder of the Hettich Group; Bert Bleicher, Managing Director of Alluti GmbH.

ECONOMICAL VACUUM GENERATION IN ALL STAGES OF WOODWORKING

Whatever your application in woodworking, when it comes to vacuum technology, we are the right partner for you. Optimize your process together with us. With the Busch VacuumCheck you receive a written status description of your vacuum pumps according to a standardized test procedure.

Contact us. We are happy to assist you!

Busch Australia Pty. Ltd.
1800 639 087 | sales@busch.com.au | www.busch.com.au

**U
BUSCH**
VACUUM SOLUTIONS

New cinder Hideaway® Compact range

With the continuing trend for dark coloured cabinetry and hardware, Hideaway Bins announces the addition of the cinder colour to its popular Hideaway Compact bin range.

The new cinder colour option strikes the right balance between need for premium looking design and the great value offered by the Hideaway Compact bin range.

The cinder colour was first released with the award winning Concelo® range and was designed to harmonise with the dark grey and Anthracite colours from leading drawer brands. With many kitchen designers and manufacturers offering matching dark grey cabinetry and hardware, the Compact cinder bin range now makes it possible to achieve a totally harmonised look across the whole kitchen.

The added practical benefit of cinder is its ability to hide dirty marks and scuffs.

In total, 13 Compact bin models are now available in cinder, and are the same price as their arctic white equivalent - all floor mounted Compact bins are available in cinder, and door pull models in 15 litre, 20 litre, 35 litre and 40 litre buckets sizes are also available. Check out the Hideaway Bins website to



see the full Compact bin range - with 35 Compact bin models to choose from, there is a Hideaway Bin to suit any project.

Compact cinder bins are available nationwide, through Hideaway's distribution partners; Nover, Häfele and Galvin Hardware.

HIDEAWAY BINS

Phone 1800 042 642

www.hideawaybins.com.au

Right: Hideaway
Compact
KCF220SCD-C 2 x 20
litre buckets in cinder -
top mount.

Below: Hideaway
Compact KC40SCD-C
2 x 20 litre buckets
in cinder - floor/base
mount.



KitLock by Codelocks expands the range

Digital lock innovators and designers Codelocks Asia Pacific has expanded its KitLock by Codelocks range of digital keyless locker solutions. The new KL1100 RFID lock is the latest addition featuring a stylish, slimline front plate the KL1100 gives any locker or environment a modern, contemporary feel.

With two modes allowing card access to be managed locally or remotely, supporting private (single users) or public (multiple users) function, the KL1100 is perfect for environments with many lockers that would benefit from using and managing RFID cards. The 24hr clock allows or restricts when users can access lockers, or automatically unlock lockers at pre-specified times.

The KL1100 is easy to install, operate and manage, featuring a powered latch enabling intuitive 'push shut' closing. The Remote Card Authorisation (RCA) mode offers remote management allowing card clients to be created and managed via a PC using the Codelocks Card Management Client (CCMC) software and a smart card reader. KL1100 is available in a metallic silver or gloss black finish. For further information visit www.codelocks.com.au/kl1100

CODELOCKS AUSTRALIA PTY LTD
Phone 02 9882 1009
www.codelocks.com.au



Italian storage solutions in the kitchen with Lincoln Sentry

Gollinucci's Sous Chef is the latest addition to the kitchen, designed to organise even the smallest of spaces. Available exclusively through Lincoln Sentry, the Sous Chef comes in white and grey and is made to work with the Blum LEGRABOX system. Find out more about the Sous Chef system by visiting our website.



Visit lincolnsentry.com.au or call 1300 551 919

@lincolnsentry Lincoln Sentry



Building up business with SCM Pratika

Growing from just a handful of staff to a team of 60 in only 4 years, Network RV has quickly expanded into a leading manufacturer and supplier of caravan furniture and interiors.

Established by Director Joe Marcovic, Network RV designs and manufactures for a variety of caravan companies, as well as producing its own caravans. "In the early days we were manufacturing one caravan a week. Now we're producing around 30 a week," said Joe.

Creating both generic and unique custom designs, Network RV needed a factory setup that was capable of constant and consistent production quality.

"Before I started Network RV I had worked with many different machines and suppliers in a variety of settings," said Chris. "For my own company, I wanted to go with the supplier I'd had the best experience with. SCM Group Australia was an easy choice."

With furniture that can consist of up to 300 parts and each part needing to be individually designed, the factory setup had to be robust and reliable. "The SCM team we dealt with knew our business well, so were able to advise on the best machines to fit straight into our business," said Joe. "Combining an SCM Pratika 310MF CNC machining centre with a K360TER edgebander has worked out very well for us."

A versatile machine perfect for a range of joinery applications, the SCM Pratika has completely transformed Network RV's manufacturing process. Bringing the SCM Pratika into the factory has not only increased production from one piece of furniture a day to 20-30 sets of furniture per week, it has also allowed for new methods for building the pieces. "It's key to our production. The Pratika is the hub and centre, it all starts from there. Our entire business revolves around it," said Joe.

Regular servicing and maintenance has been a positive experience for Network RV, making sure that both the Pratika and K360 run as smoothly as possible. "We've had no major problems with either machine," said Joe. "The SCM technicians are prompt and experienced. They get in and get the job done so that we never have to stop work."

Joe has been so impressed with the SCM Pratika that he has already placed an order with SCM for a second CNC, due to be delivered in the coming months.

"The SCM Pratika has really helped us to set our business apart in the market – it makes our operation seamless," said Joe. "It gives me the confidence and security that production is never going to stop, and we'll always be able to satisfy our customers. SCM Group Australia has been fantastic, I'd never consider anyone else."



SCM GROUP AUSTRALIA
Phone 1300 422 238
www.scmgroupaustralia.com.au



Intelligent Organisation Solutions InnoTech Atira Drawer System

Hettich's InnoTech Atira drawer system is versatile in any living or commercial space, with four height options and three finishes; white, silver and anthracite. Hettich have a range of clever storage solutions for small to large drawers. The OrgaStore range allows the drawers content to be segmented into clear areas, making life easier keeping everything organised.

www.hettich.com.au | Ph: 1800 687 789



@hettichaustralia

Technik für Möbel


Hettich

by Rick Lee

Creativity at the edge

There's something about fine woodwork that makes you want to touch it, to feel the rich gloss or satin finish beneath your fingers, to run a light touch over a joint just to marvel at its perfection. Like all works of three-dimensional art, it's the tactile nature of their form that I find totally irresistible. The Edge exhibition at the Sturt Gallery, Mittagong, NSW, brings such pieces together in a celebration of Australian woodworking talent. 28 of the best Studio Woodworkers of Australia were invited to design and build works that would stretch their imagination and skills, taking their ideas to the 'Edge' of creativity. The result is a wonderful exhibition of works that combine the finest qualities of wood, skilled technique and design inspiration. The exhibition is sponsored by Sturt Gallery and Studios, and Felder Group.

There are clocks and tables, lamps, chairs and cupboards, all familiar in households throughout the land, but each piece here is a triumph of unique studio design. Handcrafted with one thing in common, they all showcase

the beauty of wood, its versatility and an enduring nature of handcrafted furniture that will always be in demand no matter what the fashion. In some ways, the exhibition harks back to the days when furniture was built for life, not just the life of one generation, but of many. It's easy to imagine these works being passed down through families, heirlooms to be cherished for hundreds of years to come.

Like good wine, pieces like these will get better with age, taking on the scars and scratches of day to day life, absorbing history and showing it off in a noble patina that comes with age. Just as we can see life etched in the character of antique pieces of furniture, in these newly created works, we also get a glimpse of a living past. Trees that have sometimes stood for hundreds of years are reborn with a beauty that befits such natural resources and plantation timbers can be just as unique in their presentation. We see colours and patterns in the grains of timber, the swirls of burls and the figures of veneer that tell of weather and environment and of



Top right: Chairs by Tony Kenway
Centre: Clock by Will Matthysen
Far right: Apollo II light by Warwick Wright
Right: Genesis by Warwick Jones





2019 Best Alfresco Design



2019 Cabinet Maker of the Year



2019 Best Bathroom Design



2019 Best Commercial Design



2019 Design of the Year



2019 Best Kitchen Design

2020 Industry Awards Cabinetmaking & Furnishing

ENTER NOW

www.acfa.net.au

awards@acfa.net.au

1300 342 248



AUSTRALIAN
CABINET AND
FURNITURE
ASSOCIATION

2020 Key Dates:

Entries Close: August
Finalists Announced: August
Awards Night: 18 September

Awards Venue: Dockside Cockle Bay
2 Wheat Road, Sydney

2020 Award Categories:

Major Awards Categories:

Cabinet Maker of the Year
Outstanding Achievement of the year
Design of the Year

Design Categories:

Best Kitchen
Best Bathroom
Best Free-Standing Furniture
Best In-Built Furniture
Best Soft Furnishings/Interior Design

Outstanding Achievements

Workplace Champion
Apprentice of the Year

Cabinet Maker of the Year Categories:

Best Kitchen Project - New Build
Best Kitchen Project - Renovation
Best Bathroom Project - New Build
Best Bathroom Project - Renovation
Best Commercial Project
Best Alfresco Project
Best Laundry Project

*New Category:

Best First Time Participant Design/Project

PROTECT

PROMOTE

PROVIDE

► long lives lived. These characteristics are brought out and used to maximum effect by the artisans who have created these distinctive pieces.

There are some pieces that stand out for me, but it would be churlish to mark out some as the best because each work is unique in its form and function and displays a personality of its own, and after all, art is in the eye of the beholder. It's slightly disappointing when I see the sign that says: Please don't touch. It's like a mouse trap for me and I can't resist a quick look over my shoulder as my fingertip grazes the highly polished surface on my way to the exit. I'm compelled to touch. I doubt the creator will mind too much that their work had such power over me. It's the kind of reaction any artist would want for their pieces. All in all, it's an exhibition well worth seeing.

And as for touching, I imagine I won't be the last.

STUDIO WOODWORKERS AUSTRALIA
www.studiowoodworkers.org.au



Confluence coffee table by Evan Dunstone

Cabinet by Ian Higgs



Inverse Parenthesis hall table by Darren Oates



Centre: Coffee table by David Muston

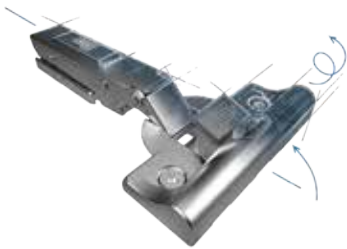
Above: Ele coffee table by Stuart Faulkner



Kiss Kiss, a love seat by David Uphill-Brown

Transitional space-savers

Set F400 Bi-Fold Door System



Compatible with the T-Type hinge for the industry's fastest door assembly.



[LEARN MORE](#)

Create style and definition with our Set F400 bi-fold door system. Maximise space and de-clutter communal areas with hidden laundries and wardrobes. Ideal for room dividers, kitchen pantry and appliance cupboards, walk-in cupboards, wardrobes and walk-in robes, and partitioned laundry applications.

The 30kg load capacity per door offers the flexibility to use a variety of door panels to create the perfect style to suit your application. When used with the Titus T-type Glissando hinge, you can be confident that the Titus proprietary damping technology will ensure smooth and consistent soft close action for the lifetime of the product.

- + For top hung systems
- + Soft close applications with T-Type Glissando
- + Kitchen cabinet bi-fold
- + 30kg weight capacity
- + Inspired by European trends

Contact Titus Tekform

www.titustekform.com.au
info@titustekform.com.au
 1300-0-TITUS

LUMINA INDUSTRY

Invisible Joints. Perfect Appearance. Flexibility.



Invisible Joint with Laser Edging
Waterproof Invisible Joint
iTronic for intelligent automation.
Integrated Multifunction Cutting Technology
Intuitive Operation with Touch Screen

Michael Weinig Australia Pty Ltd
3 Widemere Road
Wetherill Park NSW 2164
1800 736 460
sales-australia@weinig.com
www.weinig.com.au



Eurofit premium range of wire ware by Inoxa

Eurofit Hardware has recently introduced Inoxa Elite wire ware to its existing standard range.

Inoxa Industrie has 30 years of experience in manufacturing metal wire accessories. Its own galvanic plant was built in 2013 with the latest avant-garde technologies to help produce its products internally and with a closed exhaust system. This means zero pollution and efficient production.

Inoxa Elite, is chromium plated and therefore corrosion proof and safe for human use. Designed and manufactured in Italy, Inoxa Elite integrates the kitchen area with solutions that interpret and unite the need to use space to the maximum with practicality and functionality.

Finished with a craftsman's skill, Inoxa Elite is elegant in style, practical and refined in hi-tech taste. A perfect fit for Eurofit. The Inoxa products are exclusive to Eurofit in Australia.

EUROFIT

Phone 03 8592 1955

www.eurofit.com.au



A genuine asset

For years, the walls of the Carjo Furniture factory in Victoria's northern suburb of Reservoir were decorated with literally hundreds of complex jigs it used to manufacture its solid hardwood furniture. The jigs are still there, used only occasionally now and mostly gathering dust because Joe and Carl Mimmo recently installed a 5-axis Biesse Rover B machining centre. Carl said, "Logistically, the Biesse Rover B eliminates four to six machining processes. It's a real asset to our business."

Carjo's relationship with the Biesse Group goes back almost twenty years, in fact, Carl remembers the first Biesse machine installed early in 2001. They use other brands of machinery but for most of their high-tech equipment, Biesse is their brand of choice. Today, they operate a Selco Beam Saw; two 3-axis CNC Rover machining centres; their new 5-axis Rover B machine they've had for fifteen months now and they've just ordered a wide-belt sander from Biesse Group.

Carl said, "Biesse always offer us the solution we need. They'll never try and sell us something that won't work for us." Carl is very astute when it comes to equipping the factory. He spends a lot of time researching any new equipment before they start asking around for solutions. Carjo know what they need and expect their supplier to work with them, finding the right solution for their needs. This often results in a non-standard machine spec and Biesse is able to offer the widest range of options for Carjo's distinct manufacturing requirements.

Carjo use American oak and Victorian ash but will also process timbers specified by the customer such as walnut; blackwood;

iroko; blackbutt and spotted gum, all hardwoods and all challenging to work with so their new 5-axis Rover B was specified with an upgraded kilowatt motor and an extra set of origin stops that better suit their production. A new wide belt sander on order was also specified to meet the distinct needs of a machine processing hardwood components and furniture sub-assemblies.

Joe has been in business for himself since 1980 when he bought Allied Furniture; an existing business from 'Three Italian Guy's,' friends of the family from Italy. After Paul Keating's 'Recession Australia had to have' Joe started a business of his own. Carjo is an acronym of Carl (his son) and Joe. Recently, Joe's grandson James joined the business to make it a third-generation company. James works the 5-axis Biesse Rover B and together with Carl, they discover new things it can do, almost on a weekly basis. It's like a good video game, it takes a few minutes to learn but a lifetime to master.

Carjo's production is based on its furniture range sold in independent retail outlets. The major furniture chains were given the boot long ago because "They wanted to dictate all the terms." Production for other companies is also a part of the business and Joe learnt all about the ins and outs of this from time he spent at Kenwood Chairs where he was first introduced to CNC machinery. Carjo also produce a range of free-standing furniture for aged care facilities Australia-wide and both Joe and Carl have been instrumental in designing products specifically for that use.



Software

Carjo furniture used to be a hands-on business. There was no CAD software because a lot of what they did was one-offs for interior designers. Carjo's thinking is that they're 'Wood Engineers.' What's unique about Carjo is that they're adept at doing most things and happy to accept a challenge. Of course, that's all changed with their Rover B and bSolid software. Carl says, "The bSolid software allows us to import drawings of whole pieces of furniture and to 'take them apart' and see how they could be constructed. The bSolid software is so precise, we could draw medical equipment with it if we wanted."

The ability to design complex furniture parts with bSolid; combining many processes into one has saved Carjo an enormous amount of time. Carl says, "Doing several processes while the part is held in one place gives us a much better product in terms of accuracy and quality. As an example, we used to make all the parts of a frame and then assemble them for a pretty good result. Now we make the frame first, then machine it in one cycle for an excellent result. Even our assembly time has improved because the assemblies go to them without the need for any detail work."

Carl rates the bSolid software very highly. He says, "We find that with bSolid there's always an easier way to do things than with other software programs. One of the reasons we went with the Biesse product was that we didn't need third-party software to be able to do the more complex jobs we often get. We have several dozen processes set up now that once needed an elaborate jig to hold them, either on a static machine or a 3-axis CNC machine, but that's all gone now; the Rover B has changed the way we make furniture."

One attribute Joe won't compromise is quality and Carjo reserves the right to decide how its furniture is made. He said, "If we're to be responsible for it, we'll decide how it's going to be made." Carjo has won almost 20 National and State awards for quality product and now, with their new 5-axis

Biesse Rover B machine, their quality has gone to the next level.

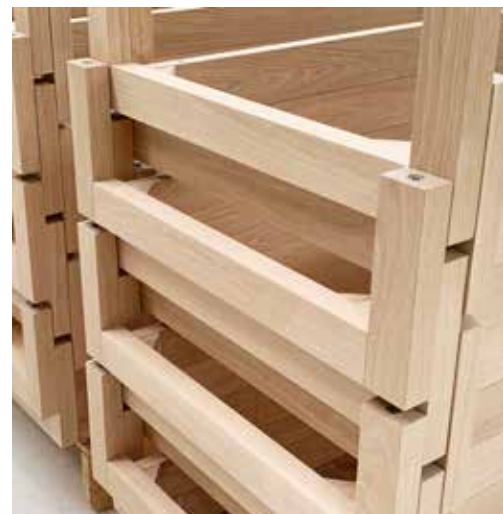
The long term

Joe Mimmo is well-known not only in Victoria but around Australia for his work with the Australian Furniture Association. Joe stands apart for his work within the furniture industry and many of the things we take for granted now have been fought for by Joe and other dedicated furniture industry personalities. Think about Australian Made; Australian Standards; training and Joe Mimmo's name pops up every time. He's a clever and resourceful man and a look around his factory reveals dozens of clever manufacturing aids to save time and produce more innovative work.

And yet, Joe is committed to CNC technology. He said, "We needed five different machines to make the complex furniture components we're doing, so two years ago we decided to look for a better solution. Carl and I saw a Biesse machine at AWISA in Melbourne and we were so impressed, we went back the next day and stood in front of it, staring at what it was doing and thinking what it could do for us." Joe says "We've invested a lot over the last few years because we believe in ourselves and we believe in the future. We're in it for the long-term and we know Biesse is in it for the same reason."

"We've moved from quantity of product to quantity of variety," says Joe. Challenges are not a problem at Carjo, but Joe says, "We do need a machinery partner to ensure our continued success. With Biesse Group we have a partner that has an interest in what we do and invests themselves in our future. Their new focus on service is a winner for us. We believe the versatile Biesse machines suit our changing production needs; they're a genuine asset to our business."

BIESSE GROUP AUSTRALIA
Phone 1300 BIESSE (243 773)
www.biesse.com.au



Lincoln Sentry official opening

Having celebrated 34 years in business earlier in the month, Lincoln Sentry continued the celebrations on Wednesday 26 February with the official opening of the National Customer Support Centre and Acacia Ridge Distribution Centre (DC) by DuluxGroup Chairman and CEO Pat Houlihan.

Lincoln Sentry Executive General Manager Mike Kirkman said the new site is 30% larger than Coopers Plains and provides enormous synergies with the co-location of the National Customer Support Centre and Brisbane DC.

"We have ambitious growth plans and our co-location ideally positions us to achieve these plans," he said.

"Our Brisbane DC now has one third additional floor space and we have been able to double

our storage capacity thanks to the increased height within the facility."

"Since moving into our new Brisbane DC last October, our workforce has benefited from a safer place to work, thanks to a dedicated focus on improved traffic management."

"Through the use of allocated vehicle access zones, clearly marked pedestrian walkways and the addition of new mechanical handling equipment in forklifts and low-level order pickers, we have not only made our Brisbane DC safer but also more efficient."

"Thanks to DuluxGroup's commitment to the long-term future of our business, we are benefitting from their significant investment.



Celebrating the opening of Lincoln Sentry's National Customer Support Centre and Acacia Ridge DC (from left) DuluxGroup Chairman and CEO Pat Houlihan, Lincoln Sentry National Manager Operations and DCs Raj Prasad, DuluxGroup Executive General Manager Supply Brad Hordern and Lincoln Sentry Executive General Manager Mike Kirkman.

"It's exciting times for Lincoln Sentry and our new National Customer Support Centre and Brisbane DC in Acacia Ridge will provide the necessary infrastructure to ensure our growth journey is achieved," said Mike.

LINCOLN SENTRY
Phone 1300 551 919
www.lincolnsentry.com.au

Edgebanding and Surface solutions for Recreational, Commercial & Residential.

SURTECO NSW (HEAD OFFICE)
7-11 Wentworth Crescent
Arncliffe Park, NSW 2216
Phone: +61 (0) 2 9421 0300
Fax: +61 (0) 2 8814 8000
info@nsw.surteco.com

SURTECO VIC
37-39 Pacific Drive
Keyborough, VIC 3173
Phone: +61 (0) 3 9796 8282
Fax: +61 (0) 3 9798 5828
info@vic.surteco.com

SURTECO QLD
13 Rambo Street
Capalaba, QLD 4157
Phone: +61 (0) 7 3265 1881
Fax: +61 (0) 7 3245 1476
info@qld.surteco.com

SURTECO WA
535 Abernethy Road
Kewdale, WA 6105
Phone: 1300 531160
Fax: +61 (0) 2 8814 8000
info@wa.surteco.com

SURTECO Australia
we create.
we innovate.

www.surteco.com.au | shop.au.surteco.com

Universal application. Unbelievably powerful. **EDGETEQ S-500**



EDGETEQ S-500
Edge Banding Machine

Individually configurable
in performance and feed

Can be used with any material
can process any edge types

Greater output
due to robust, maintenance-friendly
design



AUSTRALIAN
CABINET AND
FURNITURE
ASSOCIATION

BY INDUSTRY **FOR INDUSTRY**



Image Credit: COS Interiors & Flack Studio
Cabinet Maker of the Year 2019

2020 / 2021 Membership Offer

Join today and
receive up to 3 months
membership free*

*Standard 12 months membership runs 1 July 2020 to 30 June 2021

*Applicable to new members joining between 1 April and 30 June 2020

The association supporting the furnishing, joinery,
cabinetmaking, kitchen and bathroom industries.

Join online at **www.acfa.net.au**

For further information 1300 342 248 or membership@acfa.net.au

Member Benefits:

- ✓ 24/7 access to key business resources
via ACFA Website - acfa.net.au
- ✓ Unlimited calls on workplace relations
including minimum wage and allowances
- ✓ Up-to-date information on
workplace laws and legislation
- ✓ Industry specific policies,
checklist and fact sheets
- ✓ Discounted rates for
NSW, VIC, SA
Building Contracts*
- ✓ plus more...

*Subject to
membership
category

PROTECT

PROMOTE

PROVIDE

Wilson & Bradley introduces the Peka Pecasa shelving system



Consisting of a few simple, but highly versatile components that can be combined in an infinite variety of ways, the Pecasa system makes an elegant and practical addition to any room.

The system is built around a central wall profile to which shelves and storage drawer boxes can be attached in a variety of configurations to create personalised furniture solutions. It also features a built-in cable tidy so cables from lighting systems, TVs and other devices can be neatly tucked away. The shelves can be fitted with lights and the wall support can be used to mount mirrors or a television.

Pecasa's stylish design and outstanding flexibility make it a winning solution for living areas, offices, bedrooms, wardrobes or hallways.

Even if a room is awkwardly shaped or if its ceilings are high, low or sloped, Pecasa can be adjusted to fit the available space. The flexible modular components – including tabletops, shelves and cabinets – can be attached to the central wall profile in any configuration and repositioned at any height.

WILSON & BRADLEY PTY LTD
Phone 1800 633 507
www.wilbrad.com.au

HOMAG at HOLZ-HANDWERK 2020

Production in the digital age

HOMAG will showcase its extensive range of products and services to customers at the HOLZ-HANDWERK trade fair. The booth's main theme will be the organisation of woodworking shops in the digital age, with a focus on practical solutions

*practical
solutions that
make everyday
work easier*

that make everyday work easier and increase the efficiency of workshops - be that with modern machine technology, customised software applications, intelligent control concepts or innovative service products.

At HOLZ-HANDWERK, HOMAG will use two different concepts to show the specific opportunities that digitalisation can already offer. Sophisticated tools simplify users' everyday work through simple steps and can help with workflows. HOMAG's "Digital entry" workshop concept and the "Networked digital workshop" concept, are featured earlier in this magazine. Other products and services to be featured at HOLZ-HANDWERK include the following:

Life Cycle Services

ServiceAssist offers customers the help they need to solve problems quickly and independently. By recommending suitable and proven solutions, the app enables machine operators to prevent possible malfunctions and thus increase plant availability. ServiceAssist can be used anywhere and everywhere on mobile devices such as tablets and smartphones.

iPackage

At an excellent price/performance ratio, this all-inclusive package includes the TeleService flat rate, the ServiceBoard app and an annual inspection (including travel expenses). Detect signs of wear and maintenance needs early on and plan inspections and servicing in good time - thanks to iPackage, customers have everything under control.

eShop

After the HOLZ-HANDWERK fair, customers and interested parties will be able to order even more new products from the HOMAG Group online in the eShop. In addition to attractive machines and a wide range of spare parts, the new digital assistants, not to mention training and service packages, will also be available directly at shop.homag.com.





Edge technology

EDGETEQ S-380 & S-500 series

Automatic glue quantity metering for the exact quantity of glue required - always tailored to the panel material used. Adjustments can be made quickly via the touch control system. Optimal glue availability ensures better performance and cost efficiency at the same time.

The motorised top roll pressure unit and small parts package enable optimal processing of small parts and acute-angled or obtuse-angled parts. Individual surfaces covered with protective films can also be optimally clamped during processing.

CNC technology

A-Flex table: the new A-Flex table combines the flexibility of a manual table with a display system and the convenience of a table with automatic positioning in one solution. It positions clamping equipment and consoles automatically, while at the same time offering the flexibility of a manual console table.

DRILLTEQ D-510

The perfect supplement for CNC surface processing, covering all common processing on the front side and in the periphery of the surface. The machine offers flexible clamping without setting, perfect reference thanks to a flat support and can perform a wide range of processing tasks, making it the perfect complement to a nesting machine or for processing shelves, frame parts and much more.

PowerEdge Pro Duo

Thanks to new components and an intelligent control system, the new powerEdge Pro Duo edge banding unit gives users the perfect result quickly and easily. And that applies not only to existing processing activities - the unit also allows free



switching between conventional gluing with hot-melt glue and precoated edges with a zero joint.

Panel dividing technology

SAWTEQ B-300 flexTec

The robot saws in the SAWTEQ B-300/B-400 flexTec series combine the strengths of automation with manual versatility. At HOLZ-HANDWERK, HOMAG will present the SAWTEQ B-300 flexTec with additional new features to make the entire process of the machine even easier, more flexible and more efficient for customers - from work preparation and optimisation through to production workflows and destacking. SAWTEQ B-130

With its state-of-the-art saw control software, the SAWTEQ B-130 cuts quickly, precisely, efficiently and with significantly higher automation than a circular saw - and only for a slightly higher price. After HOLZ-HANDWERK, the entry-level saw will be available with a 3800 mm cutting length and the proven Easy2Feed automatic feed system. The advantages? Easier loading, higher load capacity and greater flexibility

IntelliDivide cutting

Cloud-based cutting pattern optimisation on demand. For HOLZ-HANDWERK, HOMAG integrated further features that make processes even simpler and more efficient and improve software handling.

Automation technology

TRANSBOT S-100

TRANSBOT connects the processing steps in the production workflow flexibly and fully automatically, from manually operated individual machines to automated processing centres. HOMAG will present the TRANSBOT Basic solution as an entry-level solution at HOLZ-HANDWERK. ►



LOOPTEQ O-300

The perfect addition to single-sided edge banding machines, the LOOPTEQ O-300 makes the production process more efficient. Thanks to cost-effective single-person operation, manual parts handling is minimized and particularly ergonomic. Automating edge processing is essential for boosting efficiency and worthwhile for any company.

CABTEQ S-250

The ideal assembly assistant for pressing cabinet furniture is particularly space-saving. It is easy to operate and requires no prior knowledge.

PAQTEQ C-250

This cardboard cutting machine enables individual, customised cardboard packaging for a product - just in time - for optimal product protection. Measuring just 1500 mm wide, the PAQTEQ fits in every workshop.



Surface processing

Planing

HOMAG will present a new solution for window manufacturing and the subsequent processing of glass fixing rails. A visualisation of the production steps for the window profiles in the "ProfileCenter" also makes operation easier.

Sanding

The 15.6" touch display now ensures easy, ergonomic operation in the entry-level range (SANDTEQ W-100 and W-200 series). The SANDTEQ W-100 RC Advanced Finish for easy entry-level varnish sanding was also demonstrated.

Painting

The SPRAYTEQ S-100 now has additional properties for easy glass painting.

HOMAG

Phone 1800 355 635

www.homag.com



modern. simple. no keys.
no coins. smart card
access. **hassle free.**
remote card authorisation.
program locally. audit
trails. **peace of mind.**
battery powered.
private and public
functions. no WiFi
required. less is more.
upgrade your lockers.

the all new
KL1100 RFID locker lock.

Go Keyless. **Go Kirt-Lock**
by CodeLocks

codelocks.com.au/KL1100





IMPROVE YOUR BUSINESS IN 2020



planit
CUTTING EDGE SOLUTIONS



**AUTOMATE
YOUR
PROCESSES
WITH
CABINET
VISION**



**OFFER
A UNIQUE
EXPERIENCE
FOR YOUR
CUSTOMERS
WITH VORTEK
SPACES**



**EXPAND
THE
USABILITY OF
YOUR CNC
MACHINE
WITH S2M
CENTER**



**INCREASE
ACCURACY
OF ONSITE
MEASURES
WITH LEICA
LASERS**



**IMPROVE
YOUR
SYSTEMS
FOR
TEMPLATES
WITH ELASER**











“

Talk to Planit about how investing in 2020 **will improve your business.**”

1300 855 411

www.au.planit.com

CALL US TODAY FOR A DEMONSTRATION

SCM AUSTRALIA OPEN HOUSE

23-24. 04. 2020

MELBOURNE, SCM TECHNOLOGY CENTER

MORBIDELLI X200

THE NEXT GENERATION



At last, the **Morbidelli X200**, the ultimate nesting machine for the Australian market is here.

With high emphasis on increased **flexibility** and **productivity**, while combining excellent **performance** and maximum **configurability options**.

Join SCM Australia at our exclusive launch of the **Morbidelli X200** in our **Melbourne Technology Centre!**

Hear from industry experts about nesting best practices; machine maintenance and data output to maximize efficiencies. Also on display will be a selection of **SCM CNC Machines** and **edgebanders** demonstrating exactly what these systems can do for your business.

SCM is running these exclusive demonstrations across 4 sessions over 2 days.

BOOKINGS ARE ESSENTIAL!
numbers are limited.

REGISTER ONLINE

www.scmgroupaustralia.com.au

SCM Australia

26 Rocco Dr

Scoresby, 3179

Melbourne, Victoria

Tel. 1300 42 22 38 - www.scmgroupaustralia.com.au

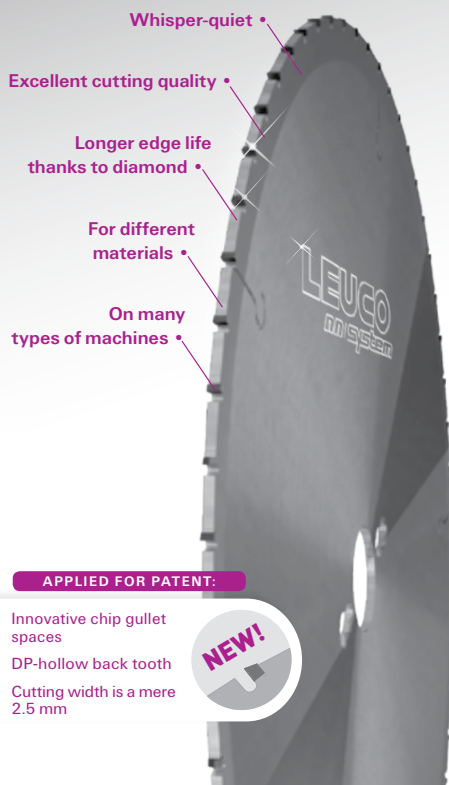


is more

LEUCO nn-SYSTEM

STEPS AHEAD!

The new benchmark for saw blades



Select your
„nn-System DP Flex“ directly
in LEUCO Online Catalog
and request it now:

➔ www.leuco.com/Products/nn-SystemDPFlex

The vast number of materials, for which
„nn-System DP Flex“ is suitable, you can see it
on the LEUCO YouTube channel

➔ www.youtube.com/leucotooling



LEUCO

www.leuco.com.au

T +61 - 02 - 8708 - 4900

Clever customisation from CAD+T

Celebrating 30 years in the furniture production and interior design market this year, international software developer, CAD+T specialises in creating highly customisable software solutions for three and five axis CNC machines.

“One CAD/CAM software package does not work for all and that’s why our CNC software packages don’t work off a pre-programmed database system,” begins Martina Schwarz, International Sales and Marketing Manager at CAD+T. “Instead, we work with our customers to create flexible and bespoke solutions that will work specially around our customer’s business model. This may depend on the nature of the business and its production rates, the machinery and tools in place and the materials being used.”

CAD+T’s clever CAM Interface separates components and automatically generates CNC data from the customer’s construction drawings. A database of milling strategies, machining parameters and tools generate the machine files needed to complete the job, which in turn, creates a solution that doesn’t require the programming or re-organising of CNC data. In short, this means that users can wave goodbye to timely manual programming, generic system inputting and the need for an experienced software programmer.

Martina says, “It really is the next generation in CNC software and has been created to dramatically simplify our customer’s manufacturing processes and streamline production processes and material output.”

It’s also been designed to be quick and easy to implement into a business, simply working off material specification, and it also offers huge time-saving benefits of around 60% per order. It also offers a reduction in error prevention of up to 80% and users have the added benefit of being able to run one software package on several CNC machines, saving time and money throughout the production cycle.

Martina adds, “Our adaptable approach to software design allows us to analyse the production process and create effective software concepts that work around our customer’s most challenging requirements. This is what separates CAD+T from other software developers. 90% of our customers in Australia and around the world work on CNC machines, with a growing trend towards 5-axis work. It’s a very important market for us and, due to demand, we’re continuing to invest heavily in ongoing research and product development in this area. We work closely with our customers and we’re not afraid to talk to industry to find out what they need. This approach has led us to create a wealth of problem-solving solutions that have been proven to be advantageous to the furniture industry.”

CAD+T AUSTRALASIA PTY LTD

Phone 02 8006 2067

www.cadt-solutions.com

by Rob Ditessa

Wooden rocking horses - popular for centuries

WOODEN ROCKING HORSES hold cherished childhood memories for many people, and it is only natural that nostalgically they seek to share the fun and exhilaration with succeeding generations. The Victorians secreted in hidden compartments inside the body of the horse documents, photographs, and sometimes coins, for their ancestors to discover. Britain's Queen Victoria herself commissioned some for her nine children. Originating in mediaeval times in the form of a rocking apparatus to practice jousting, the wooden rocking horse reached the height of popularity as a child's plaything in the mid-nineteenth century. A little later a safer model was developed where the horse rocked on a stationary platform rather than rock on a bow base. Local manufacturers emerged when the first World War effectively stopped the import of the horses from overseas.

In Australia today there are a handful of skilled workers who carry on the horse makers' tradition, amongst them Debbie and David Sainsbury, from the Gladstone region of Queensland. Every rocking horse they make is bespoke, based on the client's favourite show pony, or a memory of a once loved old rocking horse. "People give us photos and ask if we can duplicate markings, or colours, from their real horse into a rocking horse. We have even been given red cedar wall panelling that the owner's father had obtained from an old Post Office about 35 years previously, and we made that into a rocking horse. Almost anything is possible," Debbie tells AWISA Magazine.

Reminiscing about how fond she had been of riding her rocking horse, while they waited for the arrival of their first grandchild, sparked the desire to make a horse for the baby. Then, reading a magazine article about Christopher Woolcock, from Renaissance Rocking Horses, who ran classes in making rocking horses, motivated them to fulfil the desire. Both Debbie and David attended the sessions and their first rocking horse was a great success. Today they make rocking horses for children around the nation.

Both are generous in their praise and appreciation of help and invaluable advice they received in their wood workers' journey from master rocking horse makers, Doug Colvin of Colvin Rocking Horses, and Len Elliott of Rocking Horse Man. Sadly both have passed away, but their many conversations and words of encouragement continue to inspire.



The first thing required to begin building a rocking horse is to have the timber cut to specifications. The next is putting the timber through the planer, working out the various parts that will be traced and cut out in sections, and then put together so the body can be carved out. They often refer to this stage of the unfinished product as looking like a 'Trojan' horse.

Using a 4" grinder with a special carving wheel attached, the horse begins to take shape. The carving wheels are made by Saburrtooth, USA, and are available in several different grades from extra coarse, down to fine. "They look like a doughnut cut in half with raised up little spikes covering them. They come in a flat face or round, and are very kind to the timber, no gauging of the wood, just a nice sawdust. We have upgraded our tools and recently purchased a big Carbatec table saw, bandsaw and heavy duty thicknesser planer from a guy who was retiring. When we first started our gear came from Bunnings and it's a shock to see how small our first bandsaw was, but it cut through a huge amount of timber," says David.

Australian Red Cedar is one of his favourites, often referring to it as 'slabs of chocolate in the shed' because of the unique colour. Debbie chooses as favourites, Bunya and Norfolk Pines, because of the grain and colours, and Silky Oak, Camphor Laurel, Queensland Maple and, although she hates the smell of it, Red Cedar.

The rocking horse now needs the finishing touches. Once it is ready for sanding, the sander does the hard work, and then a lot of hand sanding is required to complete the look. The colour of the stain, and the number of coats, depends on the shade the customer has chosen. Painting a horse takes many hours to complete.

"The eyes are handmade glass from Germany, and we are now having our English saddles made for us. And of course, as tradition dictates, the mane is real horse hair.

"We use quality Italian leather for the little bridle and strapping and also include a filigree engraved brow band in the bridle in either Jewellers Bronze, which looks like gold, or sterling silver plated, which has become a feature of our horses.

"The stand is the normal safety stand that we fit with either brass or chrome top plates, and swing irons which we have made for us. We hot brand all of our stands."

In 2015 when Cyclone Marcia hit central Queensland, it flattened many trees including the avenue of Bunya Pines in the Rockhampton Botanical Gardens. The trees were among the first plantings in 1873, David explains. There was a call out on social media to people with ideas of how to make use of the wood. The Sainsburys tendered for some of the logs. Retrieving the massive logs proved to be a huge undertaking. They had to be cut in half to load onto a semi. "They were milled at our local sawmill in Benaraby and once that was done and the timber was delivered to us, we had to hand stack and space the timber in the shed. It was a feat which took two weeks of afternoons and weekends. The piles were not far from the roof of our three metre high shed, and we made 40 horses using that timber."

It has surprised both Debbie and David that what began as a one rocking horse project has developed into a business, and is helping to reignite the popularity of this traditional children's toy. Over the past ten years, their business, Roundyard Rocking Horses, in Benaraby, 20 kilometres south of Gladstone in Central Queensland, has continued to succeed. ■



Photo: Michelle Ann Studios, Qld.

**Quality CNC
tooling**

Huge rangeFast delivery



CNCRouterBits.com.au



Sleek storage and sleek doors

Stylish and efficient storage solutions are often hard to find. However, an increasing staple in many kitchens is the Titus Tekform drawer, which continues to meet consumer needs.

Presenting as a clean and simple box drawer, there is plenty hidden under the surface. Thin side walls lend to their appearance, while the ability to extend fully allows ease of access to the contents of the drawers. The drawers have a 40kg load capacity and can be customised easily in regards to size, height, rails and organisational inserts. These Tekform drawers are available in white and anthracite grey and seven widths which allows flexibility to suit a wide range of styles and cabinets.

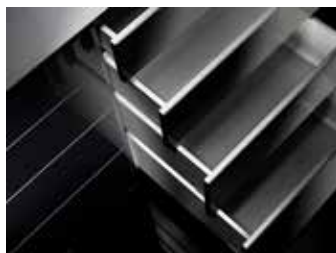
The drawers also feature a desirable soft-close mechanism. The 'Confident Close' as coined by Titus Tekform, ensures a fast closing drawer that finishes with a quiet landing, allowing for

the drawers to continue to perform efficiently and successfully over their lifetime. The damping mechanisms inside contain the Titus propriety damping technology to ensure a reliable close each time. These drawer systems are also perceptive to tolerances in cabinet construction. This ensures precise drawer alignment, smooth and silent operation and drawer stability when in the open position.

The Stefano Orlati Made to Measure door program from Titus Tekform delivers prefabricated doors cut-to-size with perfectly matched edgebanding, and is now available to order online in a quick and simple app. Made to Measure doors are available with both OptiMatt and OptiGlaz board for a quality high gloss or matt finish for any kitchen or room design.

Many kitchen cabinets and countertops are made with materials that emit toxic volatile compounds. The new





innovative OptiMatt PET board from Titus Tekform is not only non-toxic, safe and 100% recyclable, it's also extremely durable. Featuring a soft-look, sleek surface that won't chip, crack or delaminate and a scratch and fingerprint-resistant finish, OptiMatt is an affordable non-toxic solution for a green and health-conscious space.

TITUS TEKFORM
Phone 1300 0 TITUS
www.titustekform.com.au

From site measure to CAD in a single step!

flexijet^{3D}
Laser measuring system

- Site measure with only one person.
- Manufactured in Germany and used in the joinery and shopfitting industries around the world.
- Measure in 3D or 2D without restrictions.
- 7" touch display.
- Integrated camera.
- Auto levelling feature.
- Instant surface and space calculations.
- Projection of CAD points on-site to aid in installation.
- Easily create digital templates, scribe uneven surfaces and measure rooms or entire buildings.
- Interfaces to all common CAD software and CNC equipment.



1300 077 977

www.flexijetaustralia.com

Solu's new L- shape Shadowline profile

In line with European trends, and in response to requests by designers, Solu presents a leaner version of its signature Shadowline profile. Still available in both 42 and 52mm, with a patented clip system and matching end caps, the L- profile has a definitive square internal corner. The Shadowline-L also suits a vertical application for tall cabinet doors.

The new profile is available in anodised, powder coat and brushed and provides the same level of quality that the Shadowline has always delivered. Developed by Solu as a handle free solution with a dual purpose, the original design intention of the C- profile was to also create a support rail for cabinets. The patented Shadowline System is designed by Australian cabinetmakers, for the local market .

Both C and L profiles are supplied in an economical 3600mm length and cut to size by the cabinetmaker to attach to the front of the cabinet carcass with the clips as required. The 42mm L- profile can be fitted under the benchtop and will easily fit in the space above a freestanding dishwasher with little (or no adjustment) to cabinets, and depending on model used, will work with an integrated dishwasher.

It is also compact enough to maximise storage space in the cabinet and drawers. The 52mm profile can be installed between drawers and is designed to enable adequate space for a comfortable finger grip behind the drawer front .



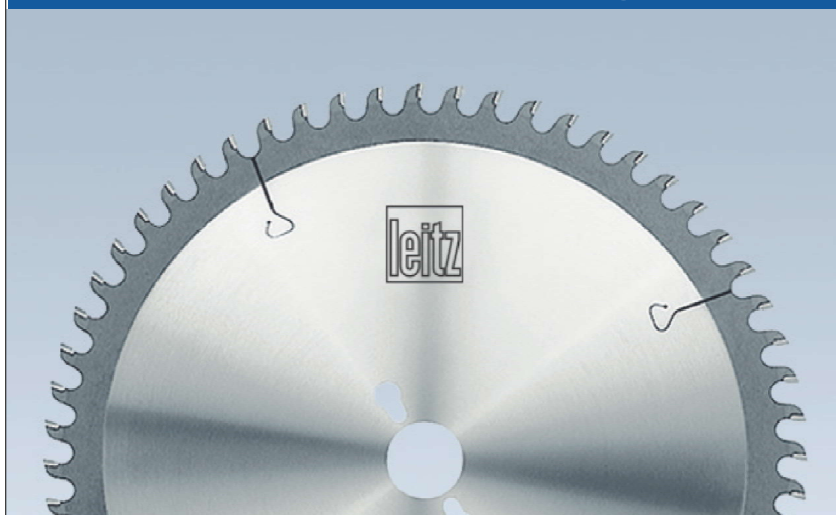
SOLU PTY LTD
Phone (02) 9519 4618
www.solu.com.au

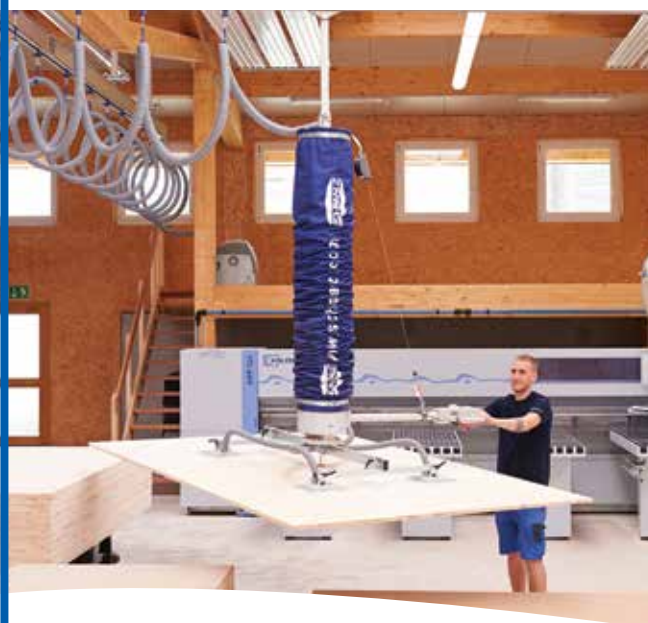
**Brilliant Cut
Boxed Set**

Main Blades and Scoring Blades



Leitz Brilliant Cut Saw Blade Boxed Set
Special Offer - Call 1300 135 127 for your quote!
or email sales@leitz.com.au





Handling Systems

Loading of your CNC with ease

WWW.SCHMALZ.COM.AU SALES@SCHMALZ.COM.AU FREECALL 1800 992 211

Vacuum Gripping Systems - Vacuum Components - Vacuum Handling - Factory Cranes

Vale Erwin Biemel



It is with regret and sadness that AWISA advises of the passing of Erwin Biemel.

Erwin was been a member of the Titus Tekform family for many years, first as the owner of long-standing hardware distributor Biemel Enterprises and more

recently as the State Manager for Western Australia after Titus acquired his business in 2017.

Biemel Enterprises was a family business, with Erwin and his father the first to import Grass hinges into Australia. Erwin's son, Anton, is the current sales manager for Western Australia.

Erwin was very passionate about the industry and a valued member of Titus Tekform. AWISA's sincere condolences are extended to his family and friends.

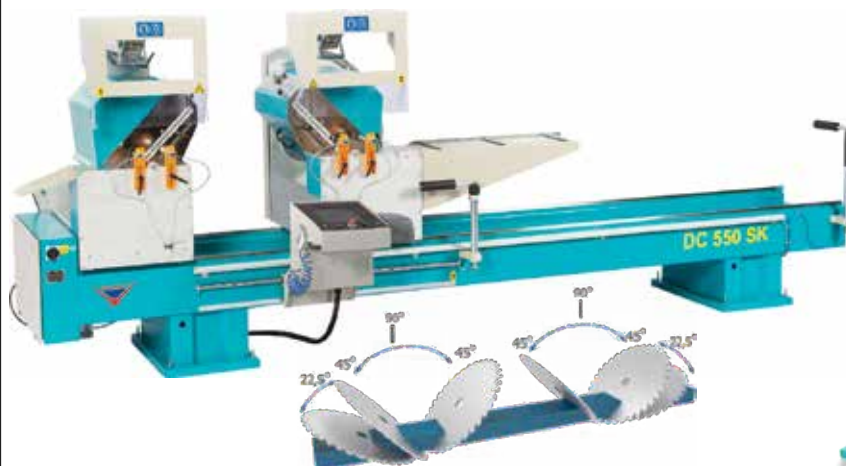


**PERTICI
INDUSTRIES**



DC 550SK CNC Double Mitre Saw

Extensive range of large capacity saws and routers
Improve your quality and efficiency
Competitive prices



Specialised Workshop Equipment

- Reduce Handling Costs
- Prevent Workplace Injuries
- Protect Your Work



www.lunamac.com.au



Australian Woodworking Industry Suppliers Association Limited

AWISA The Association



AWISA was formed in 1986 by the principal suppliers to the Australian woodworking industry. The main aims of the association are to present industry exhibitions, publish industry magazines, co-operate with other organisations, and to uphold the highest ethical standards and encourage members to do the same.

Membership applications are welcome from Australian based companies, and from overseas companies with Australian agents or distributors that are also members of AWISA. Membership of AWISA includes suppliers of woodworking machinery, cabinet and furniture hardware, panel products and surface materials, portable tools, computer software, materials handling equipment, dust extraction equipment, components, and general plant and safety equipment.

AWISA The Exhibition



The exhibition has been held regularly since 1988, and attracts furniture manufacturers, cabinet makers, kitchen manufacturers, joiners, shop and office fitters, and other wood, timber and panel processing industries. Architects and interior designers also attend.

The AWISA exhibition planned for July 2020 has been postponed. For information about plans for the next exhibition visit www.awisa.com/exhibition

AWISA The Magazine



AWISA's magazine is published quarterly and is distributed free to a database of over 13,000 end users in the industry. AWISA's editorial policy is to produce quality editorial about business and technical issues that affect the woodworking industry, and to provide members with a means of disseminating information about their products. The association welcomes input from both members and end users about subjects that should be written about in the magazine.

AWISA The Board

CHAIRMAN

Brett Ambrose, Blum Australia Pty Ltd

BOARD MEMBERS

Kevin Bruce, Lincoln Sentry
Michael Bullock, Biesse Group Australia
Ross Campbell, Homag Australia Pty Ltd
Stephen Cugley, Planit
Lee Gabbett, SCM Group Australia
Martin Gane, Hettich Australia
Vit Kafka, Altendorf Asia Pacific
Stefan Kremer, Felder
Ron Smyth, The Wood Tech Group
Jim Snelson, Borg Manufacturing

General manager: Geoff Holland Phone: 0412 361 580 Email: info@awisa.com

ADVERTISERS INDEX

ALL ABOUT LABELS	33
ACFA	51, 60
BIESSE GROUP AUSTRALIA	44
BLUM AUSTRALIA PTY LTD	2, 3
BUSCH AUSTRALIA PTY LTD	45
CAD+T AUSTRALASIA	37
CDK STONE	27
CNCROUTERBITS	69
CODELOCKS	65
EUROFIT	76
FLEXIJET	71
HAFELE AUSTRALIA	13
HETTICH AUSTRALIA	49
HIDEAWAY BINS	75
HOMAG	17, 34, 59
LEITZ TOOLING SYSTEMS	72
LEUCO AUSTRALIA	67
LINCOLN SENTRY	47
LUNA MACHINERY	73
MICHAEL WEINIG AUSTRALIA	54
MULTICAM	4
PLANIT	65
SCHMALZ	73
SCM GROUP AUSTRALIA	39, 66
SOLU	36
SURTECO	58
TITUS TEKFORM	53
WILSON & BRADLEY PTY LTD	29
WOODTRON PTY LTD	24

www.awisa.com

DISTRIBUTION

AWISA – The Magazine is distributed free to a list made up of companies that attended the last three AWISA exhibitions, plus the client databases of some major AWISA members. To be added to the distribution list send an email to info@awisa.com. (AWISA Ltd may at some time in the future charge a subscription for personally addressed magazines)

CONCELO® LAUNDRY

Raising the bar in what should be expected from a laundry hamper.

NEW FROM HIDEAWAY® BINS

The Concelo® Laundry Hamper offers a sophisticated storage solution.

Based on the same platform as the Red Dot award-winning Concelo® waste bin, the NEW Concelo® Laundry system continues to raise the bar in what should be expected from a laundry hamper.

This new design is packed with features to suit the needs of designer, the cabinet maker and the homeowner.

An attractive hamper at an attractive price!
Contact Hideaway® for more information.

hideawaybins.com.au/concelo 1800 042 642

NEW 60L HAMPER



CONCELO LAUNDRY FEATURES

COLOUR OPTIONS
Available in white or cinder.

TRUE 6 WAY CAM DOOR ADJUSTMENT
With locking bolt system so no more remedial work.
(+/- 2.5mm vertical and horizontal +/- 0.75 degree pitch adjustment)

HÄFELE MATRIX RUNNER
Concealed, over extending, smooth, synchronised runners - equal to other premium drawers.

60L MOULDED HAMPER

CLIP 'N' CLEAN TRAY
Unique to Hideaway, no more rusting metal frames!

ELECTRONIC PUSH TO OPEN COMPATIBLE

SIDE MOUNTING
To suit standard System 32 drilling positions

Patent protected concelo.com/ip



reddot award 2019
winner

Available from Nover, Häfele
and Galvin Hardware

Concelo Laundry is built on the same platform as the Red Dot award winning Concelo Waste Bin.

Concelo®

Hideaway®

EUROFIT



Celebrating **10** Years Partnership With **ambos**



ZLF-101R/102L



ZLF-700A



ZTR-750/1150

**ENTIRELY
MADE &
ASSEMBLED
IN ITALY**

**SUPERIOR,
FUNCTIONAL & DURABLE**
products by **AMBOS**



ZTR-400AM

Exciting new products
coming soon — **HEAVY DUTY
WALL-LIFT & ANTHRACITE
COLOUR**

Sign Up to check prices & order online
www.eurofit.com.au

sales@eurofit.com.au

P: 03 8592 1955