## WOODNEWS

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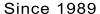




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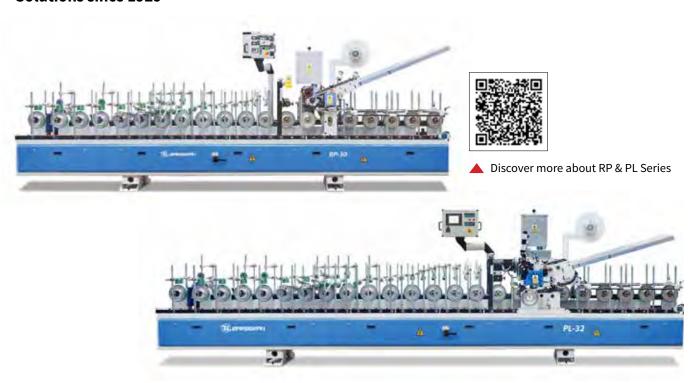


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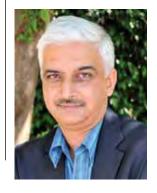
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## EDITOR DHANANJAY SARDESHPANDE

## How to mark a 'Happy 2021'

#### Dear Readers,

Indian industry, especially the furniture and interiors sector, seems to be emerging from the shadow of the slowdown forced by the Covid-19 pandemic - in fact 'rebounding' would be a better word to use for the rate of recovery and near-explosion of demand! However, suppliers to the industry - be it raw materials and consumables, fittings and hardware, or even machinery and technology - are battling a unique situation: material costs have shot up, logistics are mired in backlogs and container shortages; and production is yet to reach optimum capacity utilisation. It will be some time before this situation eases, when production factories in the Western world go fully on stream to plug the unprecedented clamour for restocking.

That the third quarter of the

financial year 2020-21 was a time of rapid recovery is evident from the performance of such panel and lamination giants as Greenply, Merino, Stylam and Rushil Décor. In fact, the Chairman of Century Plyboards, Mr Sajjan Bhajanka, was quoted by PTI as saying that "it is the best quarter performance in our company's history for our plywood, MDF and particle boards". Somewhat similar sentiments are being echoed by leading woodworking industry suppliers, who wrote for us in the Special Focus section of this magazine. My heartfelt thanks to them all for sparing their time to share their views with you!

According to Jones Lang LaSalle Inc., a global commercial real estate services company, the year 2021 will witness the industrial and warehousing sectors dial up their growth trajectory, fuelled by e-commerce, healthcare, FMCG (fast moving consumer goods) and office space market. In the home construction sector, a combination of increased home purchase

affordability and improved consumer sentiments will further lead to the translation of pent up demand into sales. Low interest rates and continued monetary stimulus from the government are expected to bring broad-based investment growth, JLL says.

In the months following the global spread of and disruption caused by the Covid-19 virus, there emerged a steady spate of claims, press notes and scientific papers on ways and means to halt the contagion by adding protective layers on surfaces that were prone to frequent human touch. We have pieced together these claims and looked up several scientific resources to find out what these 'protective' coatings are and how they work. Today, with the rollout of vaccines and the easing of Covid-19 threat, there is a lot to look forward to in 2021. Let us all take adequate precautions to remain safe, so that we are able to enjoy the thrilling times ahead. Happy New Year!

#### STAYING IN TOUCH

In keeping with the times and for ease of communication, WoodNews has discontinued the printing of Business Reply Envelopes with each issue of the magazine.

However, we continue to welcome your views and reviews of happenings in the industry, your contributions to and suggestions for the magazine, as well as business proposals via email.

Now follow us on:





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We look forward to hearing from you soon!

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## **'Furniture Park'** mooted in Kutch



The Gandhidham Chamber of Commerce and Industry (GCCI) in Gujarat has set up a committee to work out the details of a proposed 'Furniture Park' in Kutch district of the state.

The GCCI, headed by its current President, Mr Anil Kumar Jain, has been lobbying with the state and Central governments on the subject, to focus on local opportunities for business growth and employment.

The GCCI has secured 'in principle' approval for the Furniture Park from the Union Minister of State for Ports, Shipping and Waterways, Mr Mansukh Mandavia.

The Gujarat Chief Minister, Mr Vijay Rupan, has agreed to declare Furniture Park as a focus industry to compete with Chinese imports. The idea has also found favour with Mr. Amitabh Kant, Chairman of Niti Ayog, says Anil

#### How to connect

The GCCI committee is headed by its member, Mr Deepak Parakh, to promote the Furniture Park project at all levels. It is now identifying about 500 acres of land under the Deendayal Port Trust.

The GCCI has appealed to furniture manufacturers interested in the proposed Furniture Park to contact Deepak on +91-99785 55000, to visit Kutch and check out the infrastructure and amenities.

The GCCI is a 68-year-old trade and industry body with more than 2,500 business units as its members. The key

reasons to choose Kutch for a Furniture Park are:

- Based in Asia's biggest timber import centre for all varieties of wood species;
- · Availability of large tracts of land at very nominal prices;
- Availability of skilled labour;
- Established trade routes to large hinterland of North & West India;
- Proximity to two large ports: Kandla and Mundra;
- Robust infrastructure of rail/road network with Mumbai and Delhi;
- Good quality residential township with modern social infrastructure;
- Trade-friendly Gujarat government's assistance to entrepreneurs.





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## WOODNEWS

# Waiver of phytosanitary permit sought

The Directorate General of Systems and Data Management (DGS&DM), under the Union government's Central Board of Indirect Taxes and Customs, issued an advisory (No. 06-2021) on 29 January, 2021, making it mandatory for importers to upload phytosanitary import permit (Documentary Code 8520PQ) in e-Sanchit.

Sleek Boards LLP, based in Pune, has submitted a representation to the Joint Director stating that it is a great impediment for importers of engineered panel products like particle boards, MDF, oriented strand boards and plywood, which are produced under heat and pressure and have been known to be free of any plant quarantine restrictions since 2003.

The Ministry of Agriculture in exporting countries following the uniform global norms set by the World Health Organisation are not supporting the request for uploading the mandatory

requirement. Importers are facing a huge cost for non-clearance of their import cargo in absence of the phytosanitary certificate.

According to Mr Nitin Vaze, CEO of Sleek Boards, as per uniform code of practices by all importing and exporting countries, the offices in exporting countries are not issuing such certificates – and if they do they are charging a sizeable fee per certificate.

Sleek Boards has brought to the notice of the DGS&DM that it is also agreed by the Government of India to exempt the products falling under Chapter 4410, 4411 and 4412 by order called the Plant Quarantine (Regulation of Import into India) Order, 2003- Requirement of Import of Wood and Timber.

The Ministry of Agriculture also passed another order, called the Plant Quarantine (Regulation of Import into India) Third Amendment Order, 2004 (published in the Gazette of India on 31 May, 2004) reaffirming that even for packing material wholly made of processed wood products such as plywood, particle boards, oriented strand boards or veneer that have been

created using glue, heat and pressure or combination thereof. In short, products falling under HS Codes 4410, 4411 and 4412.

In light of the government's initiatives to encourage ease of doing business

Sleek Boards has requested the Joint Director, DGS&DM, to remove the items exempted by the Plant Quarantine (Regulation of Import into India) Order, 2003, from the requirement of phytosanitary import permit for items falling under 4410, 4411 and 4412 soonest, to save trouble and costs to importers.

Till the release of the January 2021 advisory, all these products were exempt from phytosanitary certification, and were freely imported, unobstructed by the Customs Department.

Sleek Boards has also appealed to all trade associations and importers to take up this matter for early relief to importers on uploading such documents, which exporting counties are reluctant to provide. For more information, you may write to sleekboards@gmail.com.





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# Bringing CLT to India: participate and win!

Prize money of Rs. 13 lakh aims to generate interest among Indian architects, woodworking professionals in building with wood

In the first-ever event of its kind, major Japanese real estate developer, Mitsubishi Estate Company, and Gurugram-based Aakar Design Consultants are organising 'CLT Induction in India', an open competition with total prize money of Rs. 13 lakh.

The competition aims is to create awareness and promote cross-laminated timber (CLT) as a primary building material for the future of housing in India. The idea is to have a system-based design to refine housing architecture in India, making it more sustainable, green, quick and easy to construct.

The competition challenges participants to design an urban or semi-urban housing scheme with an innovative construction system using CLT, exploring it as a building material to fulfil the needs of urban housing.

The design competition targets to introduce the innovative use of CLT in the Indian context; hence the design proposal should explicitly focus on innovative structural as well as spatial building systems.

Participants are invited to design an urban or semi-urban housing scheme catering to the needs of different user groups, depending on a proposed site context. There is no defined site location for this, and contestants are free to select a site in an urban or semi-urban fabric anywhere in the Indian context.

But the design proposals are expected to develop a response with the chosen context and its climatic conditions. The competition is divided into two sections:

- Innovative mid- to high-rise building design proposal restricted in height to 30 metres, accommodating between 50 and 100 residential units, but keeping fire safety as a prime consideration;
- Proposal for innovative low-rise detached housing/villas with 50 units where the size of the units can vary.

#### Rule book

Contestants are allowed to pick up existing housing projects and redesigning the building system using CLT as the primary material. The proposed system can either be designed purely in CLT or as a hybrid with reinforced concrete, or steel, or other low-carbon materials like stone or earth constructions.

The content of the boards is open, as far as the contestants are able to clearly express their ideas. However, it is important to detail out the proposal and focus more on the construction system of the design.

Submissions must be done in two A2 digital boards with a maximum file size of 10MB, oriented in either landscape or portrait format, with the registration number on the lower right corner of the

#### **Registration & Rewards**

Registration for the 'CLT Induction in India' competition is open on www.aakardesign.com/competition and ends on 15 March. All design proposals must be submitted by end of day on 31 March 2021. The results of the competition will be announced at the end of day on 30 April 2021 on the same website.

The 1st Prize is a trip to Japan for two (business class), including a visit to the Tokyo Olympics Stadium and a meeting with Architect Kengo Kuma; or a cash award of Rs. 6,00,000.

The 2nd Prize is a trip to Japan for two (economy class), including a visit to the Tokyo Olympics Stadium and a meeting with Architect Kengo Kuma and associates; or a cash award of Rs. 3,00,000.

The 3rd Prize is also a trip to Japan for one (economy class), including a visit to the Tokyo Olympics Stadium and a meeting with Kengo Kuma and associates; or a cash award of Rs. 2,00,000.

There is one Student Prize of Rs. 1,00,000. The sponsors could consider visits to their factory and opportunities to visit buildings in CLT in Japan for deserving practising professionals with a keen interest in the material.

board. All boards must be uploaded through the website in Portable Document Format (PDF).

One description of the design proposal should be submitted in not more than 500 words (PDF) and populating a framework to enable the ecosystem to be able to promote the sustainable architecture with focus on CLT. All information provided in writing must be in English.

There are no restrictions to the number of members per team. Any student or professional from different universities, countries and backgrounds can participate in the competition.

Interdisciplinary teams are encouraged, although it is recommended that at least one member of the team should have an architectural background. Teams with architects and structural engineers are encouraged to bring out the potential of the building material.

#### **Judging criteria**

Material, structure and technological innovation: 50%. CLT as a creative and innovative building system, as well as modularity and adaptability of the system

to the Indian context will enable CLT architecture in India to achieve sustainability goals.

Response to climatic factors on site: 20%; design and spatial innovation: 20%; and integration of the conceptual building system into the local context: 10%.

The jury members are architects Kuma Kengo, Mahendra Raj, Rajeev Kathpalia, Gurdev Singh and Rohit Raj Mehndiratta, and Mr Morishita Yoshitaka from Mitsubishi Estate Co.

Mitsubishi Estate Co. operates in Japan, the US, China, Singapore, Indonesia and Vietnam, in airports, office, retail and residential property businesses. It formed the CLT unit in 2017 for research and development aimed at commercialisation of CLT.

Aakar Design Consultants is an association of architects offering specialised services in urban design, architecture, interiors and project management and execution for the last 40 years.

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# Ligna-21 offers digital options too

Seven months before its start, Ligna (27 September to 01 October, 2021) is looking at a positive registration level. Almost 900 companies have already decided to show their on-site presence in the fair, says Mr Christian Pfeiffer, Global Director, Ligna and Woodworking Shows at Deutsche Messe. "We will again be occupying 10 halls and the outdoor area."

"We are doing everything we can to provide companies with a safe and successful marketplace," adds Pfeiffer. A comprehensive safety and hygiene concept will apply to the presence in the halls and on the exhibition grounds, which will comply with the regulations in force at that time and will be coordinated with the relevant authorities.

Wide aisles, compulsory wearing of masks on the entire grounds and registration of every visitor and exhibitor will, among other things, ensure maximum safety for all participants on the grounds.

Ligna has also added new virtual participation options to its offering for exhibitors with stand space. "This allows companies to present themselves both in the halls and on our Ligna digital platform on the internet. The additional digital visibility allows them to increase their reach and expand the opportunities for interaction with existing and new business partners," says Pfeiffer.

Even companies that are unable to exhibit in Hannover due to possible international travel restrictions need not forego participation in the show. The new virtual

participation options on the Ligna digital platform enable them to network with all market players as well as journalists from all over the world.

Companies can choose between three digital packages with different services. Depending on the size of the package booked in the Small, Medium and Large formats, these include exhibitor presentations, various dialogue functions, live streaming or videos in the Ligna product media library.

For exhibitors with stand space in Hannover, the Digital Package is included free of charge in the range of services.

The additional Ligna digital packages also enable visitors who cannot be on site to participate virtually and experience the woodworking innovations at the show. For more information visit www.ligna.de.



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# 2021: key conference year for tropical timber



While the Covid-19 pandemic may affect scheduling and the form they take, the year 2021 is set to be an important year for international conferences with interest and potential impacts for tropical timber and forestry sectors.

The World Forestry Congress in Seoul, now rescheduled to 24-28 May 2021, will address the state and future of forests globally and efforts to achieve sustainable development goals in the context of recovery from Covid-19.

It will look to define the role of forests in the 2030 global development agenda and other policy frameworks, such as the Paris Agreement and Global Forest Goals. It also aims to identify measures needed for the forest sector to contribute to the postpandemic objective to 'build back better'.

The 15th meeting of the United Nations Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) in Kunming, China, rescheduled to the second half of 2021, will see adoption of a post-2020 global

biodiversity framework with the goal of mainstreaming biodiversity into national development plans worldwide.

The draft framework sets out five longterm biodiversity goals for 2050 and 20 targets to achieve by 2030. Among the aims are to reduce extinctions and increase endangered species populations.

It also sets a goal for nature to contribute 'at least (30%) of efforts to achieve targets of the Paris Agreement on climate change'.

The Carrefour International du Bois exhibition is scheduled to take place from May 26-28 at the Parc Beaujoire in Nantes, France. The biannual event is billed as Europe's leading exclusively timber trade exhibition.

The last show attracted 11,500 visitors from 85 countries and 563 exhibitors. The STTC and ATIBT/Fair&Precious are set to contribute to the conference programme.

A core theme of the International Union for Conservation of Nature (IUCN) World Conservation Congress in Marseilles (France) from September 3-11 will also be 'nature-based climate change mitigation and adaptation efforts'.

"The full potential of the world's natural carbon sinks and reservoirs that can

contribute to a climate-resilient and biodiversity-rich future has yet to be unlocked," states the IUCN. "This will require strengthening of capacity for ecosystem planning and management. Policy and decision-making may require trade-offs to optimise benefits for biodiversity and climate change."

Among the topics of the UN Climate Change Conference (COP26) in Glasgow (UK) from November 1-12 will be 'green recovery'; taking the opportunity of reconstruction from pandemic to move to a lower environmental impact global economic model.

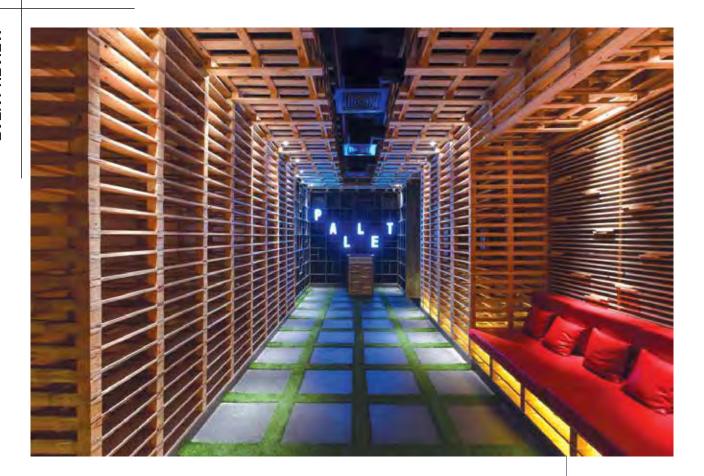
In the lead up to the Conference, the COP26 and Tropical Forest Alliance have launched the Forest, Agriculture and Commodity Trade (FACT) Dialogues project.

The aim is to accelerate transition towards more sustainable land use practices and create 'new opportunities for investment, jobs and livelihoods in forests, land use and agriculture and to ensure economies have a sustainable relationship with forests'.

As part of this, multi-stakeholder consultations involving representatives of all parts of the forest and forest products supply chain are convening to feed their views to governments.

# TECHNO LOGY





# Webinar highlights advantages of B.C. wood species

Interior wood work with SPF by architect Ketan Jawdekar at a premium brewery in Bengaluru.

Forestry Innovation Consulting India (FII), better known as Canadian Wood, has been actively engaged in promoting Canadian wood species in India and offers architects, designers, contractors and furniture manufacturers a wide choice of legally harvested wood species for a large variety of applications.

Over the years Canadian Wood has worked with a cross-section of reputed architects, interior designers, builders and developers across India by assisting them on their projects and arranging technical support.

The recent 'Architecture in India and Canadian Wood' was the 9th in a series of Canadian Wood webinars that further endorsed the numerous applications possible with its species.

The webinar, presented in association with the Festival of Architecture and Interior Design, was moderated by Mr Peter Bradfield, FII's Technical Advisor.

It featured engaging presentations and panel discussions by leading architects such as Sönke Hoof from Vastū Shilpā Consultants; Sidharth Talwar from Studio Lotus; and Ketan Jawdekar from Studio K-7.

Ketan is the winner of at least 45

international awards. The initial slides of his presentation captured his tangential thinking and abstract approach through snapshots.

One main example of this, 'Pallet Brewery and Kitchen', is a premium pub in Bengaluru, a project that has won multiple accolades and the International Design Awards, formed the core of his session.

The search for high-quality wood and design flexibility led to Canadian wood species SPF (spruce-pine-fir), which is known for its high dimensional stability globally and highly recommended for making wooden houses, structural framing and interior fit-outs.







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Use of Douglas-fir in the ceiling, panelling, doors and door frames of 'Villa in the Woods' by architect Sidhartha Talwar.

False ceilings room, dividers, backdrops, bottle racks, mouldings and finishings in the project were made with SPF, along with plank walls and end-cut wall of a private tasting room.

Sidhartha is a believer of conscious design, which means an inclusive approach that celebrates local resources, cultural influences and attention to detail. His presentation on explorations in wood included several premium residential and hospitality projects entailing multiple applications of Canadian wood species.

The main focus of his presentation was an on-going project labelled 'Villa in the Woods', located in the Kumaon Hills in Uttarakhand. The 88-acre residential project spread includes a flexible nature of construction that allows for the structure to be bent towards the contours of the hills.

The villa is one part of the project incorporating the use of Canadian

Western red cedar for exterior cladding, shingles and Douglas-fir for doors, door frames, paneling and ceiling work.

Douglas-fir is highly valued for its strength-to-weight ratio, making it a good choice for doors, door frames, windows and even heavy structural purposes like post-and-beam constructions, gluelaminated beams (glulam), etc.

In addition, he also briefly introduced the audiences to his other wood-based projects, highlighting the use of Canadian wood species in local 'nakashi' (carving) work and craftsmanship in others.

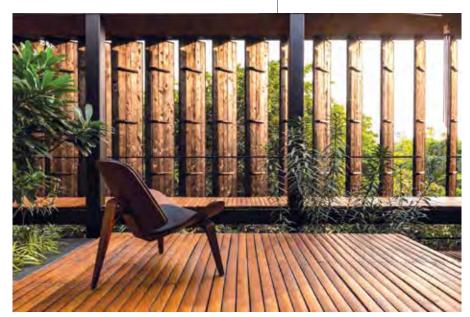
Architect Sonke, whose impressive work finds special mentions in several prestigious books and magazines, presented a residential project in Ahmedabad. As a challenge to extend the living space restricted on sides, a box like a perch was placed on the rooftop of the bungalow with louvres surrounding the space.

Canadian Yellow cedar was chosen over many other types of wood species and charred for a shining charcoal-like finish. Highly durable and naturally resistant to decay, Yellow cedar is increasingly being chosen for making doors, door frames, windows and outdoor applications (furniture, pergola and more).

The adjustable louvres enhanced aesthetics and lent the functional advantage of maneuvering harsh sunlight entering the space. The three presentations were followed by a very engaging panel discussion, and finally concluded with an insightful questionanswer session with the audience.

Mr Pranesh Chhibber, Country Director at FII said, "It was an honour for us to have our 9th webinar as the common ground for such outstanding professionals to share some of their best work."

Use of Yellow cedar louvres by architect Sonke Hoof.





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#### HE HOMAG











An anti-microbial laminate is a polymer-matrix composite of layers that have been treated with an anti-microbial agent. These fit into a variety of different applications, including flooring, countertops and wall partitions.

## Trial By Fire!

In the months following the global spread of and disruption caused by the Covid-19 virus, there emerged a steady spate of claims, press notes and scientific papers on ways and means to halt the contagion by adding protective layers on surfaces that were prone to frequent human touch. **Dhananjay Sardeshpande** pieced together these claims and looked up several scientific resources to find out what these 'protective' coatings are and how they work.

There is now a flood of products and varied claims about assisting in the halt of the spread of the Covid-19 virus, at least through contaminated surfaces open to human touch, including articles of

day-to-day use such as wood-based furniture.

Canada-based Holsag Furniture recently said it would begin shipping its wood chairs to customers finished with a catalysed lacquer that includes an antimicrobial coating that prevents the growth of bacteria and some viruses.

Microban International, a leader in antimicrobial technologies, has teamed up with a leading textile manufacturer, to provide anti-microbial treatment of

Pic courtesy: www.holsag.com

textiles for the hospitality industry in the UK, US, Canada and the European Union.

Nohara Japan has introduced Dr HardoLass coating, a patented technology, which stays on hard surfaces for up to 5 years. The coating has been tested against influenza Type-A virus and proven to be effective in suppressing the virus and bacteria, on contact.

A chemical engineering professor from Virginia Tech published a scientific paper on a surface coating that, when painted on common objects, de-activates SARS-CoV-2, the virus that causes Covid-19. The idea is that when the droplets land on a solid object, the virus within the droplets will be inactivated.

#### **Harvesting microbes**

So what is an anti-microbial coating for furniture? People and businesses are more conscious than ever about hygiene and cleanliness. Furniture, especially wooden furniture, and upholstery can absorb micro-organisms such as bacteria, mold and other fungi. Keeping surfaces clean can be a constant struggle.

The ancient Egyptians discovered the remarkable cleansing power of antimicrobials more than 2,000 years ago by using specific molds and plant entrants to treat infections. Evidence of this has been found by scientists studying uncovered bones from ancient Egypt.

It was only in 1928 that the healing power of anti-microbials was discovered by modern scientists. It was the year Alexander Fleming discovered the immense healing power of a natural antimicrobial fungus known as penicillin. Thus, antibiotics were born.

Anti-microbial coatings control, destroy, or suppress the growth of microorganisms and their negative effects such as odour, staining and deterioration. These anti-microbials do not all work the same. But most of them work by leaching or moving microbes from the surface on which they live.

A furniture finish that includes an antimicrobial formula prevents the growth of bacteria and some viruses. The US Environmental Protection Agency has assigned the anti-microbial toxicity rating to the safest category of chemicals.

Therefore, they are certified and approved by the EPA for human use.

#### **Working chemistry**

An anti-bacterial agent destroys or inhibits the growth of bacteria cells. An anti-microbial destroys or inhibits the growth of micro-organisms or kills them outright.

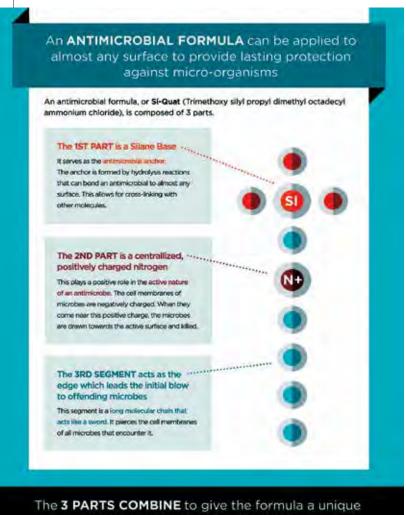
Anti-bacterial technologies are effective against a broad spectrum of harmful bacteria, including E. coli and MRSA. They typically incorporate silver active ingredients, allowing for successful application in a wide variety of product types.

Anti-microbial technologies minimise the presence of bacteria, mold and fungi on surfaces for very long periods of time. The typical active ingredients in them include silver or zinc.

How do anti-microbial agents work? They disrupt the vital life processes of micro-organisms, eliminating microbial growth and preventing their reproduction.

They are most commonly applied during the manufacturing step itself to become a durable, built-in feature. Additives to prevent bacterial and fungal growth are also used to treat intermediate materials (adhesives, pigments, etc.) while in transport and during storage.

Once an anti-microbial coating is bonded to a surface, it is ready for action. The microbe is punctured by the long molecular chain (sword). The positive/ negative attraction of nitrogen draws the microbe further down the 'sword'. When the cell membrane of the microbe comes in contact with positive charges, it is electrocuted and blown apart, accounting for a reliable 'kill'.



and effective mode of action



On a laminate surface, microbes can double in number every 20 minutes. This can result in staining, unpleasant odours and premature degradation of the laminate product.

This is even more important in warmer climates and during hot summer months, when these materials are prone to spoilage by microbes.

In anti-bacterial agents we can count soaps and detergents, which prevent the development of bacteria. Anti-microbial agents, such as alcohol-based hand sanitizers, prevent the spread of bacteria, fungi, parasites and some viruses.

This gives anti-microbial agents a broader scope of protection than that provided by anti-bacterial agents. In essence, anti-microbials can act as both an anti-bacterial and an anti-parasitic.

The 60-year-old Holsag primarily manufactures chairs from European beech its at 2,70,000-square-foot facility, to educational institutions hospitality businesses throughout Canada and the US.

Its research & development and manufacturing teams worked with suppliers to add an anti-microbial formula to the catalysed lacquer finish. A coat of the lacquer is sprayed onto the chair frame. The anti-microbial formula has the same shelf life and warranty as the lacquer formula.

#### Laminates too

On a laminate surface, microbes can double in number every 20 minutes. This can result in staining, unpleasant odours and premature degradation that affects the durability, lifespan and hygiene of a laminate product. Once microbes have begun to proliferate on a laminate surface, constant cleaning is required to keep growth under control.

Recognising that the ability to clean constantly is unreasonable in most environments, Microban has developed a range of anti-microbial technologies for laminate surfaces.

An anti-microbial laminate is a polymermatrix composite consisting of layers of materials that have been treated with an anti-microbial agent. These fit into a variety of different applications, including flooring, countertops, wall partitions, etc.

As a thermosetting material, highpressure laminates (HPL) have a natural resistance to microbial proliferation. However, these hygienic properties have a limited lifespan and eventually wear off.

In addition to decreased efficacy over time, global biocidal regulations do not permit the marketing of any laminates as being anti-microbial unless they contain a registered biocide.

Microban anti-microbial laminate protection can be seamlessly introduced to HPL during the final resin bath of the impregnation process. The growing awareness of antibiotic resistance, combined with the regular inclusion of laminates in hygiene-critical spaces, has resulted in an increased demand for antimicrobial laminates in healthcare. consumer and commercial environments.

#### Other applications

Microban International is a global specialist in anti-microbial technologies that give protection against the growth of bacteria, mold, mildew and algae. Microban solutions on textiles and upholstery do not wash off or wear away.

Headquartered in North Carolina, USA, Microban's latest 'Protect-360°' product line include mattress encasements and pillow protectors that are treated with anti-microbial Microban product protection and inhibit the growth of product damaging bacteria. Protect-360° products are water-proof, bedbug-proof, and have passed third-party testing for viral penetration protection.

A recent study revealed that 68% respondents said cleanliness in hotels has become extremely important to them over the last year. Over and 58% of respondents said they would be willing to pay more for a hotel room with products treated with anti-microbial protection.

28



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## WOODNEWS

## Stealing fire from combustible material



Fire-retardant coatings could be one option for providing enhanced protection to buildings during a wildfire. A study by the Insurance Institute for Business and Home Safety, South Carolina (US), showed that weathering exposure reduced the effectiveness of fire protection of intumescent coatings, but the weathered coatings did not act as additional fuel.

With wood construction on the rise in recent years – ranging from sustainable wooden apartment buildings, libraries and schools – regulations regarding wood construction, including fire safety, have been updated over the years.

According to Tikkurila, a leading Finland-based paint company, wood can be used as a construction material without fire protection treatment. However, depending on the site and customer requirements, treatment can make the building safer.

This extra protection enables a wideruse inschools, kindergartens and assisted-living facilities (old age homes); offices, hotels and libraries; storage facilities and extra floors with wooden frames.

Fire retardants slow the ignition of wood and the spread of fire, while also creating less smoke than untreated wood. This provides valuable extra time for people to escape and for emergency services to reach them, while reducing the effects of smoke inhalation.

#### Intumescent coatings

When exposed to heat, fire-retardant material expands and creates an insulating foam layer on wood. The porous foam layer insulates the wood from the flames, preventing the wooden surface from heating up rapidly or catching fire.

This is known as intumescent technology: fire protection based on the paint surface

expanding when exposed to heat. Compared to salt-based fire-retardant products, surfaces treated with intumescent technology can better withstand moisture, UV light, and weather.

In Europe and much of North America, construction materials are labelled with the following markings (with the exception of flooring):

A1: materials that do not contribute to fire at all (non-combustible materials)

A2: materials with extremely limited contribution to fire

B: materials with very limited contribution to fire

C: materials with limited contribution to fire





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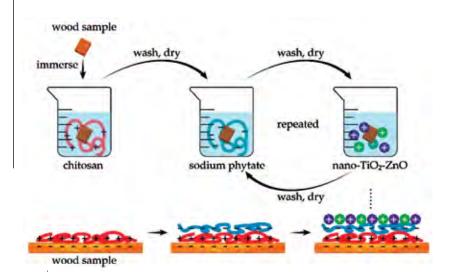


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The College of Furnishings and Industrial Design, Nanjing Forestry University in China has come up with a novel scheme of fabricating flame-retardant coating on a wood surface by layer-by-layer (chitosan/sodium phytate/nano-TiO2-ZnO) self-assembly. It leads to dramatic flame retardant effect on the wood, leading to higher thermal stability.

D: materials with acceptable contribution to fire

E: materials with acceptable fire behaviour

S: materials with no defined type of fire behaviour

S1: very low smoke emission

S2: low smoke emission

S3: smoke emission does not meet S1 or S2 requirements

DO: no flaming droplets or particles

D1: flaming droplets or particles burn out fast

D2: production of flaming droplets or particles does not meet D0 or D1 requirements

#### **Emission norms**

If a fire-protected surface needs to be abrasion resistant, it should be finished with a top lacquer or paint. For claddings, a topcoat should always be used to make sure the fire protection system can withstand exposure to the elements.

Indoors, a fire-retardant lacquer alone is enough for wood surfaces that are not subject to wear, such as ceilings.

Most fire-retarding coating

products are developed, and primarily intended, for industrial painting. In addition to vacuum application, spraying, and curtain coating, the products can be applied onto small surfaces with brushes or rollers.

Most modern fire-retardant products contain no ingredients that are hazardous to humans. And since they are waterborne, they cause less emission and are environment-friendly and safe to use.

However, there are very different building materials that can also burn and cause a fire to spread, especially office materials (including stationery) and plastics. The inflammations progress relatively fast and the smoke development is comparatively strong.

#### **Raw materials**

What raw materials do manufacturers of fire protection coatings use? According to Clariant AG, a Swiss speciality chemicals company, when the paint is simply to be protected from ignition, ammonium polyphosphate or aluminium trihydrate (ATH) can be used. The hydrates form water vapour and can thus lower the temperature of the incipient fire.

Ammonium polyphosphates also form a carbon layer on the surface and react with the ingredients of the paint, shielding the building material from the oxygen supply and preventing the fire from spreading further.

But the intumescent effect needs further ingredients, which have to be dosed into the colours exactly.

Halogenated fire retardants, whether chlorinated or brominated, still play a relatively important role, especially in plastics. In the event of a fire, the halogens are split off and act as radical scavengers. They deactivate high energetic radicals and slow down the chain reaction in the fire scenario.

The disadvantage is that in case of fire, hydrogen halide (hydrochloric acid) is formed, as well as other toxic gases. Therefore, halogenated fire protection agents are being increasingly forbidden. This applies especially to PU base materials.

#### Oxygen consumption

Modern methods additionally generate various physical test data such as combustion energies or oxygen consumption. The latter is measured using a cone calorimeter.

Normally, one uses a reference substrate from which one knows the fire behaviour – for example, a chipboard. The varnish is applied to this and the coated and uncoated test specimens are compared.

There are also tests for textiles and plastics. In the case of plastics, for example, a glowing wire is used, which is then placed on the surface and you can see whether it starts to burn or whether something drips off burning. The characteristics of each material are very different, and fire-retardant coatings tailored to the respective application.

There is a general trend towards waterborne formulations. Ammonium polyphosphate, for example, can also be used in aqueous systems, but there are already special requirements, such as viscosity behaviour, which is different for aqueous formulations than for solventbased ones.

Where water-borne systems cannot be used, there is a tendency towards 2K-systems which, for example, have very good properties under harsh conditions. High demands have to be met, for example, in terms of durability.



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# What light initiates, temperature accelerates, moisture precipitates

If radiation can get into a material, it potentially can cause it to change. But does this mean that black paint will degrade in the sun because it is absorbing nearly all wavelengths of visible light? The answer to that question lies in understanding the chemical nature of the paint and which wavelengths of radiation will cause this paint to degrade.

The three main environmental stress factors of weathering are solar radiation (light energy), temperature, and water (moisture). But it is not just "how much" of each of these factors ultimately causes degradation to materials, because different types of solar radiation, different phases of moisture, and temperature cycling have a significant effect on materials on exposure.

These factors – along with secondary considerations, such as airborne pollutants, biological phenomena and 'acid rain' – act together to cause weathering.

Radiant energy that comes from the sun is made up of photons that travel through space as waves. The solar radiation that reaches Earth's surface consists of wavelengths between 295 and 3,000 nano-meters. A nano-metre (nm) is one billionth (1x10-9) of a metre.

Wavelengths between 295 and 400 nm are considered the ultraviolet (UV) portion of the solar

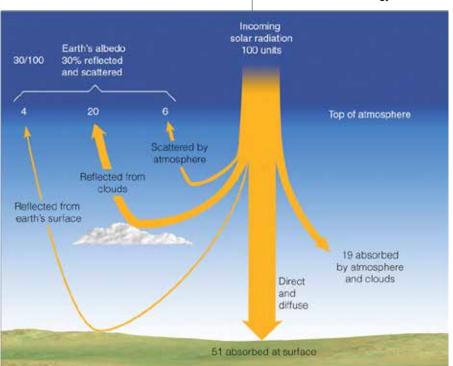
spectrum, making up to 7 % of the total radiation. Ozone in the stratosphere absorbs and essentially eliminates all radiant energy below 295 nm.

Visible light (the radiation the human eye can detect) is between 400 and 800 nm, making up just over half of the solar spectrum. About 40 % of the radiation

from the sun is contained in the infra-red portion of the solar spectrum beyond 800 nm.

Irradiance can be defined as the radiant flux incident on a surface per unit area, commonly expressed in W/m2 (Watts per

Earth's annual solar energy balance.



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WOODNEWS

square metre). For this parameter, it is necessary to indicate the spectral range in which the measurements were taken or for which the values were calculated.

If we turn our attention to narrow wavelength intervals, we obtain the spectral irradiance, measured in W/(m2nm). For weathering tests, the concept of radiant exposure, which is the time integral of (spectral) irradiance, maybe more important, stated in J/m2 (Joules per square metre).

Most radiant exposures are measured in either kJ/m2 or MJ/m2 to convert this energy into numbers to which we can more easily relate.

#### **Understanding radiation**

Direct radiation is radiant energy that reaches Earth's surface directly from the sun, excluding the scattered radiation of the atmosphere. Diffuse radiation is a component of radiant energy that has been scattered by the atmosphere, and therefore, reaches exposed surfaces at all angles.

One easy way to understand direct and diffuse radiation is if we imagine a tall building. The direct light causes the sharp shadow of the building. Diffuse radiation creates general ambient light, allowing us to see if we are standing in the shadow of that building.

In addition, there is radiation that reflects off Earth's surface (sometimes referred to as albedo radiation) that also reaches the surface of a wood specimen being tested.

The amount of radiation reflected off Earth's surface is dependent on the ground

Covering: bare rocks, sand or gravel will reflect much more radiant energy than a grass-covered surface. Water or snow will reflect an even greater amount of radiant energy.

The ratio between direct and diffuse radiation reaching Earth's surface is strongly influenced by atmospheric conditions. Water vapour (humidity) and pollution will increase the amount of radiant energy found in the diffuse component.

A desert climate has a much higher percentage of radiant energy in the direct component than a sub-tropical climate. This occurs because there is much less water vapour in the desert than in a sub-tropical climate.

By contrast, a location with higher levels of pollution dramatically reduces the amount of direct radiant energy. Shorter wavelengths of radiation are more likely to be scattered than long wavelengths, which makes the sky appear blue.

Therefore, the percentage of UV in the direct component will always be less than that of total solar radiation.

#### Water vapour

Because of the high water vapour content in a sub-tropical climate, about 50% of the UV radiation is diffused on clear days. Many days are not clear, which results in an even greater percentage of radiation in the diffuse component. To

maximise solar radiation, specimens in a sub-tropical climate should be exposed at a tilt angle close to horizontal, such as 5°.

Conversely, a desert climate would have a greater percentage of UV radiation in the direct component (75%). This means that the most radiant exposure over the course of one calendar year would be on specimens that were near the latitude angle of the exposure site, although other angles such as 5°, 45° and 90° are common.

Seasonal variability exists in both subtropical and desert environments. The amount of variation depends on the exposure angle and climate, especially the atmospheric conditions that cause different ratios of direct and diffuse radiation.

#### **Effect of energy**

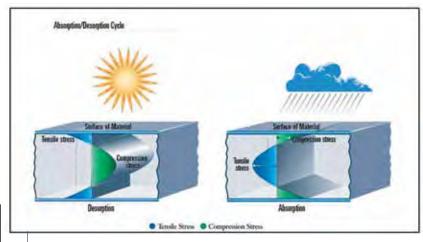
While radiant exposure is an important factor in understanding the degradation of materials or determining the length of weathering, it really tells us only half the story. Radiant exposure tells only how much radiation has been deposited onto the surface of a material.

It says nothing about how much of that radiation has been absorbed by the material or what effect, if any, it has. According to the Grotthus-Draper principle, absorption of radiation by any component of the system is the first necessary event for photochemical reaction occurrence.

The molecular structures that constitute different polymers are susceptible to radiation they might absorb at sites called chromophores. Following another basic principle of degradation, the amount of energy absorbed by a molecule must exceed the bond energy to cause degradation.

#### **Energy balance**

Simply put, if the absorbed radiation has more energy than the energy holding the molecular structure together, polymeric bonds may be broken, and degradation will begin. Note, however, that not all



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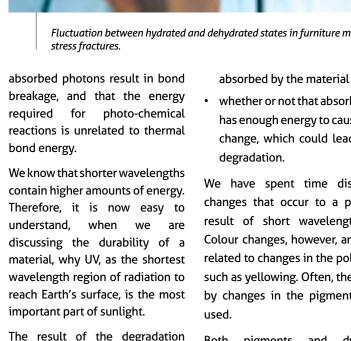


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Fluctuation between hydrated and dehydrated states in furniture may result in

characteristics of a material as a result of radiation is dependent on:

- · quality and quantity of radiant energy deposited onto the material
- wavelengths radiation

whether or not that absorbed radiation has enough energy to cause a chemical change, which could lead to material

We have spent time discussing the changes that occur to a polymer as a result of short wavelength radiation. Colour changes, however, are only partly related to changes in the polymer matrix, such as yellowing. Often, they are caused by changes in the pigment or dyestuff

Both pigments and dyes absorb wavelengths in the visible (otherwise, they wouldn't be coloured!) and are also damaged by UV-A radiation and visible light. From a customer's perspective, colour change is undoubtedly one of the most important parameters when evaluating material's

performance.

#### **Temperature changes**

The temperature of materials exposed to solar radiation has an influence on the effect of the radiation. In polymer degradation it is often said that light initiates, temperature accelerates, and moisture participates. Temperature often determines the rate of subsequent secondary reaction steps in polymer degradation.

These secondary reactions can be often qualified using the Arrhenius equation. A general rule of thumb in chemistry assumes that reaction rates approximately double with each 10°C rise in temperature, although this doesn't usually apply to solid-state materials, and may not be seen when measuring physical or appearance changes.

Also, thermo-chemical reactions that may be initiated at higher temperatures may not occur at all or at a very low rate at lower temperatures.

The temperature of a material exposed to natural sunlight is a function of ambient temperature, solar absorptivity and irradiance, and surface conductance and emissivity. In the presence of sunlight, the surface temperature of an object is usually considerably higher than the temperature of the air.

Solar absorptivity in both the visible and infra-red regions is usually closely related to colour, varying from about 20% for white surfaces to over 90% for black surfaces. Thus, materials of different colours will reach different temperatures on exposure.

As a result of different surface temperatures, mildew and other biological growth will form accumulate at different rates on materials of different colours. White, or lighter coloured materials, tend to "grow" more mildew than darker coloured materials.

Weathering can be both chemical and physical in nature. Temperature cycling can induce mechanical stresses, which can lead to non-chemical degradation such as cracking and crazing.

Ambient air temperature, evaporation rates, and the convective cooling from the







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surrounding air during exposure all play a role in the temperature of a material, and therefore, influence degradation rates.

#### Water effects

Water is one of the substances in our environment that is everywhere, whether in the form of humidity, rain, dew, snow, or hail. All materials used outdoors are exposed to these influences.

There are two ways in which water affects materials. Water absorption by synthetic materials and coatings from humidity and direct wetness are examples of physical effects. As the surface layers absorb moisture, a volume expansion is produced that places stress on the dry sub-surface layers.

Following a drying-out period, or desorption of water, the surface layers will lead to a volume contraction. The hydrated inner layers resist this contraction, leading to surface stress cracking. This fluctuation between hydrated and dehydrated states may result

in stress fractures.

The freeze-thaw cycle is another physical effect. Because water expands when it freezes, absorbed moisture in a material causes expansion and stresses that cause peeling, cracking and flaking in coatings.

Rain, which periodically washes dirt and pollutants from the surface, has an effect on the long-term rate of deterioration that is determined more by its frequency than its amount. When rain strikes an exposed surface, evaporation cools the surface rapidly, which may cause physical degradation to a material. Frozen rain, or hail, may also cause physical degradation.

#### Secondary effects

Gases and pollutants in the atmosphere, especially in the form of 'acid rain', may cause entirely new reactions. In highly industrialised areas, acid rain is the primary element driving the weathering process that affects a wide range of materials.

Blowing dirt and dust may have effects on the weathering process without reacting with the actual molecular structure of the material. These effects include the screening of UV radiation from the materials by dirt, which absorbs the UV portion of the spectrum. Semi-permanent "varnishes" can form on the surface of exposed materials in certain climates.

When considering the roles that solar radiation, temperature, moisture and secondary effects play on products, we must realise that these factors work together to degrade materials.

The synergistic effects of the main factors of weathering vary, depending on materials being exposed. Even small changes to a product's formulation, such as the addition of stabilisers, flame retardants, fillers, etc., will change the degradation characteristics of that material.

The use of recycled material, impurities in the polymer matrix, and the characteristics of product processing are additional variables in weathering performance. That is why it is safe to say that a complete understanding of the effect of weathering factors on every material will never be achieved.

 Courtesy: Atlas Material Testing Technology LLC, Mount Prospect, Illinois, US (www.atlas-mts.com).

Temperature often determines the rate of subsequent secondary reaction steps in polymer degradation.



40

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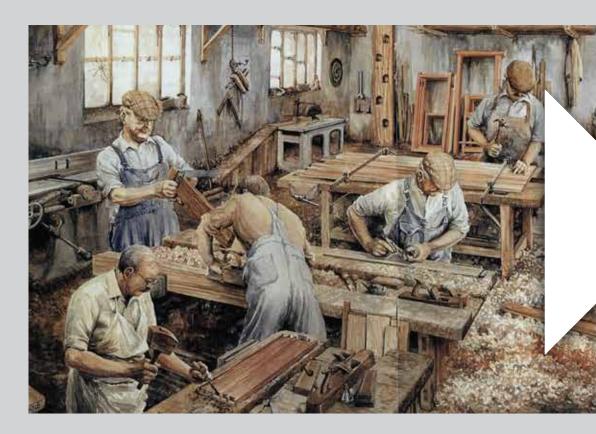
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## ICA wins with BIO coatings



Falegnameria Ezio Sordelli, based in Torre del Greco, in Italy's Naples county, is an expert in furniture for homes, offices and shops, kitchens, bookcases, cabinets, wall panelling, stairs, interior doors, window frames and wood items

Each of its creation is remarkably

unique, based on a combination of handcrafted manufacture and custom design, giving the customer the chance to have direct input and be a co-creator of the product.

The workshop at Falegnameria Ezio Sordelli makes many beautiful things, but there is one creation that is widely known – its amazing LIA wood handle, the first

patent-pending wood handle in Italy.

The inspiration came from an experience with a customer, who wanted a wall-mounted handle in hand-crafted precious wood. A metal handle was out of the question, as it would have been way too jarring. The customer wanted something that would seamlessly blend in.

So from that seed grew the idea of LIA, a hand-crafted handle in wood with a small metal core that makes it even more resilient. It is a totally original product with a truly refined, customisable design to suit the customer's needs.

Its creator, Ezio Sordelli, says: "The main innovation of our handles is that the wood is not just an insert, it's the actual main material. That's why its protection is paramount."

That is why he has opted for a coating cycle made up entirely of BIO water-based products from ICA. As well as the top-level optimal performance and excellent technical characteristics ICA offers, the water-based coatings are also kind to the environment and the end user's health.

## Flamingo: world class atomisation for spraying



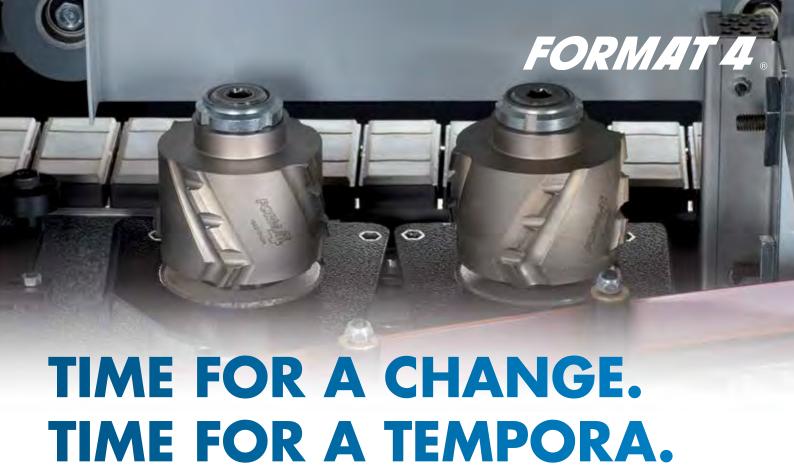


Flamingo (L) is an expert with lacquers, clear coats and PU paints on various surfaces. It comes with an airless spray painting pump (R), the 'Mini Tiger'.

It has become imperative now and for the future that wood, because of its inherent characteristics, will hold the key to safe and sanitary interior spaces in the post-Covid-19 world.

VR Coatings Pvt. Ltd. has taken cognisance of the same and is completely saddled up to handle the wood industry's needs for faster and quality production. Since its inception in 1985 VR Coatings has established a reliable brand and evolved as a complete solution provider for any automation need for spraying and dispensing across industries and verticals.

VR Coatings has invested tremendously in R&D and production to bring the finest



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spraying machinery for the wood industry. Its air-assisted airless spray gun, Flamingo, is proof of world class atomisation and quality finish due to its specially designed air cap.

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- Flat and round jet optimal adjustment possibilities

- Wide range of nozzle tips available
- Convenient external adjustable needle sealing
- · Safety trigger lock fitted
- Adjustable paint spraying pressure: 80-200 bar
- Stainless steel wetted parts with PTFE seals

Flamingo is the best bet for lacquers, clear coats, PU paints, etc. on various

surfaces. Flamingo comes with a low- and medium-duty airless spray painting pump, the 'Mini Tiger'.

VR Coatings is an expert in coating line installations (paint booths, conveyors and drying systems); automated and semi-automated systems for coating and material handling; application equipment for waxing and coating; training on equipment and processes; and several solutions on problems related to surface finishing and coating.

## Nordson hot-melt PUR systems in flat lamination





The Versa drum bulk melter (L) and PUR slug melter have melt-on-demand features that minimise adhesive waste.

With the growing consciousness surrounding sustainability, the woodworking industry has seen a drastic shift in the kind of material used to build furniture on a commercial scale.

Resinated decor foils, veneers and thermo-plastic foils are some engineered materials used to replace hardwood in furniture making, of which interior fittings, flooring and kitchen panels are a few examples.

Additionally, decorative laminated panels have found themselves in trend across large sections of the interior design market due to the valuation of aesthetics and versatility.

Flat lamination is the process of bonding engineered wood boards with a

decorative laminate in roll form using PUR adhesive. Manufacturing high-quality panels is reliant on three primary factors: high-quality laminates (veneers and foils), high quality wood boards, and high-quality adhesive dispensed consistently.

With the shift in material, a change in the



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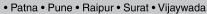


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method used to bond these surfaces has also taken place over time. While erstwhile furniture making and building involved the meeting of hammer with nail against a wooden surface, contemporary furniture building employs hot-melt PUR adhesive to bond surfaces.

Hot-melt PUR adhesive has proven to be most effective in this process due to the following properties:

- offers the highest bond strength;
- leads to increased lifespan of the finished product;
- reliability of the bond prevents peeling over time.

Using PUR adhesive has ensured that end products remain resistant

to high temperature and most chemical reactions. It also increases resistance to moisture in the air and, in turn, provides higher bond strength in comparison to conventional hot-melt adhesives.

PUR is known to be particularly useful for bonding dissimilar material combinations such as plastics, wood, metals and fabrics with significantly low quantities of adhesive, making bonds more aesthetic and easier to finish.

Additionally, PUR adhesives are single component and solvent-free, which ensure sustainability concerns are addressed through the elimination of VOCs (volatile organic compounds). Hotmelt PUR adhesives are odourless and improve consumer acceptance as compared to solvent-based adhesives.

Nordson has a wide range of melters and dispensing equipment to handle hot-melt PUR in different forms, from 200-kg drums to 2-kg slug melters.

Nordson Versa drum melters are used for both preliminary heating as well as direct application onto substrates (depending on the nature of the product requirement), pumping PUR adhesive on to coating rollers or filling adhesive trays.

Nordson Versa PUR slug melters can handle 20-kg slugs with a melt-on-demand feature that ensures that users heat adhesive for only as long as their production system is in use, and only as much as necessary to allow pumping out only as much adhesive as is required.

Nordson is a market leader in producing precision dispensing hot-melt equipment, ranging from melters to slot coaters that enable precise and replicable melting and dispensing, ensuring minimised waste.

For more information, write to saurabh. gupta@nordson.com.

# Japanese tech is game changer in paint application

Anest Iwata, a 95-year-old Japanese market leader in paint application technology, has entered into a joint venture with renowned multinational, Motherson Group, to introduce its wide range of products to the Indian woodworking industry.

Anest Iwata comprises of complete product range related to paint, sealer and lacquer application with piston and diaphragm pumps, air-less air-assisted guns, manual and automatic spray guns, robotic application, paint distribution system and paint booths.

Anest Iwata has mastered the technology of spray painting application with cutting edge technology like LVLP (low volume, low pressure) which exhibits very high transfer efficiency on the component and

low paint/material overspray, reducing paint wastage index.

The atomisation from patented LV technology spray guns is so precise that even at extreme low air pressure of about 0.1 bar it starts atomising the paint/top coat. This results in huge saving in paint consumption by around 30%.

The W-S 400 Supernova uses a unique split nozzle technology cuts the paint flow like a knife's edge and gives uniform spray, no mottling and excellent paint finish.

Iwata's diaphragm pumps are a boon to the continuous production lines for paint feeding to spray guns. They ensure less downtime, easy operation and supports maximum paint and material variants.



In case of high viscous liquids like sealer, Iwata's air-assisted air-less range is well suited for the application with minimum air and maximum dry film thickness.

According to Mr. Animesh Basu, Marketing Manager, "The wood segment is in a rapid transition from a handicraft to professional industry practice. We have an integrated and impeccable service base here that aims at production optimisation."



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## How wood homes become a haven

Natural building material has inherent strength to face up to earthquake, wind and fire hazards



Wood has inherent acoustical and thermal properties that augment its structural capabilities. As a result, wood use in a project can help maintain the desired indoor environmental quality where noise and thermal comfort are valued.

Wood is naturally sound-damping, offering excellent noise control. As a result, wood has long been specified for applications requiring the amplification of sound (such as a concert hall) or its mitigation (such as a library).

Acoustic design considers a number of factors, including building location and

Architectural design considers a number of factors, including building location and orientation, thermal and noise insulation, as well as functionality among the building elements.

orientation, as well as the insulation or separation of noise-producing functions and building elements. Wood can



In a fire, the char forms on mass timber at a predictable rate, slowing combustion, while retaining strength and allowing time to evacuate the building.

contribute to insulating and separating areas of a project.

Sound Transmission Class (STC) and Impact Insulation Class (IIC) ratings are used to establish the acoustic performance of building products and systems.

Designers can also establish STC ratings for the project and specify materials and systems to ensure the building performs at that level. This should be considered during the project's design phase.

#### **Noise sources**

There are many sources of noise throughout the building and around the site, from the continual hum of the HVAC (heating, ventilation and air-conditioning) system to the chatter among building occupants to the intermittent whir of emergency vehicles and other traffic outside.

Such noise can travel above or through the ceiling, deck and floor joists, windows and doors. Sound can also travel through fixtures and fittings, such as electrical outlets and recessed light fixtures. Perimeter joints and wall partitions are also vulnerable to sound transmission.

Green-building certifications such as LEED are beginning to incorporate acoustics more prominently. Designers seeking such certifications have historically overlooked wood in favour of hard, reflective surfaces that are easy to clean. However, many are beginning to reconsider wood for its advantageous acoustic performance.

In addition to also being easy to clean, wood has the ability to be sourced locally and store carbon, strong thermal performance, low VOC emissions, and reliable behaviour during fire and seismic events.

#### Thermal performance

As an insulating material, wood has a role to play in ensuring building interiors can

achieve efficient, desirable thermal performance. However, wood doesn't act alone.

A building's shape and orientation, the volume and location of the thermal mass, the efficiency of enclosures such as windows and doors, and the degree of insulation used are all factors to consider when evaluating thermal performance.

However, as thermal efficiency requirements for building enclosures increase, wood is a natural solution to pair with other insulating and weatherising materials to ensure consistent thermal comfort indoors.

Unlike concrete and steel, wood does not need a thermal break between the structural and exterior envelope. Wood sheathing products, such as plywood and oriented strand board, can be an asset to designers looking to implement continuous,





solid exterior barriers to prevent redundancy and regularity are favoured

Pre-fabricated mass timber components such as gluelaminated (glulam) timber beams - as well as cross-laminated timber (CLT), dowel-laminated timber (DLT) and nail-laminated timber (NLT) wall, floor and roof panels - are finding use in projects across the globe.

air leakage.

Due to their thickness, these wood products deliver thermal insulation and thermal mass. For projects seeking to meet net-zero energy or other stringent energy performance criteria, wood can store solar heat energy during the day and release it at night, reducing energy loads.

#### Seismic resistance

Earthquakes are a critical concern for design professionals working in some of the most populated and vulnerable regions of the globe. Because seismic events cannot be prevented, buildings in those regions must be designed to maintain structural integrity and keep occupants safe.

Structures with ductile detailing,

for seismic force resistance. This structure includes repetitive wood framing and ductile nailed wood structural panel shear walls and diaphragms.

Recent seismic events - as well as research into material performance have given designers and engineers critical insight into how buildings perform under such stress, which is reflected in building code and project applications.

Research has proven that timber components, assemblies and entire structures are capable of meeting or exceeding the demanding most earthquake and seismic design requirements.

Wood products and systems give designers and engineers a readily available and robust selection of codeapproved building materials that can help commercial and residential buildings and other infrastructure better withstand seismic events.

Wood-frame construction offers several characteristics to this end:

Wood's ability to withstand high loads (inherent flexibility) for short periods of time and retain its elasticity and ultimate strength is an asset in seismic zones;

Wood-frame buildings typically weigh less than those made of concrete and steel.

- Wood-frame buildings typically weigh less than those made of concrete and steel, reducing inertial seismic forces, which are proportional to weight and more extreme for heavier structures:
- The ability to yield and displace without fracturing under earthquake's abrupt lateral stresses (ductile connections) is an attribute of wood-frame construction features several nailed connections that allow it to respond to seismic events without critical failure;
- Building codes prescribe minimum fastening requirements for connecting repeated wood framing members, which is unique to wood-frame construction and benefits its seismic performance;
- The fasteners numerous connectors used in wood-frame construction offer multiple, often redundant, load paths for seismic forces, reducing the chance that the structure will collapse if some connections fail;
- The thickness of mass timber panels



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and the number and size of nails fastening the assemblies determine each component's stiffness. Heavy bracing for shear walls can resist lateral distortion common earthquakes.

#### **Fire protection**

Modern building codes take fire safety and protection seriously. All building materials experience negative impacts from exposure to fire: steel buckles, concrete spalls and wood burns.

Wood-framed structures have served the needs of society since the 1700s, rom single-family homes, to larger, multi-storey apartment buildings, town houses, commercial and industrial properties.

In a fire, the char forms on mass timber at a predictable rate, slowing combustion, while retaining strength and allowing time to evacuate the building.

The International Building Code (IBC) considers fire impact management and fire ignition prevention in its guidance on fire resistance. Wood products may be responsible for load-bearing functions, separating functions or both.

The IBC considers the following factors when determining fire resistance, or how long a component or assembly can continue its function(s) during a fire event:

- Structural resistance: the duration the assembly can support its load during a fire event:
- Integrity: whether the assembly can prevent the spread of high-heat flames and gasses;
- Insulation: whether the assembly can prevent temperatures on surfaces not directly exposed to flames from rising

above its pre-fire temperature by 180°C), or 140°C on average.

In occupied buildings, methods to mitigate the impact of fire on life, safety and property include firewalls, gypsum encapsulation, automatic sprinklers, fire detectors and evacuation plans, and fire department consultation and approval.

Research and analysis show that wood not only meets prescriptive fire safety and protection codes, but it often surpasses them. In a fire test, a 7-inchthick wall comprising cross-laminated timber (CLT) with 5/8-inch Type-X gypsum lasted 3 hours and 6 minutes. That is 1 hour longer than code requirements!

#### Wind resistance

Buildings everywhere face the risk of damage due to high winds, with each structure reacting differently according to its stiffness, strength and shape. So, all buildings must be designed to safely respond to lateral wind loads.

Wood's elasticity and strength give buildings an advantage during high-wind events. There are many ways in which wood can be used to help buildings resist high winds, which can occur along the length and width of the building, as well as through vertical uplift.

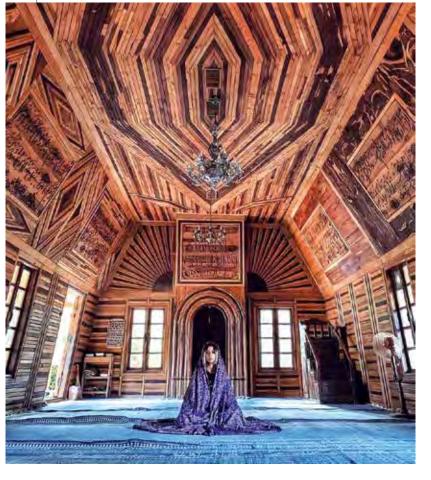
In high-wind events, loads are typically applied in a series of short spurts. Wood is effective at resisting these loads because its elastic limit and ultimate strength are higher when tested for short periods of time.

Wood sheathing in the form of wood structural panels, fiber board, particle board and board sheathing can be used as diaphragms and shear walls that transfer loads delivered by wind events to the building's foundation.

As with seismic performance, woodframe construction's numerous nailed connections give the load more paths to follow, reducing the chance of a structural collapse should some connections fail.

Courtesy: www.thinkwood.com. Think Wood is a communications campaign in the US (West Linn, Oregon) which provides commercial, multi-family and singlefamily home design and build resources to architects, developers and contractors.

This mosque, built according to the earthquake seismicity of Nishapur in Iran, is regarded as the first earthquake-proof wooden mosque in the world. It has an area of 200 square metres.



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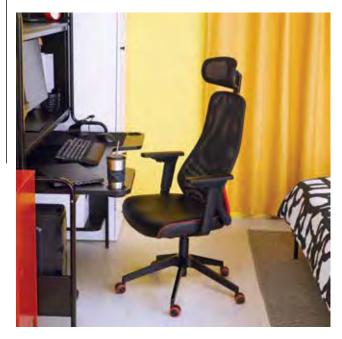


#### compact 3 r

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- Lacquer reclaiming unit







## IKEA puts gaming first!

Paying heed to the needs of 2.5 billion gamers around the world, and from a life-at-home perspective, IKEA has launched a range of gaming chairs in China and Japan, before rolling out in other markets by October this year.

With an ever-increasing number of gamers worldwide and a rapidly growing market, getting into gaming was a natural step for IKEA. To contribute to a better everyday life for all gamers, IKEA partnered with ROG (Republic of

Gamers), an ASUS sub-brand, keeping the leading position in gaming industry and designing high quality, innovative hardware and gear for gamers.

ROG has in-depth knowledge of the gaming industry and wants to find new ways to make gaming blend into the home. Combining the best of both worlds, the collaboration aimed to create relevant, functional, beautiful and affordable products.

The new gaming range will target PC gamers and include six product families: HuvudSpelare, UteSpelare, MatchSpel, GruppSpel, UppSpel and LaneSpelare.

The new gaming range includes more than 30 products, covering both furniture (gaming desks and chairs, a drawer unit) and accessories such as a mug holder, a mouse bungee, a neck pillow, a ring light and many more.

Each product family offers a gaming desk and a chair of different price range to meet the needs of different target groups.

"The needs of billions of gamers around the globe are very diverse, whereas the existing offer is rather technical and often perceived as masculine design-wise, despite around 46% of gamers being female," says Ewa Rychert, Global

Business Leader of Workspace, IKEA.

"We believe there's a lot to be done to democratise the gaming experience. We do it by present in gaffordable, high-performing gaming products and complete solutions that we hope reflect people's personality and taste," she said.







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## Macallan distillery in certified timber

Photo courtesy: https://www.rsh-p.com/





The hills of the Scottish Speyside are home to the Macallan distillery, welcoming visitors to see the production processes of the world-famous whisky.

The building is cut into the slope of the land and, with its undulating roof structure and the grass surface, integrates perfectly into the landscape.

The unique roof, made of PEFCcertified timber, makes the building a prime example for sustainable construction, and is at the same time probably the most striking aspect of the building.

Manufactured by the PEFC-

certified timber engineering company Weihag, high-precision, computercontrolled technology was used to produce the timber elements.

individual Comprising 3,80,000 components and 1.750 PEFC-certified glulam timber beams, it is one of the most complicated timber roof structures in the

Each junction and beam has a specific name and has been tested in over 160 different load conditions.

**PEFC-certified** timber contractor Robertson delivered the complex architectural design of the distillery, working with 25 sub-contractors to bring the construction to life.

Up to 400 people specialising in more than 20 different trades were employed onsite to construct this outstanding piece of contemporary architecture.

"The Macallan Estate truly is a special place, a place we have come to love and respect hugely," said Mr Graham Stirk of the main architect of the project, Roger Stirk Harbour+ Partners.

"The vision was always ambitious, but this enabled us to challenge our own thinking to create something so dramatic and awe-inspiring," he adds. The distillery opened its doors to visitors in June 2018, six years after the announcement of the project.



#### WOODNEWS

WoodNews thanks the various companies that have submitted information. For any editorial submissions, please contact Mr. Dhananjay Sardeshpande, Chief Editor, at dhananjay@ pdatrademedia.com. The information published in Notes and News and Products & Processes is as per the details furnished by the respective manufacturer/distributor. It does not reflect the views of WoodNews or of the management of PDA Trade Media.



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Cham Shelf (L) is in Indigo stain with red Vietnamese lacquer detail. The Moon Cabinet (R) is stained American red oak with brass and rattan inlay.

# Spotlight on new talent in Vietnam

Competition attracted a record 331 entries, all created using American red oak from the American Hardwood Export Council

The Handicraft and Wood Industry Association of Vietnam (HAWA) and the American Hardwood Export Council (AHEC) recently announced the finalists and winners of the 17th Hoa Mai Furniture Design Competition.

All entries this year were created from American red oak, the most abundant species in American hardwood forests. There were over 331 entries, 269 of which were from university students.

The judging panel narrowed this down to a shortlist of 23, from

which nine eventual category winners were chosen.

Nguyen Hoa, and a two-member team, Vu Thanh Nam and Nguyen Khanh Linh, won first prizes in the competition, the former for his 'Cham Shelf' and the latter for their 'Beo' chair set.

Le Long Vinh and Huynh Thanh Quyen were also awarded a special prize, presented for the first time in the annual competition, for their 'Floating Market Bench' inspired by the floating markets in the Mekong Delta.

Vo Ngoc Nguyen and Quach Minh Quan won second prizes for their 'Asian Feels'

dining table and 'Minnaar' chair. Honourable prizes were awarded to Nguyen Thi Kim Thoa (Smart Desk), Nguyen Thi Huyen Trang (Re-Cabinet),

Duong Thi Minh Ngoc (Propulsion Chair) and Le Phuoc Dang Huy (DakWak Chair).

According to HAWA, the furniture industry in Vietnam is targeting sales of US\$20 billion by 2025 and is looking to move away from doing mainly sub-contract work to original design.

To achieve this goal, improving value addition on wooden products is imperative. Increasing investment in product design will help the industry shift

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The GÓI Cabinet (L) was inspired by the Vietnamese tradition of wrapping Chung and Giay cakes in leaves. BÈO (R) also uses rattan, rush and duckweed with a Scandinavian aesthetic.

manufacturing furniture based on designs provided by original buyers to design manufacturing, resulting greater revenues.

Entries for the competition were judged on their appearance, ideas and the ability to be produced on a large scale. As testament to the quality of design on display, some furniture companies bought the copyrights for many of the designs.

American red oak (Quercus rubra) is an attractive oak with distinct reddish-pink tones. It is similar in appearance to white oak, but with a slightly less pronounced figure due to the smaller rays and a more porous end grain structure.

American red oak is the most abundant species in America's hardwood forests and is used for flooring and a wide variety of furniture and building applications. The wood is hard and heavy, with medium bending strength and stiffness and high crushing strength. It is very good for steam bending.

(For details visit www.americanhardwood. org).



Smart Desk is all about contrasts. The design cleverly integrates wireless charger and USB ports with a concealed drawer.





Floating Market Bench (L) was inspired by the floating market of the Mekong Delta. The reliable and consistent quality of American red oak meant that the slender poles were easier to achieve without splitting. KN-KX is based on a Vietnamese fairy tale (R), and the designer chose dark oil for a more dramatic effect.



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## WOODNEWS

# Hepo hardware fittings: re-defining value proposition in India

There is no denying the fact that the global pandemic has enhanced the importance of home improvement, especially with people spending a lot of time indoors during the lockdown.

An enlightening discussion with the first man of the dynamic new entrant in the Furniture Fitting Industry, Mr. Prashant Khandelwal, CEO of Hepo India, which is making rapid inroads in the furniture fittings and home improvement space.

The conversation was centred around the path-breaking success story of Hepo India – from being a budding young brand, to being on its way to becoming a formidable

player in the highly competitive organised hardware market.

Prashant also addressed the contributing factors to this towering success and how the same will benefit all associated stakeholders along with Indian customers.

#### What can our readers know about Hepo India and its business model?

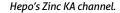
Hepo India was established with the aim to promote the sale of screws initially. However, the management saw enormous opportunity for the brand in the evergrowing hardware market.

Consequently, the whole vision for Hepo India went into an overdrive and the brand's invigoration picked up pace. The company operates in the mid-priced hardware segment through a robust B2B2C model with a skew towards the B2B segment.

The four wheels of the chariot on which the company is building its business are distribution, OEM customers, exports and online platform.

#### How is Hepo India related to Hettich India?

Hepo India is a subsidiary of Hepo Investments NL B.V. of the Netherlands. Hepo Investments is a 50:50 joint venture company between Hettich of Germany and Adventz Group (Zuari Agro-Chambal Fertilizer group) in India.







#### Our value proposition: quality goods at reasonable prices, delivered at your doorstep.

- Mr Prakash Khandelwal, CEO, Hepo India.



#### So, what differentiates Hepo from Hettich?

These two brands are poles apart. Hettich is a global manufacturer of furniture fittings and is an aspirational brand with over 40,000 SKUs. Hepo operates in the mid-priced segment with a strong 'value for money' proposition and has a limited, but very specific product portfolio, for the mass market.

The key focus of Hepo is to deliver assured quality at good price right at your doorstep. Hepo works on a distributordriven model, whereas Hettich operates through the dealer channel. As such, there is no direct or indirect comparison between the two brands.

#### What is the nature of Hepo's product portfolio?

Hepo majorly operates in two broad categories: furniture fittings and screws and fasteners. The furniture fittings portfolio consists of cabinet hinges, drawer runners, gas pumps (for over-head cabinets), butt hinges, multi-purpose locks, bathroom fittings, wire baskets, bed fittings, aluminium profiles, connecting fittings and much more.

What is more, the product range keeps expanding month after month.

#### What are the major sourcing avenues for Hepo?

Hepo is building a global sourcing network in order to ensure that we procure the best of materials. For example, we procure bed fittings from Germany and import screws from Europe.

In order to ensure that the customers get the best quality products, we ensure that we only accept the products which have undergone rigorous quality testing.

#### How do you ensure quality at Hepo?

The company adheres to the highest international quality standards. For example, our telescopic runners are tested and certified for 50,000 cycles and 24 hours SST.

Likewise, cabinet hinges are quality certified under EN 15570 Level-1. The quality control largely takes place at our state-of-the-art quality testing lab, helping us deliver an exceptional product at a reasonable price for the consumers.

#### What are the focus areas for Hepo?

Hepo wants to put the focus on the four pillars on which Hepo India mounts its success. We have a four-way action plan for the same.

We want to expand our distribution network manifold in order to ensure our presence even in the remotest corner of the country. This will help us to ensure last-mile delivery.

Through these distributors we also want to deliver quality products to retail outlets and hardware counters, and ensure convenient doorstep delivery for them.

We ensure that OEMs and large industrial customers buy our goods directly by offering them quality goods reasonable prices, delivered at their doorsteps. This helps them reduce their inventory carrying cost and sourcing needs.

Simultaneously, we are expanding our global footprint by initially catering to South-East Asian countries and thereafter expanding to West Asia, followed by African regions and also make our presence in European markets as well.

Our digital arm is the latest feather in our cap. We intend to launch more micro e-commerce platforms such as Handlesfor99.com which would ensure quality handles at attractive prices to customers and B2B online platform on hepoindia.com.



Hepo products at places where we currently do not have distribution.

#### How does Hepo work to the benefit of its OEM customers?

In the Indian context, a large number of OEMs seek a healthy value-for-money proposition. We can offer them a price below their current purchase prices without compromising on the quality of our products at all.

Hepo India products are the perfect alternative to the usually preferred Chinese goods, which are low on both price and quality.

We are equipped to provide products in small quantities, as well as eliminating the need to buy container loads and blocking up of precious working capital.

Moreover, we can provide products as and when they are needed, negating lost sale opportunities. All our products come with warranties, providing assurance of quality. The seamless purchase experience we provide cakewalk for them.

#### How does it benefit its distributors?

Being a rapidly growing company and having an ever-expanding product portfolio, Hepo is the best bet for distributors to increase their turnover, thereby making good profits.

Also, more and more retailers and hardware counters want to associate with distributors who can provide them with a one-stop solution.

Competitive pricing also attracts customers to Hepo, which in turn makes retailers want to associate with distributors and consequently Hepo.

We also provide marketing support to our channel partners in the form of pilot salesman to drive secondary sales. When the company takes care of your interests like its own, it is but imperative that you would want to associate with us!

#### How does Hepo guarantee better rates for its customers?

Hepo ensures good quality products at affordable prices owing to our knowledge of the furniture fittings domain and our ability to buy economically viable capacities on a global scale and on a longterm basis.

This also allows us to provide goods in smaller quantities to our customers at better rate, without compromising on quality. We also offer different warranties on all our products.

#### Tell us about the global operations of Hepo.

Hepo has started export operations recently. We are exporting to West Asia and Australia as well. We are appointing local sales team and distributors in other countries. Many large international buyers stand testimony to their value architecture.

#### Where can we expect to see Hepo heading in the next 5-10 years?

The company has grown at a robust pace during the last 24 months and has built a robust product portfolio and distribution network. We aspire to grow at an ambitious CAGR of 75% over the next 5 years to eventually become the largest furniture fittings brand in India.



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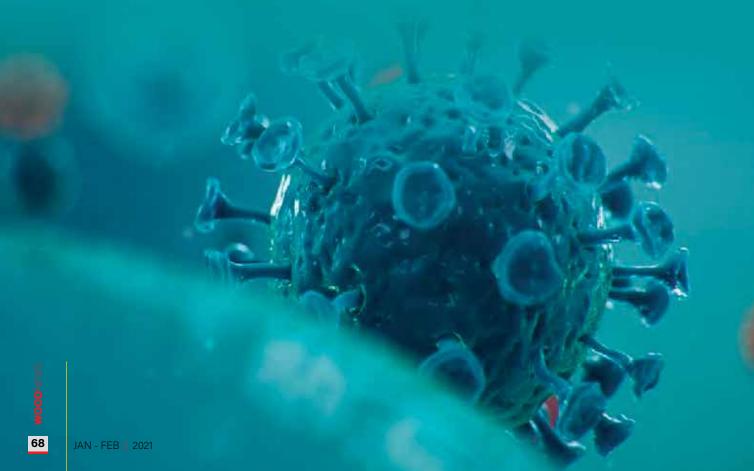
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## Surviving Covid-19 downturn, and how!

It's been a year since the Covid-19 pandemic knocked on India's doors — and momentarily shut them to the world too! It has been quite a roller-coaster ride for the domestic furniture manufacturing industry thereafter. There have been supply -chain disruptions, logistics hassles and severe scarcity of people to get woodworking factories and workshops running.

WoodNews asked some prominent providers of technology, materials and services how business is faring. How different is the post-lock-down industrial scenario? What are the emerging market trends? In the absence of the usual woodworking trade shows (IndiaWood and DelhiWood), how are they connecting with their respective audiences? What is the importance of face-to-face business interactions? Read on to find what they have to say...



## Virtual connect is here to stay, but...

The year 2020 was difficult for everyone, and Hettich was no different. We certainly have de-grown during the year 2020 over 2019, but now things are getting better month after month.

So far as customers are concerned, they had their own biases. Some dealt with the situation well and some took extremely conservative approach. But now, all are coming to terms with the changed business environment; everyone has learnt to deal with the 'New Normal'.

We are hoping for the best. Business will get back to normal by the second quarter of the current year. But the markets have changed irreversibly, especially in the home improvement market, in the following ways:

- People will not like to allow carpenters and technicians to work in their houses for long. As such there will be value migration from the traditional carpentry work to modular furniture and solutions:
- · People have also realised the value of reliable and good quality material on the one hand and the importance of nice housing on the other. Both augur well for our industry;

- Every large or small home will now have some space earmarked for work and study;
- · There will be surplus funds available in the hands of people because they will cut expenses on travel and eating out. As such, a bigger slice of this small pie will go on home improvement;
- · We expect consumer demand to go up significantly, like in the Western world.

#### **Business online**

In the absence of significant trade fairs in 2020-21, Hettich organised webinars to connect with our customers. We also sponsored shows with the Confederation of Indian Industry and the Kitchen Congress.

Our annual review was virtual; and so are our international meetings. Virtual connect is the order of the day. How effective these are is the subject matter of another debate.

We surely managed to keep in touch with our business partners across geographical barriers. It enabled us to share ideas and to transact business as well.

Considering that our industry is dominated by micro, small and medium

enterprises, exhibitors will have resource constraints to create an interesting virtual exhibition to keep visitors meaningfully engaged.

However, I still believe this experience is only the second option to the real-life version. Also, beyond a point, the law of diminishing returns begins to apply. We, therefore, will have to find new methods to connected.

#### Face-to-face

Face-to-face meetings and traditional business shows are the best for our business because, as they say: Jo dikhta hai who bikta hai (That which is shown is sold)!

The reason is that most of the intermediate products, especially furniture fittings, demand visual manifestation of their proper functionality and understating of their possible

Trade shows are places where you have many exhibitors manifesting their products. By and large, all exhibits are interesting and offer opportunities comparative study of available options and alternatives on a realtime basis.

A physical show also offers 'touchand-feel' opportunity. A physical show creates the possibility similar to taking a car for test drive; while in a virtual show it amounts to simulation. Physical shows are a great place to connect with many people in a congenial environment with very little pressure on time.

So far as IndiaWood is concerned, Hettich has been a regular exhibitor for the last 20 years. DelhiWood is not of much use to us as the gap between the two shows is just one year. You can't keep on going to the same show every year – it results in an adverse risk-to-reward ratio.





I am not a great proponent of virtual trade shows unless they have something really very interesting to offer. A physical show is like taking a car for a test drive; whereas a virtual show amounts to simulation.

- Anil Goel. Managing Director, Hettich India

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## Let's count 2021 as 'no show' year



Trade shows give the entire team from Jai Industries the chance to interact with furniture manufacturers and material and component suppliers.

- Nirav Shah, Managing Director, Jai Industries



The year 2020 was like a rollercoaster ride! In the first quarter, customers were in a positive frame of mind. For Jai Industries IndiaWood-2020 was a great success.

But we could not reap its benefits on account of the sudden and prolonged lock-down, enforced to check the spread of the Covid-19 pandemic. Even after restrictions were eased, there were still many 'containment zones' and a sudden scarcity of manpower.

So, it wasn't until July that furniture factories resumed full production.

But once the Indian business community overcame the setback, demand soared for almost all items of furniture production - it was as if we all wanted to make up for the losses on account of the disruption in the remaining months of the year!

In the on-going pandemic we are following all precautions. We have restricted our sales staff's personal interactions with customers - they use the phone and digital communication instead.

#### **Trade shows**

No, Jai Industries has not participated in any virtual trade show so far. Our traditional physical shows not only offer a platform to showcase our products, but give us opportunities to meet our old and new customers.

In a face-to-face situation there is a lot of give-and-take of ideas and views, which enables technical innovation and results in problem-solving for customers.

For Jai Industries, IndiaWood and DelhiWood are important trade shows to participate. Our existing and potential customers eagerly look forward to these shows for new products.

In fact, these shows also give the entire team from Jai Industries a chance to interact with furniture manufacturers and material and component suppliers!

I think we will have to be content with 2021 being a 'no show', given the unpredictable nature of Covid-19 infections. Even with easing of standard operating procedures for public events, we cannot be sure how many visitors will take the risk to visit an exhibition.

I am betting that with vaccination underway across India, the year 2022 will be safer, and I look forward to IndiaWood in the same year!







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# SPECIAL FOCUS

# Pent-up demand requires business alacrity

Forestry Innovation Consulting India (better known as Canadian Wood) is a not-for-profit agency of British the Government of Columbia (Canada) with mandate to promote forest products in the off-shore markets.

Though we are not engaged in any direct commercial activity, we monitor the macro-economic scenario in the country. Our interactions with our stakeholders (who buy, sell and/or use Canadian wood species) have led to the following observations:

- · Most of the businesses fared pretty badly during immediately after lockdown as they were mostly shut. But things have started looking up gradually;
- Businesses catering to high net worth individuals and high-end projects recovered faster and better, and have healthy order books;
- · Businesses catering to lower end of the market, which faces cash flow challenges either went out of business or limping back to normalcy. This market is roughly 70% of its pre-Covid business volumes.

But projection of the business is good and demand is expected to go up, which is borne out by the positive turn the economy has taken over the last couple of quarters.

India is a large market and you cannot expect such a market to lie dormant for long: pent-up demand will require business to cater to it.

#### **Going virtual**

Canadian Wood did walk through a couple of virtual trade shows; but we focused on organising our own webinars, specifically focussing on one target audience at a

This yielded good results by way of creating more awareness and spread of education about Canadian wood species, their properties and applications. We also highlighted the hand-holding and technical support that we bring to the table as an organisation both for re-man and structural applications.

Our webinars attracted a larger audience with intent of serious leaning, without any distractions - perhaps because no travel was required to attend them and there was the safety factor.

If I may say so, this is a far more costeffective way of reaching out to your target audience and address their requirements. We will continue to engage

one-on-one with our target audience, which is a lot safer compared to mass gatherings, and are highly productive.

However, I don't think the same can be said of virtual exhibitions.

#### **Trade shows**

Traditionally exhibitions have provided platforms to manufacturers and traders to physically showcase the virtues of their products and/or their technical competence to visitors and build data of potential customers.

Such events also provide visitors (especially small players) to physically check out the products through a demo on-site, which is not possible in a virtual exhibition.

So far as IndiaWood and DelhiWood go, they are an all-important marketing exercise for us. We showcase products made with Canadian wood species and with the assistance and support of Canadian Wood.

However, it is still not clear when it will be safe to hold such a show. But as and when we get there, the organisers would do well to adopt all government-mandated precautions for exhibitors and visitors alike.

Visitors can expect us to put forth our best foot forward within the given constraints. We will do everything possible to delight them with Canadian wood products and technical support.





Webinars are a cost-effective way of reaching your target audience... But I think the same cannot be said of virtual exhibitions.

Pranesh Chhibber, Country Director, Canadian Wood

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# A slowdown is the biggest teacher

Caple Industrial Solutions will end up around 80% YOY of 19-20. We were one of the few companies to offer demo machines and slowmoving articles at a discount.

With this we could rotate our inventory, achieve our purchase targets, improve our cash flow and got a chance to negotiate better and achieve our target purchase.

We have learnt to close deals online, save travel costs, save time - and WHF (work from home) is here to stay forever. Our decisions are always data-backed and we are investing further in artificial intelligence.

The machines and tools industry is not an impulse-buying market, but a need-based one. We are in touch with our customers and the industry. We help them with solutions for the needs that are obvious or hidden.

#### **Trade fairs**

As for virtual trade shows, Festool and SCM did one of the best live shows. Unfortunately, the response in India was weak as we were under lockdown during that period.

But virtual trade fairs cannot replace traditional fairs. That said we are happy to do one show in two years; because there cannot be many innovations year-on-

Our participation in IndiaWood and DelhiWood is a good branding exercise. As we play in the premium segment, our game is not during exhibitions but post exhibitions.

However, I would like to avoid taking any risk of exhibition expenses where the response and result are a question mark.

As and when our shows get underway, visitors can expect from Caple its hallmark products and services, which include solutions, education, integration,

optimisation, health and safety, effectiveness and efficiency, financial solutions, value for money and good returns on investment.

#### **Future plans**

My father taught me that a slowdown is the biggest teacher. And I believe that to take a big leap we need to take a few steps back. In slow markets you are better organised, more analytical, less rash, you identify and cut down on avoidable expenses and are more caring and humble to your customers.

With these measures we could correct so many small mistakes and, in the process, now we are well prepared to scale up. We are moving from SAP to Zoho-One, integrated with Zoho commerce.

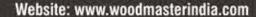
From April this year we will increase our and portfolio, bring in quality consumables on Caple. We have a BHAG (big hairy audacious goal) - to grow our bottom line not by 20% YOY but by 10x by 2025.



The year 2020 has taught us an important lesson on how to sustain the business when the top line drops.

- Satyan Thukral, CEO, Caple Industrial Solutions

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Bringing Excellence of Engineering to Wood Industries



DIMENSION SAW WITH SCORING CUTTER
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MODEL: WM-246 A



THROUGH FEED EDGE BANDING MACHINE MODEL: WM-246-PM+PT



VERTICAL SPINDLE MOULDER MODEL: WM-187-SLD

### **WOODMASTER (INDIA) MACHINES PVT. LTD.**

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# WOODNEWS

# Lockdown was just a 'speed breaker'

I would say there was no negative effect of the Covid-19 pandemic on our business! Except for the months of lock-down, market sentiment in India has been on a high. Buyers have a positive mindset and want to expand production capacities quickly.

Yes, physical meetings and discussions have gone online; but this change has only reduced our travel expenses and vastly increased efficiency.

No, we have neither participated in any virtual show nor do we intend to do so. We have always been with traditional shows, meeting clients face-to-face. I don't think virtual shows can bring that experience.

IndiaWood is very important for us and brings us many new prospects. It has earned a very favourable image among visitors for new launches and a good experience.

#### Conference needed

Yet, to me it is not time for another show in 2021, especially with the Covid-19 contagion still rampant. We exhibitors spent a lot of money and resources on IndiaWood-2020, which ended with a lock-down.

Many orders booked during that exhibition are yet to be fulfilled. We are

not ready for another investment at this point. We are also not sure whether the desired number and profile of visitors will turn up.

Currently, the industry is facing several challenges: shortage of raw materials (including particleboard), increase of raw material costs, an increase in sea freight tariffs and shortage of shipping containers. These are affecting the growth of our industry.

To address these challenges – and in the absence of a trade show in 2021 – I feel we could do with a conference of industry players, to create awareness, share problems and perspectives, and jointly look for solutions to these issues.



Currently, the industry is facing many new challenges. We should jointly address them through a national conference.

– Gopi T, MD, Woodtech Solutions



In spite of the pandemic and its uncertainties, business was good in the year 2020. There will now be a rush to cash in on the order bookings in the market to generate revenue, which had dried up during and after the

lockdown.

What is important is that market sentiment in India is positive. There is a general trend to move towards more mechanisation and automation in manufacturing to reduce person dependencies wherever possible.

IndiaWood and DelhiWood have helped us connect and network with the industry, not necessarily result in a big amount of sales. I think we should let 2021 be the year of getting back on our feet, not take



In manufacturing there is a trend to move towards greater mechanisation and automation to reduce dependence on labour, where possible.

Venkatramana Gorti, Managing Director, Homag India

risks with public participation in trade shows.

**Traditional** face-to-face exhibitions cannot be fully replaced by virtual ones.

But in the years to come, the world will slowly but definitely move to using technology for displaying and demonstrating products. As a result the

foot-print of stalls in traditional trade shows will start shrinking over time.

Barring the first quarter of the ear 2020, the remaining months have been very encouraging, In fact, October onwards our sales increased to more than the pre-Covid levels!

Most of this demand is driven by the modular furniture industry. We see a shift from the labour-intensive carpentry segment to factory-made and ready-toassemble furniture.

This means a greater use of pre-finished panels, less human contact and faster processing time. Customers who until recently travelled to China and Europe to buy furniture are now shifting to custommade orders within India.

Manufacturers and suppliers of boards and panels, who offer the same quality of materials and finishes as European producers, will stand to gain the most from the shift of demand.

# Demand soaring, but quality is sacrosanct

Traditional exhibitions give exhibitors the advantage of interactive experiences with customers and prospects. A virtual exhibition will lack the 'human touch'. But keeping in mind the current situation and restrictions, we believe that 2021 is not the year for a trade show.

IndiaWood is very important in our marketing calendar. Our activities seek to create the sensation of excitement about new product development. It also helps us to reach untapped markets and makes

the target consumer aware of our product availability in his/her region.

The challenge is currently to dig wider; so as a strategy we are digging deeper to keep our consumers happy by offering them a larger portfolio products. So there is an enhanced social media presence platforms to help us stay connected.



The challenge is currently to dig wider; so we are digging deeper to keep our consumers happy by offering them a larger portfolio of products.

Dhanesh Bhatia, Director-Sales, Aryamman Interior Solutions



# WOODNEWS

# Operations on `remote' for time being



Customers need to be offered quality products by good brands which can also provide an outstanding service.

Jurgen Wolf,Managing Director, Hafele India



It has been a very difficult year, like for most other companies; but we were able to recover somewhat in the last quarter of 2020 due to the festival period which saw strong, possibly bottled up, demand from the market.

We are expecting 2021 to be another difficult year with difficult trading conditions. Right now we continue to operate largely remote, like we did in 2020.

To be honest I am not a big fan of virtual exhibitions. But it is the best one can do under the circumstances. A virtual show can never replace the 'touch and feel' which one has at a physical exhibition. Virtual shows cannot relay the same level of customer

contact.

IndiaWood has always been a very important platform to communicate our latest products and services offering to the manufacturing and architects target groups. This will also be the case in future.

Once we are through the Covid-19 pandemic, we would definitely want to return to the anchor exhibitions. They are important for us to connect with our customers. This year may be too early to do that safely, but hopefully, at the beginning of 2022, this will be the case.

#### Going online

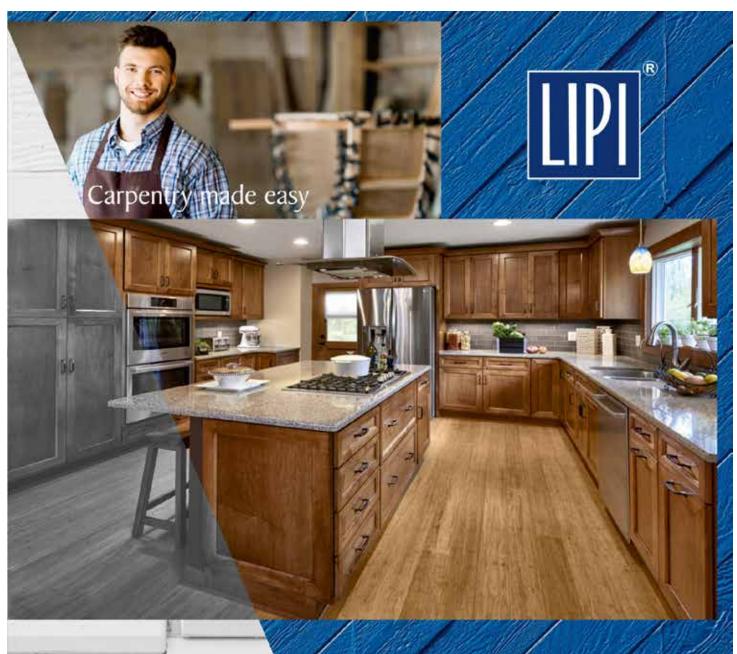
Meanwhile, we have shifted a lot of our marketing activities online, where we have a better chance of being noticed. In addition, we have been offering our customers a lot of learning opportunities,

which will continue also this year.

Going online has tremendously increased our market penetration and customer reach. To improve this online experience we are producing a lot of visual content which gives our customers a better experience.

In April we will also present our virtual Interzum exhibition which, despite being virtual, will give our customers a good overview of our new and innovative products.

Overall our customers need to be offered quality products by good brands which can also provide an outstanding service. Hafele is well-positioned to do that through digitalisation, continuous training and keeping the culture of the company intact.



- PANEL SAW
- COLD PRESS
- HOT PRESS
- EDGE BANDING
- BORING MACHINE
- CNC ROUTERS

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# WOODNEWS

# Mechanisation finding its feet

The year 2020 was overall good because of the smart recovery in business and manufacturing in the last few months. There are positive sentiments in the market regarding investments, which will have a good outcome this year.

Going forward, our customer or customer's customer will prefer machine manufacturing processes rather than manual jobs because of better quality in the former.

In India, we would definitely prefer traditional trade shows over virtual ones

IndiaWood and DelhiWood play a very major role in showcasing our products and solutions or new market launches in front of a large pool of customers across India, which no other show can provide.

Given current developments, we feel that it is possible to have a smaller trade show in 2021, before the next edition of IndiaWood. Of course, the organiser of any such show must ensure the safety of exhibitors and visitors alike.

What can visitors to such a show expect from your business?



Given current developments, we feel that it is possible to have a smaller trade show in 2021.

Shyam Krishnan,Head of Operations, Altendorf India

We notice some changes in customer behaviour. There is a propensity to replace manual labour (where possible) with mechanised solutions. This is being done to make up for the scarcity of labour and skill sets, which results in longer lead times on projects.

because the former gives us a better understanding of a prospect's requirements, resources and expectations.

Unless we demonstrate the actual working of our machines to customers it will be difficult for the latter to understand the features or performance of machines.

As we are in process of continuous technological improvements, we are planning to launch new models in different product segments this year. We will organise open house, seminars and roadshows across different cities in association with local partners for effective customer connect.

# On the cusp of digital transformation very optimistic Covid 19 scen

The year 2020 has been challenging, but at the same time interesting for our business. We have seen a new trend altogether which has brought about a

positive change, not only in the business but also overall as an industry.

In order to emerge from a crisis, two critical elements are required: courage and innovation. As an organisation we are very optimistic and believe that the post-Covid 19 scenario will be a transitory period, leading to innovation in the coming months.

During trade shows like IndiaWood or DelhiWood, our objective is to reach out to entrepreneurs and provide them solutions, which would help them produce top quality products.



# We believe that the post-Covid 19 scenario will be a transitory period, leading to innovation in the coming months.

- Krutik Mistry, Director, Felder India

Communications in marketing activities during such shows definitely captures the attention of our target audience, which is reinforced by exceptional product presentations and our connect during the shows.

We believe that the existing trade shows, especially IndiaWood, have performed really well and helped exhibitors present their brands and the visitors discover the perfect solution for their businesses.

The Felder Group started its digital transformation during Ligna 2019 and

has implemented several initiatives that have helped us connect with our customers on various platforms digitally.

We now plan to take this digital transformation journey to the next level with innovative methods, which the industry and the market will soon witness and be a beneficiary of in the coming months.

We are strong advocates of the concept of co-existing and hence our ideas are expansive in terms of their application. We are now working in the direction be a major contributor to the woodworking industry as a whole by taking up projects in the avenues of training and development of the various stakeholders of the industry.

The idea is clear: provide right information to the stakeholders of the industry in a structured way to enhance the efficiency and productivity leading to the growth and development of all.

The six weeks' loss (March-April and again in May 2020) can never be made up. However, the last three months have shown very good recovery. Products used in the home have started to move fast, whereas office products have slowed down considerably.

We have latched on to virtual/online training for in-house staff and sales. In the absence of promotional trade shows, Ebco has invested in branding on television and digital and print advertising.

Shows such as IndiaWood and DelhiWood are a necessary part of our marketing strategy. They should continue to be

# Time for caution, consolidation

organised once a year. However, this year, considering the circumstances, unless normalcy is achieved with widespread vaccination against Covid-19, I would not take risks with participation.

It is a time of adequate public caution and business consolidation. It is also time for product research and development. We have been doing exactly that in the past months.

Whenever these trade shows are organised next, you can be sure to find several new products from Ebco!



Ebco has been busy with product research and development these past few months.

Geoffrey Nagpal,Managing Director, Ebco Fittings



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# WOODNEWS

# Virtual events are a temporary necessity

What an incredible year for the business! The start, as expected, was sluggish. Orders began picking up from the second quarter of 2020-21. But the third quarter was witness to disruptions in the import supply chain and shooting cost of raw materials.

This led to a massive increase in input prices as well as temporary disruptions. However, our customers have accepted the hike.

Having said this, investments by the government at the grass-roots level and in infrastructure will have a positive cascading effect on the economy and our industry. Thus, we are extremely bullish about the future.

The furniture industry is being looked at seriously by policymakers. The focus of the government to make India a destination of choice for manufacturing is extremely good. There might be some hiccups in execution, but we are on a strong growth trajectory.

We don't know when the Covid-19 threat will recede. So a 'post-Covid' scenario will not be a simple cut-off on the calendar. People will, and have, accepted Covid as a reality that is here to stay awhile.

For us, IndiaWood and DelhiWood play a critical role in creating awareness about our company and products. We have never missed an edition of these shows as an exhibitor since we started.

Virtual meetings (and some online 'exhibitions') are a necessity in the absence of options. Nothing can replace face-to-face interactions between the seller and buyer. Once free travel resumes, in-person meetings and interactions will increase.

Our industry is such that a 'touch and feel' is required to understand a product's features and quality. But the situation in 2021 is still very uncertain for a trade show. Unless the threat of easy infection recedes, and until travel resumes freely within the country and outside it, it is difficult to predict how a show this year would turn out.



The government's focus to make India a destination of choice for manufacturing is encouraging.

– Pankaj Chandak,Managing Director, Praveedh Decor



# 'Work from home' is a business opportunity showcasing them in the expension of our sustances to provide the providence of the providence of our sustances to provide the providence of the providence of

The global disruption of life and business on account of the Covid-19 pandemic spared none. However, after lockdown, all our customers have taken extraordinary efforts to spring back and are trying to reach prepandemic levels in a short time.

We see opportunities for a growing market in a post-Covid

scenario. 'Work from home' as a concept seems to have come to stay. This necessitates more privacy at home. Most doors do not provide adequate sound and vision privacy for focussed and undivided attention while working or video and teleconferencing.

We are working on further transforming the market to focus on performancedriven door sets. This will be driven by showcasing them in the experience centres of our customers, to provide the touch and feel of this new concept.

We participated in 'Virtual Indonesia Woodshow 2020' as an exhibitor in December last year.

We got a mixed response in our maiden participation in a virtual trade show. Digital exhibitions have no geographical boundaries; but we also had visitors from non-focussed market areas.

In my opinion, face-to-face interactions



#### We are working to transform the market with the concept of performance-driven door sets.

Nitin Vaze, CEO, Sleek Boards Marketing Services LLP

cannot be substituted by virtual ones. That is why it is very important for us to connect with our customers during IndiaWood and discuss more avenues to grow together.

In 2021, our preference would be for a virtual trade exhibition

woodworking sector. Most visitors are still not comfortable with the levels of exposure in physical public events. We had several visitor cancellations even ahead of IndiaWood 2020.

Hopefully, a significant population would be vaccinated by the end of this year to raise trust and comfort levels for a trade show from 2022 onwards.

the meantime, connecting via social media platforms such as Facebook, LinkedIn and Twitter.

# Virtual events not a permanent fix

Overall the year 2020 has been a good year for strategising business. We have, in fact, maintained the original growth curve since August 2020. We have also seen a positive impact on brand presence with minimum marketing spend.

The markets were a bit unpredictable for a few months; but now the outlook is positive on getting business going with leading local branding and without the need to travel.

Architects, designers and customers who used to travel abroad for interior needs will continue to hunt for reputed local manufactures or suppliers to tie-up with.

They are also looking at moving away from site work and more modular fit-out solutions.

We were sponsors in the FOIAD virtual event held in December 2020. It was very well organised and they put in a lot of effort to meet our expectations. However, virtual events will not be a permanent solution - they have their limitations.

We would always prefer face-toface interactions and events even within India. IndiaWood has been an important event where we use it as the platform for new announcements on products or strategy. We get to meet our woodworking and dealer network at these events.

I don't think it is time for a woodworking show in 2021. The situation (Covid-19 pandemic) needs to get back to 90% normalcy for it to be successful. Meanwhile, we are aggressive on digital presence and it has worked out very well for us.

We are working on our online conversational skills connecting them to local stores to match their requirements. All marketing generated to ensure ease of ordering or understanding of products.





Our marketing efforts are based around our digital presence and the influencer base.

– Thomas Markose, Managing Director, Kelachandra Brothers & Aristo India



# Report confirms sustainability of US hardwoods



A new report released by the American Hardwood Export Council (AHEC) has demonstrated the sustainability of US hardwoods by comparing the requirements for responsible timber sourcing in regulations (such as in EUTR in the European Union and Lacey Act in the US).

The results of the report proved that, in several important respects, AHEC's strategy goes beyond what is deliverable by established forest certification systems and is much wider in scope than most timber procurement policies.

AHEC's strategy to date has been to demonstrate sustainability against environmental attributes identified in scientific life cycle assessment (LCA) as relevant to US hardwoods.

Due to a lack of awareness of alternatives technical requirements for 'sustainable timber' are still typically equated with FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification) certification.

These technical requirements are, however, increasingly out of step with the

growing recognition that the major problems associated with forests in some parts of the world – such as deforestation and poor governance – cannot be addressed through forest certification.

According to Mr Roderick Wiles, AHEC Regional Director: "Many of the requirements focused on certification do not accommodate the need for broader metrics of sustainability in the forest products sector and to recognise the importance of other issues not covered by forest certification, including carbon footprint and other life cycle impacts; transparent information on national forest governance; the quality of forest resources at national and regional levels; clear data on species volume, growth and harvest; efficient use of the full range of species and grades; product durability; and waste management and disposal."

The AHEC website hosts an interactive forest map to provide easy access to data derived from the USDA Forest Inventory and Analysis (FIA) programme on forest volume, growth and harvest. Users can drill down to show data on individual hardwood species at national, state and survey unit levels.

AHEC's comprehensive LCA study is unique in the wood sector for the level of detail on environmental impacts provided for individual species and thicknesses of lumber and transport scenarios. (www. americanhardwood.org).



#### **Japan Wood-Product Export Association**

Log on to www.woodnews.in for more information





- Ready Stock Available
- Available Sizes (mm): 148, 198, 248, 298, 398, 448, 498, 598, 698, 798, 898, 2700R & 2700L

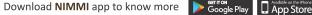


From the house of



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# MOODINE

## Greenply launches Italian dyed veneers









Greenply Industries, one of India's largest interior infrastructure brands manufacturing a range of plywood, block boards, decorative veneers, flush doors, and other products, has announced the launch of its premium collection of Italian dyed veneers.

Named 'Farbivo', it will be part of its premium collection of natural decorative veneers, Wood Crests.

Greenply veneers are made of exotic species specially handpicked from across the globe such as America, Brazil, Europe and Africa. The veneers are unique, as each flitch of veneer has a distinct pattern and is durable.

#### Salient features

- · E1 compliant
- Borer Proof & Termite Resistant
- · Exotic Natural Veneer

- · Preservative Treated
- Conforms to IS:1328

A total of 60 exclusive shades have been selected for dying this exceptional range of architectural grade (one-of-a-kind) veneers.

The Farbivo range is processed in Italy at a state-of-the-art veneer dying plant to ensure premium aesthetics and consistency of shade.

# Blum's pull-out Shelf Lock creates space

Sometimes all we need is a little 'space' – to pause, unload and reorganise. Häfele, in association with Blum, has introduced the new pull-out Shelf Lock that helps conjure up that extra worktop space.

A pull-out shelf exactly when and where you need it – and then lets it magically disappear into the furniture after work is done!

The Blum pull-out Shelf Lock can be installed with full extension Blum Movento and Tandem runners to attain flexible worktops in different areas of the home, be it the kitchen, bathroom, living room or utility room.

It is a discreet, space-saving two-sided locking mechanism that securely holds the open pull-out shelf in place so you can complete your tasks comfortably.



Application areas for feeding of BEAM SAW, PANEL SAW and SANDING MACHINE.

- \* Improved Productivity.
- \* Payback in a Few Months.
- \* Reduced Worker Injury.
- \* Reduced worker dependency.



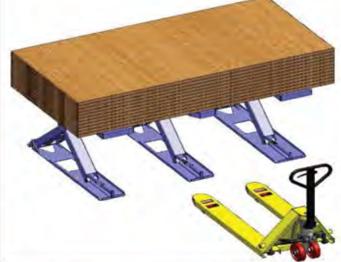
**SLIM LIFT TRIPLE - E** is the perfect solution for efficient lifting, lowering, and positioning material for variety of wood working machines. They take the backache and strain out of bending & lifting.

Woodworkers recognize that increase in production are achieved by increased worker efficiency. Slim lift is a perfect solution to feed and receive boards / panel to Beam saw, Panel Saw and Sanding machine. It is easy to install and it can be placed directly on the floor (NO PIT REQUIRED).

#### **SPECIFICATIONS**

- Capacity up to 2.5T.
- Closed Height 100mm.
- Max Lift Height up to 900mm.
- · Can Be Customized.
- · Suitable for 8'x4' & 9'x6' boards
- . NO PIT REQUIRED.









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You can combine the mechanism with any of the three technologies – Blumotion, Tip-On or Tip-On Blumotion – to achieve soft and silent closing, effortless opening or both.

The pull-out Shelf Lock comes with a synchronisation shaft which connects both the sides of the locking mechanism and helps you in releasing the shelf with only one hand.

With Blum's pull-out Shelf Lock, you can obtain extractable worktop and planes throughout your home – next to your washing machine to place your laundry basket, below a wall shelf/cabinet to stack books or items while you sort through them, or beside the kitchen countertop to place your countertop appliances while operating them.

# Dürr unveils 'next-gen' pollution control



More efficient contaminant capture was achieved through increased operating voltage that requires less collecting surface area. The gas distribution system was completely reimagined to optimise flow through the system.

Dürr Megtec recently released its "next generation" wet electrostatic precipitator (WESP), an air pollution control system that efficiently cleans industrial gases of fine particulate matter, acid mists and aerosols to meet global environmental regulations and protect downstream equipment.

Key improvements of this advanced WESP system include decreased maintenance,

enhanced performance, standardisation and faster installation times. System components are also now easily accessible for maintenance inspections.

Dürr Megtec designed the new WESP with both the environment and its customers' operations and maintenance teams in mind. As a result, a strong focus was placed on the system's high-intensity, offline automatic cleaning features, which reduce maintenance efforts, eliminate carryover of entrained matter during washing and provide better

operational performance during cleaning.

Dürr achieved a more efficient contaminant capture through increased operating voltage that requires less collecting surface area. Additionally, the gas distribution system was completely reimagined to optimise flow through the system, and various tube shapes and electrodes were tested to improve overall performance.

Standardised modules are used in the new design, thus reducing engineering time and streamlining fabrication. The systems are assembled from different standard modules and adapted to customer-specific requirements.

Modules with tube bundles are preassembled in the production facility for shipment to the customer. All electrodes are pre-loaded and pre-aligned, thus avoiding this lengthy and tedious task on the construction site.

WESP air pollution control systems are used in all sectors of industry, including wood, waste incineration, food processing, bio-fuels, metals and mining, chemical, petrochemical, iron and steel, and pulp and paper.

Dürr WESPs can remove up to 98% of particulate in a single stage, depending on the characteristics of the gas stream. Increased removal efficiency is possible with alternative configurations.



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# SCM's Stefani has 70 years of technology



SCM's range of Stefani and Olimpic edge banding squaring edge banding machines

on the latest furniture and design

trends.

keen to ensure a quality machining, to industries.

The SCM edge banders are automatic, productive, versatile and ideal for working on different kinds of panels with different dimensions, edges and glues.

The new 'Round 2 Servo' rounding unit, introduced for Stefani XD, ensures a unique machining accuracy and quality on any kind of panel, even the most delicate ones and with more complex materials. This addition makes this edge bander an even greater performer.

Many latest optimised devices of all Stefani and Olimpic range allow a perfect glue line, such as the 'SGP' for the use of different types of EVA and PU glues, and the new and AirFusion+ technology for an invisible joint between the edge and the panel without glue.

The range can also have "fast-back" panel return devices that allow maximum productivity and machining speed up to 25 metres per minute, with just one operator.

Important news entries also for the Olimpic range, such as the RC-N glue scraper for working on panels coming from the nesting cycle, and the new SGP-E glue pot, complete with pre-melting device, which allows to process panels with two different glues (EVA and PU) with an always optimal joint line and a quick glue change.

SCM edge banders and sizing edge banders can also be integrated with its Maestro Connect IoT platform, the data collection and analysis system for data coming from SCM technologies that gives full control of production flow and intelligent, implementation of predictive maintenance models.



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#### **PRODUCT RANGE:**

I MM **LINER GRADE** 0.8 MM **DOOR SKIN** 

#### You can use Star Mica at

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- Retail
- Office
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- Bathroom
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# Machinery from Jai takes centrestage

Jai Industries offer an unparalleled array of products that include woodworking and panel processing machinery. Its range of machines are products of R&D backed, high-end precision engineering and have the best possible features and are made of the topmost quality material and components. All the products are backed by dedicated service and guidance.

Jai manufactures 30,000 machines a year in its seven plants spread over a total floor area of 4, 00,000 square feet. Its machines, specifically produced to suit Indian working conditions, ensure performance and operating comfort.

The Modula range of solid wood machinery have high-end features that are specially developed for units engaged in solid wood-craft business.



J-1325 CNC Router

A high quality CNC model that allows you greater workability with affordable installation and operating cost.

#### **Salient Features**

- "Hiwin" Taiwan linear guide rail with high precision
- Heavy ball screw with high accuracy

- Digital Signal Processing for control system
- Stepper Motors with Fuling invertor
- Stronger and larger helical rack & pinion gear drive
- Steel structure with six legs makes our routers more stable
- Lubrication makes maintenance much easier

Technical Specification:		
Model No.	Unit	J-1325 (with Stepper Motor)
X - Y - Z axis working area	mm	1300 x 2500 x 200
Traveling positioning accura	mm	±0.1
X - Y working delicacy	mm	±0.05
Body structure		Steel structure with six legs
Drive motors		Stepper
Inverter	kW	Fuling 3.7
Guide rail	mm	20 "Hiwin" guide rail
Approx. weight	Kg	800

 Compatible Software: Compatible various CAD/CAM software like; Art Cam/ Type 3



Tool holding guide system

A precision system to carry the CNC design commands. This Auto-Sliding guide system allows great design flexibility.



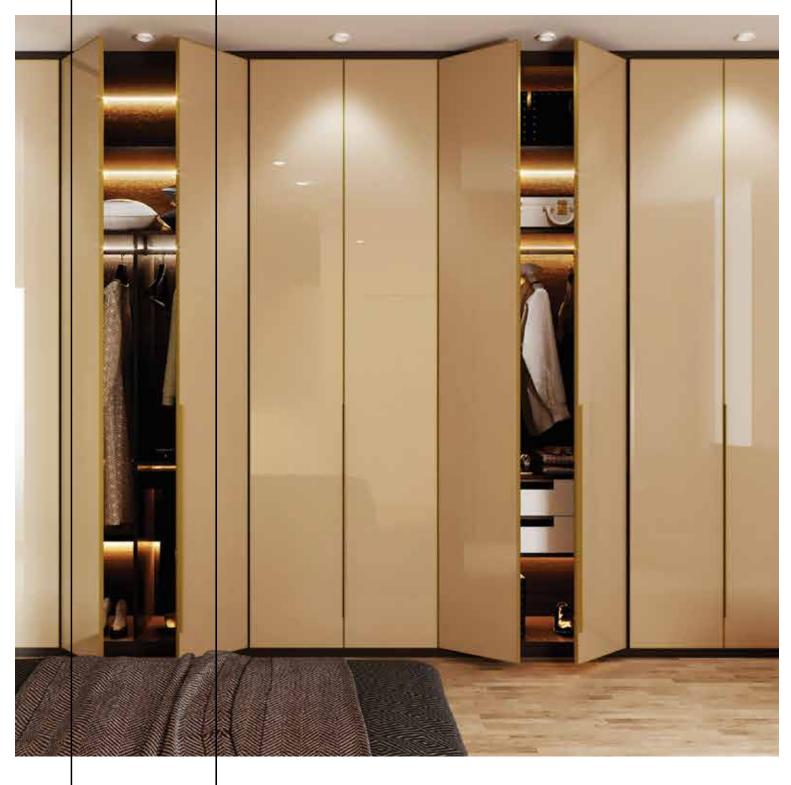
**Control System** 

A convenient, separate control panel box allows flexibility and efficiency in machine operating. Digital Signal processing is applied here as the controlling system.



**Precision Vacuum Table** 

(Optional-Ask for Separate Quote) for vacuumed fixing and sure clamping of the workpiece, to ensure steadiness during the entire routing operations



Add grandeur to your interior spaces with our new High Ceiling Wardrobe Doors with Long Handles and a seamless magestic finish.

# HANDLE

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#### J-1325 + (CNC Router with **Heavy Duty Servo Motor)**

A high quality CNC model that allows you greater workability with affordable installation and operating cost.

#### **Salient Features**

- "Hiwin" Taiwan heavy duty linear guide rail with high precision
- Heavy ball screw with high accuracy
- Digital Signal Processing for control system
- · Servo Motor with Fuling heavy capacity invertor
- Stronger and larger helical rack & pinion gear drive
- Steel structure with six legs makes our routers more stable

- Lubrication makes maintenance much easier
- Compatible Software: Compatible various CAD/CAM software like Cam/ Type 3
- Lubrication makes maintenance much easier



Tool holding guide system

A precision system to carry the CNC design commands. This Auto-Sliding guide system allows great design flexibility.



"Hiwin" Taiwan heavy duty 25 mm linear guide rail with high precision. Stronger and larger helical rack & pinion gear drive.



#### Precision Vacuum Table

(Optional-Ask for Separate Quote) for vacuumed fixing and sure clamping of the workpiece to ensure steadiness during the entire routing operations.



Rotary attachment

#### **Technical Specification:** Model No. Unit J-1325 + (Heavy Duty) with Servo Motor X - Y - Z axis working area 1300 x 2500 x 200 mm Traveling positioning accuracy ±0.05 mmX - Y working delicacy < 0.01 mm **Body structure** Heavy Steel structure with six legs **Drive motors** Servo -Inverter kW Fuling 5.5 25 "Hiwin" guide rail Guide rail mm Approx. weight Kg 1150

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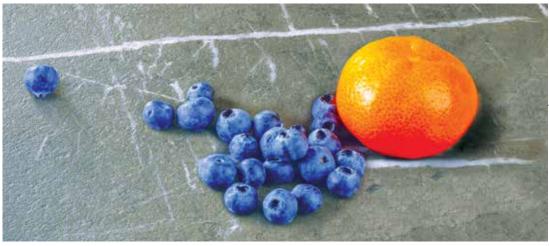
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# Egger Decorative Collection: the power of more!



The new surface, ST75 Mineral Satin, gives worktops a matt and also velvety feel. Its irregular look makes the decor image very realistic.

All pics: Egger Holzwerkstoffe

Every working day presents new challenges for architects, fabricators and distributors. The key for them is the optimum and timely implementation of their projects and the satisfaction of their customers.

With more colour options, more matching decors and more supporting services, the Egger Decorative Collection 2020-22 is the perfect tool for this purpose.

One theme is the main focus here: The success of its customers. Architects, fabricators and distributors receive a coordinated complete package for trendoriented furniture and interior designs.

For the first time, Egger offers a set of matching decors and materials across the entire collection. This means that all Eurodekor decors are available on chipboards and MDF boards, Eurolight lightweight boards, OSB Combiline and laminate. Edging in the same decor and texture complements the product range.

Egger has expanded its product support services and makes its customers fit for digitalisation and modern, professional customer consulting. With the new Egger Decorative Collection App you have unlimited access to all decor and product information. It is the perfect link between printed collection folders and constantly updated digital information.

There are nine trend worlds under the overarching motto 'Connect Emotion': Modern Classics, Future Retro, Pure Nature, Perfect Imperfection, Light Urban, Black Options, Coloured Monochrome, Metal Fusion and Matt Emotion.

#### Salient features

- Decor and material combination throughout the collection;
- Texture novelties for more character and authenticity;
- Synchronised ST32 Feelwood Vintage, ST19 Deepskin Excellent, ST20 Metal Brushed;

- Expanded worktop decor selection of stone, concrete, metal, ceramic and wood reproductions
- 12-mm thin compact worktop and matt PerfectSense Topmatt worktop with edging;
- Expanded decor selection for PerfectSense gloss and matt;
- PerfectSense Topmatt laminate is available to match all matt lacquered boards;
- More than 3,000 edging variants, in the same decor or as accent;
- New versions for compact laminates: with black, white, light grey or grey core;
- Also available in flame-retardant Flammex quality.

Metal Brushed is another new surface that is reminiscent of real brushed aluminium, along with light haptics.







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## FlexiCut abrasives for fine finishes

Flexible Abrasives is an Aurangabad-based (Maharashtra) manufacturer of high-tech coated abrasives in India. It manufactures a wide range of products for applications from hand sanding to heavy stock removal.

Its abrasive products are available in the forms of rolls, belts, sheets, discs, Velcro, fibre and flap discs, suitable for metal grinding, leather industry, glass grinding, automobile industry and many other manufacturing industries.

Its FlexiCut range of premium abrasive products is employed for grinding and polishing for superfine finishes and long life. These abrasives are suitable for sanding metals, non-ferrous metals, wood and glass.



#### **Alcoflex Premier 419RS**

This is a speciality product for heavy-duty machine sanding of ferrous and non-ferrous metals, metal and non-metal alloys. It is a durable product with very high metal removal rate and fine finish. It is suitable for hand tools, automobile, die casting and general engineering industries.

#### Alcoflex 419RS Premier Plus

This is a precision-designed product to give aggressive cutting with enhanced life to keep the grinding cost low. It is best suited for hand tool industry and similar applications.

#### **Technical data**

Grain : Ceramic coated grain

Bond : Resin-over-Resin

Backing: Heavy poly-cotton cloth

Grit range: 60

Shape : Belts



#### Wide belts

Wide belts are specially designed for drum sanding operations for plywood, particle boards and hardwood for furniture where the products come in Silicon Carbide (519R) as well as Aluminium Oxide (419R & 429R) options.

For the laminate industry, Flexible Abrasives has its Silicon Carbide (519RS) quality. These are available up to 1350 mm (width) and are suitable for medium to high pressure working.

#### **Technical data**

Grain : Aluminium Oxide

Bonding : Resin-over-Resin

Backing : Polycot cloth

Grit Range : 36, 50, 60, 80, 100, 120, 150, 180, 220, 320 & 400

Shape : Belts in desired length and width (maximum width of

1350 mm).

#### Technical data

Grain : Silicon Carbide

Bonding : Resin-over-Resin

Backing : Polycot cloth 'X' Wt., 'Y'

Wt.

Grit range: 36, 40, 50, 60, 80, 100,

120, 180, 220, 320 &

400

Shape : Wide belts

#### Alcoflex 428M / 438M

This is a specially designed product for light to medium duty machine sanding and for hand sanding of wood and metals.

#### **Technical data**

Grain : Aluminium Oxide

Bonding: Resin-over-Resin

Backing : Cotton cloth 'X' Wt., 'Y' Wt.

Grit range: 24, 36, 60, 80, 100, 120, 150, 180, 220, 320 & 400

Shape : Belts, Rolls, Sheets & Discs.



#### Alcoflex 419R (SF)

This product is made for sanitary fittings, especially soft brass items. The product's speciality is contour grinding with excellent metal removal rate.

#### Technical data

Grain : Aluminium Oxide grain

Bond : Resin-over-Resin

Backing : Poly-cotton cloth

\_\_\_\_\_

Grit range: 60, 80 & 220

Shape : Belts

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**Heavy Duty Helical Planer Cutter Heads** with Changeable Knives Knife: 30 x 12 x 1.5 x 35°



**Helical Planer Cutter Heads** with Changeable Knives Knife: 15 x 15 x 2.5 x 30° 15 x 15 x 2.5 x 37°



**Safety Corrugate Cutter Heads** with HSS Knives

**Adjustable Planer Cutter Heads** with HSS or TCT Knives



**Spindle Shaper Planer Cutter Heads** with Changeable Knives Knife: 30 x 12 x 1.5 x 35°

50 x 12 x 1.5 x 35°

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# WOODNEWS

# Wood-Mizer expands range of machines, tools



Wood-Mizer's woodworking machinery manufacturing floor in Poland.

Wood is a word that throws up many ideas and millions of people in the world can live better, thanks to this friendly and sustainable material. However, it takes a whole lot of passion, hard work, and a dream to craft all those beautiful wood products.

And let us not forget about proper tools to finish the work. It's been over 30 years since Wood-Mizer started its European operations in Poland, offering to the wood processing industry a wide range of premium-quality machinery.

Wood-Mizer now sells sawmills and woodworking equipment in more than 100 countries, offering equipment from portable to stationary sawmills, horizontal and vertical band sawmills, log processing lines, edgers and multi rip saws, resaws, blades and sharpeners.

Recently, Wood-Mizer has expanded its offering by adding moulders and planers, or simply Woodworking Products. The new

woodworking machines include models MP160, MP180, MP200, MP220, MP260, MP360 and MP365.

With these compact and versatile machines, the slogan 'From Forest to Final Form' is taking on a new meaning, allowing customers to make their final

The wide range of Wood-Mizer tools are made from top quality European steel and carbide.

wood products in an easy and profitable way.

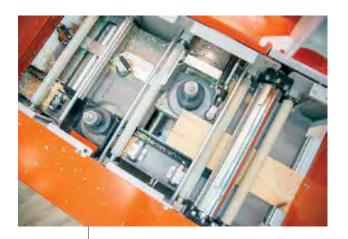
Products may range from boards, floors, windows, stairs, banisters, steps, doorframes, doorsteps, picture frames, to other decorative elements.

Wood-Mizer woodworking products have been manufactured in the Polish factory in Koło, since early 2020. The production site has a global reputation for making top-quality sawmills and wood-processing machines.

The basic engineering design is to create a very functional product in a compact size, using the best quality materials possible. Wood-Mizer moulders and planers share these characteristics:

 A multi-cutterhead allows getting a desired shape of the board after only one pass through the machine.





The insides of a Wood-Mizer MP260 four-side planer-cum-moulder.

- Individually engaged electrical motors for each cutterhead, helping to decrease power consumption and reduce noise.
- Each cutterhead has easily replaceable knives.
- Solid feed table made of stainless steel, ensuring the precision of processing and comfort of work.
- Cast iron planing table is highly durable and resistant to deformation, abrasion and tension.
- For thickness, the adjustment is made by a quick-access hand crank.
- All control functions are accessible from a convenient operator unit.
- Sawdust and woodchips generated during the cutting process are directed to the exhaust ports, so the workshop areas remain clean.
- The steel body of the machine protects inside electrical motors (separate for each cutterhead), feed rollers, and the adjustment mechanism.
- The machine is lightweight and compact and can be moved around without much effort.

All woodworking products come with a wide variety of cutting accessories and tools, made from top-quality European steel and carbide.

Among them, are HSS cutting knives, carbidetipped HM cutting knives, double-sided HSS cutting knives, profile HSS knives, dedicated cutterheads with replaceable HM profile knives, kits of HM brazed cutters with carbide tips, and for special orders, customised profile knives or side cutterheads.

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# SCM set to expand footprint in India



Italian woodworking technology provider, SCM Group, is building up its presence in India with dedicated warehouses, showrooms, experts and local technical and sales staff. The aim is to provide direct, widespread sales and after-sales service assistance at each stage of customer relations, from pre- to after-sales.

"The woodworking industry in India, Sri Lanka, Bangladesh, Nepal and Bhutan continues to grow,"

says Mr Giovanni Masino, SCM Regional Manager for West Asia and the Indian Sub-continent. "SCM offers a wide choice of technological solutions: from the artisan to industry, from panel to solid wood machining, from furniture to windows and doors."

According to Mr Balkar Singh, Area Manager for India, SCM has implemented a strategic investment in the Indian market that will continue through 2021 to provide local woodworking businesses with even more extensive, all-round assistance. It will include classic machines for woodworking to the automatic entrylevel solutions: panel sizing machines, edge banders, machining centres, sanding machines and technologies for surface treatment.

"The Indian market also registers a growing focus on digitalisation and IoT, requisites that SCM meets with its vast range of digital software and services to allow wood operators to achieve a tangible optimisation of assistance and maintenance activities, even remotely," Masino added.

# Century goes for Rs 650-crore expansion

As demand improves, Century Plyboards is looking at capital expenditure of Rs 650 crore over the next 2 years. The company will add a green-field plant, an MDF (medium-density fibreboard) unit in South India at an estimated cost of Rs 450 crore, which is expected to be operational by 2023.

The company is also ramping up capacities at its MDF plant at Hoshiarpur (Punjab), from 600 cubic metres per day to 1,000 cubic metres per day, at an estimated cost of Rs 200 crore.

Commercial production will start in the next 12 months, reports BusinessLine. At present, the company's plywood and laminate units are operating at over 90% capacities.

## Eight toy clusters get govt. nod

The government has approved the building eight of manufacturing clusters at a cost of Rs 2,300 crore, reports Economic Times. Once set up, these will boost the manufacturing of toys made of wood, lac, palm leaves, bamboo and fabric.

Of the eight clusters, three will come up

in Madhya Pradesh, two in Rajasthan, and one each in Karnataka, Uttar Pradesh and Tamil Nadu. In addition to these, two toy clusters are already under implementation in Karnataka and Andhra Pradesh.

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## Membership to IWMMTA open

The Woodworking Indian Machinery Manufacturers' and Traders' Association (IWMMTA), which was launched as a not-forprofit organisation during IndiaWood 2020, has opened its membership drive from among manufacturers and traders of machines for woodworking across India.

The association is a forum for members voice their capabilities and needs and benefit from a common platform. Its mission is to represent the membership at national and international levels, promoting and safeguarding the interests of members and the woodworking machinery industry in India.

In addition, the IWMMTA will assist

 Promoting members potential new markets, both in India and abroad;

- Disseminating information participating in events of interest to members;
- Creating a directory and projecting profiles of members to government departments, financial institutions and other interested organisations for the growth of business;
- Administering a website and social media presence to connect members with potential business prospects;
- Increasing awareness and knowledge through workshops on industry and design;
- **Facilitating** dialogue between international companies and IWMMTA members;
- Undertaking skill development to overcome shortage skilled manpower.

#### Eligibility & Benefits

Manufacturers, traders and importers of machines and tools for woodworking,

registered as companies in India, are eligible to be full members. Iinstitutions, consultants and representatives foreign companies not registered in India but connected to the woodworking industry are eligible as associate members.

The IWMMTA would collectively voice concerns of the industry and members to the various government entities; organise educational trade trips and seminars to different parts of India and abroad; disseminate information on technologies; and facilitate transfer through joint ventures or collaborations.

The office bearers of IWMMT are Messrs Ashok D'Souza, Director, Altendorf India (President), T. Gopi, Managing Director, Woodtech Consultants (Secretary) and Suresh Balakrishnan, Managing Director, Leitz Tooling Systems India (Treasurer).

For more information, write to Ashok D'Souza at iwmmta@gmail.com.

Members of the executive committee are Messrs Venkatramana Gorti, Managing Director & Country Head, Homag India; Vikram Sivaraman, Deputy Manager (Marketing), Biesse Manufacturing Co.; Nirav Shah, Managing Director, Industries; Subhashchandra Managing Partner, Umisons Industries; Shyam Krishnan, Director, Altendorf India; Krutik Mistry, Director, Felder Group India; and Satyan Thukral, CEO, Caple Industrial Solutions.







IWMMTA office bearers (L-R): Ashok D'Souza, T. Gopi and Suresh Balakrishnan.

# IKEA plans 1st Bengaluru store in Whitefield

IKEA has rented 1,00,000 square feet to set up its first store in Bengaluru. The store, coming up in VR Mall in Whitefield, is expected to be operational by 2022.

IKEA will occupy the entire ground floor of VR Mall. The store is currently in the fit-out stage. The deal has a lock-in period of 15-20 years. Work on IKEA's own store in Bengaluru is under construction at Nagasandra.

The company plans to open two more city centre IKEA Stores in 2021 to reach more people in Mumbai. It is set to enter top Indian cities with its multi-channel presence with e-commerce and physical stores.

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Razorcut Sawblades are the right solution for cutting Postlam boards (Ply, Particle & MDF) in Beam Saw. In Postlam boards, due to high density and abrasive nature of the HPL, the teeth of the Sawblade wears out very fast. The life of a sawblade drops by almost 75% when cutting Postlam as compared to Prelam boards.

This sawblade has proved that it is far ahead of any other sawblade in the market in terms of more life as well as high finish cut quality due to the following reasons:

- · TR/TR tooth configuration suitable for abrasive materials
- UT design or Irregular tooth pitches which reduces harmonious vibrations on the periphery of the Sawblade. This combined with the laser ornaments on the tool body reduces noise and gives a high finish cut quality.
- · Due to a special coating on the tool body there is reduced resin build up on the tool body.
- · Stability during very high feed rates and hence improved productivity.
- · Highly efficient due to its finish cut quality.

Razorcut Spring Promotion 2021 is live, Please contact HO/Sales representatives of your region for more details



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# WOODNEWS

# Lithuania orders new line from Dieffenbacher

The Homanit Group, a European specialist in the production of thin, high-value-added wood fiberboards, has ordered a complete low-emissions THDF plant from Dieffenbacher for its new site near the Lithuanian capital of Vilnius.

Dieffenbacher will supply all components, from debarking to stacking and will deploy the latest environmental technology solutions in combination with the fibre dryer and a 50-MW energy plant, ensuring that emissions are minimised.

The THDF plant is designed to keep emissions to a minimum while producing 1.5-mm to 22-mm thick wood fiberboards of the highest quality. A production volume of 3,10,000 cubic metres per year is planned, and expected to be commissioned in the summer of 2022.



# Easier process to turn wood transparent

The standard procedure involves soaking wood in a vat of sodium chlorite to remove the wood's lignin, its structural component. But this process requires lots of chemicals, may weaken the wood, and produces chemical waste.

Scientists at the University of Maryland say they have come up with a new method that improves the process significantly. Instead of removing lignin

completely, the team found a way to remove only the parts of the molecules which give them colour.

The procedure results in wood that is 90% transparent and 50 times stronger than transparent wood developed under the previous method. Transparent wood would perform as a better version of glass as it takes less energy to heat and cool. It is also sturdier than traditional wood and can be used in place of less environment=friendly materials, such as plastics.

## Siempelkamp to set up plant in Russia

The Russian wood-based panel manufacturer, Uvadrev Holding, has placed an order with Siempelkamp for a new particleboard plant. It will be made up of Siempelkamp's Generation-9 ContiRoll in the format 9'x 32.1m as the core component and is designed for an annual capacity of 5,00,000 cubic metres.

With this investment, Uvadrev not only expands its production capacity but also optimises quality and manufacturing costs. This is the second project that Uvadrev and its German partner are realising together, with assembly scheduled to begin in early 2022.

At the Egger site in North Carolina (US), a green-field particleboard plant made by Siempelkamp was



successfully accepted. The scope of supply also includes two dryers made by the Siempelkamp subsidiary Büttner, as well as the size reduction technology made by the Siempelkamp.

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## Nepal Wood now in May

The 6th edition of the Nepal Wood International Expo 2021, originally scheduled for 22-24 January, has now been moved to 28-30 May this year. The show has become the platform of progress in the country and provides an opportunity for companies to showcase and learn about wood.

Exhibitors from Nepal, India, China,

Malaysia and Italy have already booked into the show, and over 20,000 trade visitors are expected to attend the event. The expo has a total exhibition area of 1,00,000 square feet.

## Hyderabad recognised as 'Tree City'

Hyderabad has been recognised as a '2020 Tree City of the World' by the Arbor Day Foundation and the Food and Agriculture Organisation (FAO) of the United Nations. The recognition is for the commitment of the

city to growing and maintaining an urban forest. Hyderabad is the only city in the country to get this recognition.

## India's largest materials mart in Chennai



From electrical, lighting and home decor, to hardware, sanitary ware and ceramic, the widest spectrum of building materials will find their own modern market at Market of India (MoI), all under one roof.

Spread over 1 million square feet, inside a

gated township in Chennai, MoI will house the largest wholesale market in India. It will easily rival Guangzhou and Shanghai, as its infrastructure is among the best in the world.

With 50+ trades, 1lakh+ commodities,

nine markets, 5,000+ units, seven large atria and a 2-acre Central Plaza, MoI is an 18-km-long trade corridor.

## 5G network at Deutsche Messe

This year, the 1.4-million-square-metre Deutsche Messe exhibition site in Hanover (Germany) will become 5G-ready. It has obtained a frequency allocation in the 3.7-3.8 GHz range from the Bundesnetzagentur (Federal Network Agency) and will set up one of the largest

5G zones in Europe.

Set up by Siemens, the network can be used by exhibitors during trade shows and, outside of trade show times, can be used by companies for tests and field trials for the use of 5G in industry.

Siemens has already installed a private 5G network on the exhibition site to highlight the advantages of this technology and to make it available to industrial users.

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# WOODNEWS

## Interzum 2021 goes online



Interzum will be taking place from May 4-7, 2021, as a purely digital event as the organisers felt that what exhibitors need now is planning certainty. With its digital solution interzum@home, the fair offers suppliers to the furniture industry and interior design sector a highly attractive platform for presenting their innovations on a digital global stage that can undoubtedly be considered state-of-the-art.

Market leaders such as Hettich, Blum, Häfele and Vauth-Sagel, have already announced that they will be presenting their new launches digitally on interzum@home. Over the next few weeks, the trade fair team will be conducting webinars with live demonstrations for various markets to present the functionalities and possibilities provided by the digital platform live.

## BIFA Wood Vietnam rescheduled

The organisers of BIFA Wood Vietnam have been monitoring the Covid-19 situation closely. With Vietnam and countries worldwide implementing various restrictions, including on travel and large-scale events, the organisers have decided to reschedule BIFA Wood Vietnam to August 18-21, 2021.

# Century Laminates Launches LookBook 2020-22

CenturyPly, one of India's leading manufacturers of plywood and laminates, recently launched its best-in-class 1-mm laminates catalogue named 'LookBook 2020-22'. It introduces 70 new designs under the theme of 'Picture Perfect Spaces'. It also showcases classy designs along with the trendiest application in interiors of residential and commercial spaces.

LookBook 2020-22 has the latest range of laminates with state-of-art Virokill technology, a protective shield of nano-particles-based, self-doctored surfaces that can physically rupture and kill viruses with 99.99% efficiency.

## New dates for PEFC competition

The dates for the World Architecture Festival (WAF) Festival has been moved from the original dates in June, due to the on-going uncertainty created by Covid-19 and will now take place from December 1-3, 2021, in

Lisbon (Portugal).

For the third year in a row, PEFC is sponsoring the 'Best Use of Certified Timber' Prize. It rewards architects and project teams for using certified timber as the main construction material for buildings outstanding in sustainability,

innovation, quality or aesthetics.

The entry deadline has moved to May 7 this year, to allow all projects completed by this date to enter the awards programme. (https://www.worldarchitecturefestival.com/ENTER)

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#### WOODNEWS

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**Editorial** 

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Located in Mysore, Karnataka and spread across an area of over 301,000 Sq.ft; Pyramid Timber Associates Pvt. Ltd., is one of India's leading manufacturers of wood based products that include Wooden Doors, Door Frames, Decorative Veneers, Finger Jointed Boards, Wall Panellings, Sawn Sizes & Exotic Table Tops.

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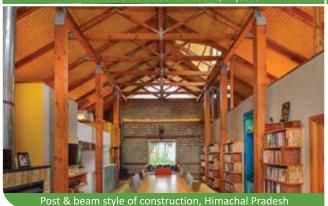


# CELEBRATING CREATIONS MADE WITH SUSTAINABLE WOOD.









British Columbia (B.C.), Canada is recognized as the global leader in sustainable forest management. Reputed woodworking professionals across the country have adopted our species sourced from these forests for a wide range of applications. These include furniture, doors, door frames & windows, wood interiors, outdoor and structural uses. We thank every hand that joined us in our efforts in promoting sustainability and wish all a very *Happy World Wood Day, March 21, 2021*.



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