

WOODNEWS

JULY - AUG 2021

Vol. 31 • No. 2



31
YEARS

Pioneer in the
service of the
woodworking
industry



NO KIDDING!

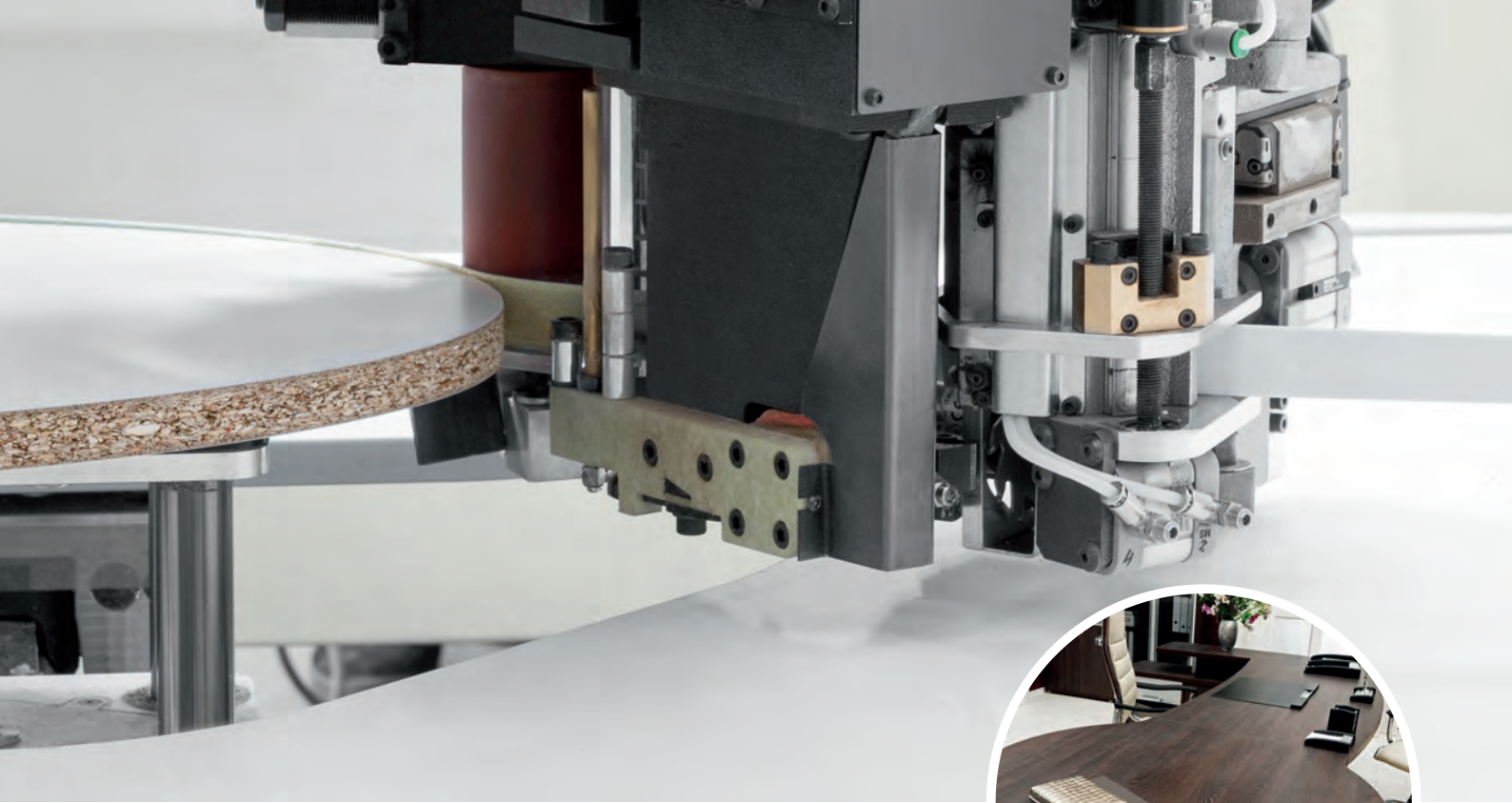
Pink Guppy shows making furniture
for minors is no child's play P.24

INTERVIEW

MTC's Roger Chin on what Indian
manufacturers can expect P.48

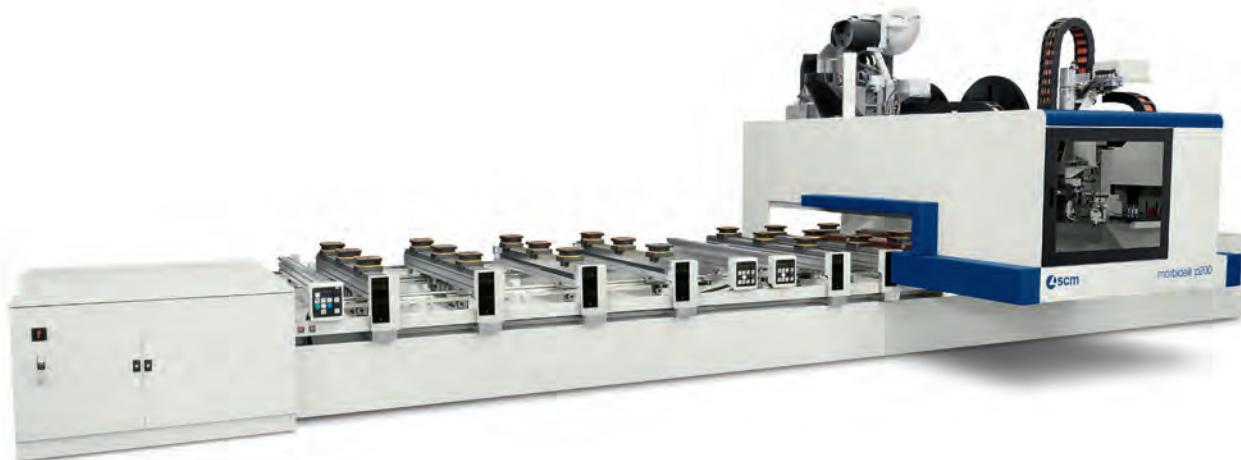
FEATURE

Moulded plywood: strength
and versatility P.54



MORBIDELLI P200 EDGEBANDING SHAPES: THE DREAM YOU MADE, NOW IN YOUR HANDS

- **First-rate edgebanding** with the most performing and compact edgebanding unit on the market able to process any type of panel
- **High flexibility:** the edgebanding unit allows the edge application on panels up to 80 mm thick
- **A single positioning and no displacement** due to HE-PODs supports which allow the optimization of the parts positioning and the tool paths
- **Free to move**, utter ergonomics and more space optimization thanks to PRO-SPACE solution without external safety fences



DISCOVER MORE



Stands out. Stands apart.



Furniture made with Western hemlock - known for its even grain, excellent machining and coating properties.

With Canadian Wood it is not just about creating great designs in wood. It is also about the overall positive impact of wood as a natural material on human health and well-being. Canadian Wood promotes five distinct species namely, Western hemlock, Spruce-pine-fir, Douglas-fir, Western red cedar and Yellow cedar.

VARIED SPECIES, MULTIPLE APPLICATIONS



Structural



Doors, door frames
& windows



Outdoors



Wood interiors

• Ready-to-use, certified lumber • Sized • Graded • Seasoned • Sourced from sustainably managed forests

It's time to UPGRADE your
factory with NITSHAW
Industrial Machines and
Software.



Solid Woodworking

Panel Processing

Surface Finishing

Automation

Representing world's best technology and process solutions in woodworking in India

Our clients are some of the best known names in the Indian woodworking business across office and residential furniture, manufacturing doors and windows, kitchen, wardrobes, interiors etc.

The vast range of Nitshaw solutions are available for **solid woodworking, panel processing, surface finishing and automation.**

Connect with us now for world's leading technologies, higher reliability, class apart finish and amazing cost optimisation.

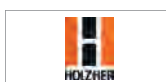
📍 #25, 2nd flr, Muthappa Complex,
60 ft Main Rd, Kamadhenu layout,
B. Narayanapura, Bangalore – 560016,
Karnataka, INDIA.

☎ +91 80 2851 0199
+91 87927 31778

✉ marketing@nitshaw.com

🌐 www.nitshaw.com

Our esteemed partners:





HOLYTEK GROUP For a long-term cooperation, trust matters.
Delivering the best value machines and services
for over 30 years.

Complete Solutions for Solid Wood and Panel Line Machinery



**High Speed
Double Surface Planer**



Straight Line Rip Saw



4 Side Moulder



High Frequency Machine



Sliding Panel Saw



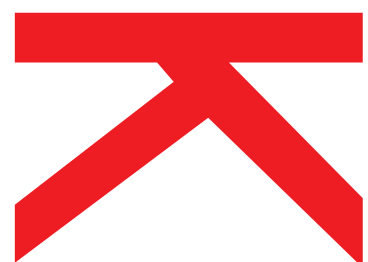
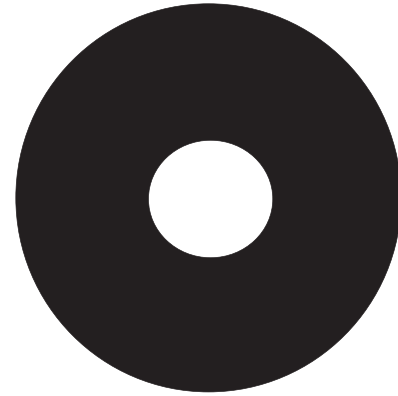
CNC Drilling Machine (Six Side Drill)



Through Feed Edge Banding Machine



**CNC Machining Center
W/Auto Loading &
Unloading System and Label Printer**



HOLYTEK
GROUP

HOLYTEK INDUSTRIAL CORP.

9F-1, No. 400, Sec. 1, Chang Ping Rd., Taichung, Taiwan E-mail: holytek@holytek.tw
Tel: +886-4-2245-2818 (Rep.) Fax: +886-4-2243-6928 <http://www.holytek.com.tw>



Holytek official website

SOLWOOD PRIME SOLWOOD INDIA PVT. LTD.
Tel: 011-47023999 E-mail: info@solwoodindia.com

GROUP

Since 1989

Contents

JULY - AUGUST 2021

10

EVENT UPDATE

CIFF Shanghai postponed to September 25

Ligna makes comeback, in digital *avatar*

Zow prepares for Feb 2022 reopening

Xylexpo teams up with Bi-MU

18

EVENT REVIEW

Canadian Wood benchmarks door solutions

Homag's concepts take on 'life'

24

COVER STORY

No kidding! Pink Guppy shows producing furniture for minors is no child's play

28

CASE STUDY

Dieffenbacher app for communication of future

ICA checkmates with 'The Queen's Gambit'

32

EDUCATION

The 'fine art' of drying timber

FFSC in overdrive to achieve Mission 2025

Skill-strapped US launches 'You Wood' project

40

DESIGN & FINISHING

Hotel's eco-credentials impress world leaders

Lamello helps craftsmen stay the course!

SmartDesks assists mobile workforce to adapt



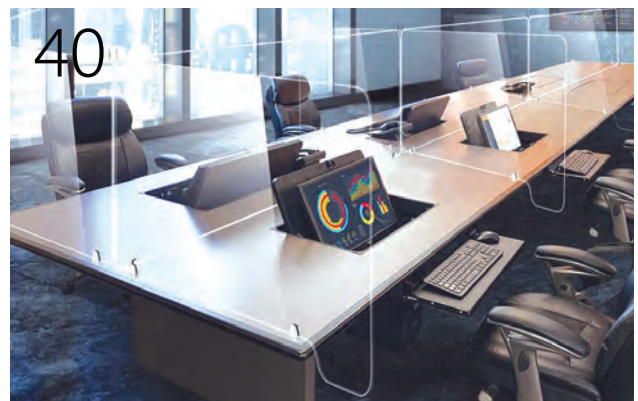
10



28



24



40

TECHNOLOGY

BIESSE.COM



Selco SK 2

SIMPLE PRECISION

Secure investment for future growth and expansion.
A reliable technology based on experience gained
with superior ranges.



Opera 5

PERFECT SURFACES

The minimum pressure means
100% quality on sanded
components.

 **BIESSE**

Contents

JULY - AUGUST 2021



48

INTERVIEW

Sawn timber catching up with log imports: MTC's Roger Chin

52

ENVIRONMENT

WWF blames EU for abetting deforestation

54

FEATURE

Fine-tuning the art of moulded plywood

Cork flooring for commercial applications

American hardwoods gain acceptance in India

66

TECH UPDATE

'Black gold' of mushrooms tamed

Scientists convert waste wood into biofuel

Robots take virtual viewing to the next level

Need for plastics reduced by natural fibres

72

PRODUCTS & PROCESSES

Blum, Halspan, Homag, Innovator, Interbuild and more...

81

ADVERTORIAL

Ebco Newsletter: Fresh Solutions

106

NOTES & NEWS

Biesse, Combilift, Dieffenbacher, Egger and others

111

MAINTENANCE CORNER

Jai Industries' Optimus 5.5P edge bander

WOODNEWS

Chief Editor | Dhananjay Sardeshpande
dhananjay@pdatrademedia.com

Chief Copy Editor | Roy Thomas
roy@pdatrademedia.com

Founding Publisher | Gouri Ramakrishnan

Founding Editor | Dr. Joseph George

President | Tony Doulton
tony@pdatrademedia.com

Executive - Media | Jyotsna Yadav
jyotsna@pdatrademedia.com

Executive - Media | Vinay M C
vinay@pdatrademedia.com

Senior Executive - Circulation/Admin | Chandrababu M
chandru@pdatrademedia.com

General Manager - Design | Infant Vikas
vikas@pdatrademedia.com

Manager - Design | Ramesha K S
ramesha@pdatradefairs.com

Taiwan, China and Hong Kong:
Robert Yu, Worldwide Services Co., Ltd., 11F-B, No. 540,
Wen Hsin Road, Sect. 1, Taichung, 408, Taiwan.
Tel.: +886-4-2325-1784 Fax.: +886-4-2325-2967
Email: erin@acw.com.tw

Printed by:
Repromen Offset Printers Pvt. Ltd., Bangalore, India.

WoodNews is published bi-monthly by PDA Trade Media, a division of PDA Trade Fairs Pvt. Ltd. Material from the magazine may be reproduced, in part or in full, only with prior permission and giving due credit to the source. Articles express the views of the authors, not necessarily those of the management. No responsibility is undertaken for the absolute accuracy of information published. All correspondence, including material for publication, may be addressed to the Chief Editor.

ISSN No. 0971-6734



PDA Trade Media, A Division of PDA Trade Fairs Pvt. Ltd.
32/2 Spencer Road, Frazer Town, Bangalore, 560 005, India.
Tel.: +91-80-4250-5050 Fax: +91-80-2551-3078

Chairman | Pradeep Devaiah

Printed by V. Krishnamoorthy, published by PDA Trade Media, owned by Pradeep Devaiah,
printed at Repromen Offset Printers Pvt. Ltd., No 46 & 47, Krishna Reddy Layout, Domlur,
Bangalore - 560 071 and published at 32/2 Spencer Road, Frazer Town, Bangalore, 560 005
Editor: Dhananjay Sardeshpande.

Official Magazine of:



• • • • •

Representative
Member for India:



www.woodnews.in

Now available online at:



Technology Category





NOW IN

XL



2800 x 1220 mm

* Limited color options

ORNARE[®]
PREMIUM HIGH GLOSS ACRYLIC PANELS

+91 880 27 27 127
info@ornare.in
www.ornare.in





EDITOR

DHANANJAY SARDEHPANDE

No child's play, and many other tales

Hello Readers,

Necessity, it is said, is the mother of invention. It can also give birth to an enterprise that finds a gap in the market. In this issue's cover story, Ms Sonal Ramnathkar, a Mumbai-based entrepreneur and Director of Eudora Enterprises, tells us how she found no players in the niche for children's furniture; how she planned and launched her Pink Guppy brand; and how safety in product design, choice of certified materials and the manufacturing processes itself is no child's play.

In this issue you will find interesting reading on how traditional carpentry is assisted by top-end technology and new-age materials to help a woodworking enterprise shine out in its preferred niche – making chessboards for export worldwide, with perfectly even surfaces, an impeccable and tactile finish, with excellent resistance to wear.

On the other end of the scale, we also present a case study of how

technology is assisting automation and off-site production management in many Dieffenbacher-installed fibreboard manufacturing lines with the help of an App.

Round and spherical wooden forms are any woodworker's nightmare. So, how can one German company have "fun" specialising in and executing such challenging projects across Europe? Even the use of clamping tools for round wooden parts is cumbersome.

But Lamello's connectors have proved particularly helpful in these projects – they are indispensable not only with classic manual machines, but also with state-of-the-art CNC technology. Read the article to find out how.

What advantages can Malaysian suppliers offer Indian importers? The COO of Malaysian Timber Council, Mr Roger Chin, answers that, and many other questions pertaining to that country's offerings in terms of sawn timber, plywood, fibreboards, veneer, architectural components, wooden furniture and flooring.

Taking of veneer, one of our articles discusses interesting design and product possibilities in moulded plywood: seats, backrests and U-shaped moulds to entire chairs fashioned from plywood! Moulded plywood is the term for two- or three-dimensionally shaped products from multiple layers of veneer, glued together through heat and pressure in a press.

Did you know that cork is 50% air? And yet it is dense enough to withstand heavy traffic and weight? Its air-filled cells provide insulation against heat and cold. Cork absorbs sound; is naturally resistant to mold, mildew and insects; and is anti-microbial too. Any wonder, then, that it has found wide acceptance as a material for flooring? Read the 'what', 'why' and 'how' on this topic inside.

In the on-going series on Technical Matters pertaining to wood, the American Hardwood Export Council's expert dwells on the 'fine art' of drying timber to acceptable moisture content levels for various commercial applications. What happens if timber is not dried correctly? Read on...

STAYING IN TOUCH

For Editorial content: dhananjay@pdatradingmedia.com, or editor@woodnews.in, or call +91-80-42505036.

For Advertising options: tony@pdatradingmedia (+91-80-42505059), or jyotsna@pdatradingmedia (+91-80-42505065).

For Circulation and Subscriptions: chandru@pdatradingmedia.com (+91-80-42505054).

Now follow us on:

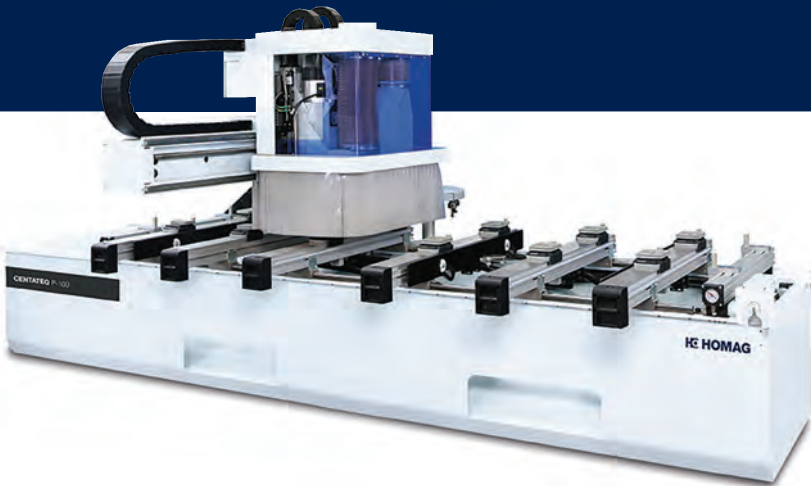


If you prefer to communicate by snail-mail, you are welcome to write to us at: WoodNews Magazine, No. 32/2, PDA House, Spencer Road, Frazer Town, Bengaluru-560005. (+91-80-42505000).

We look forward to hearing from you soon!

Skills to Complement Technology

Upskill your workforce to be a leader



Topic	Duration
woodWOP CNC Programming software	10 Hours
Cut Rite Cutting Optimization software	5 Hours
HOMAG iX CAD/CAM software	40 Hours
Edge banding & Manual multi boring	5 Days
Beam saw, Edge banding & manual multi boring	7 Days
Beam saw, Edge banding, CNC drilling & CNC router	12 Days
CNC drilling & CNC router	10 Days
Maintenance	5 Days

For details and to know more about HOMAG products

HOMAG India Pvt Ltd.

No. 7/6, Rajadhani Estate
Veerananjipura Grama, Kasaba Hobli
Nelamangala Taluk, Bengaluru 562123
Tel : + 91 80 68374545
E-mail: info-india@homag.com



Stay connected
for updates



YOUR SOLUTION

www.homag.com



At CIFF Shanghai this year, there will be over 2,000 exhibitors, occupying an area of 4,00,000 square metres, and over 1,50,000 buyers.

CIFF Shanghai postponed to September 25

18 to 21 March, 2022. The first phase will focus on home furniture, home decor and home textile, outdoor and leisure furniture. From 28 to 31st March the second phase will highlight office, commercial and hotel furniture, and furniture machinery and raw materials.

Together, the two editions involve over 6,000 of the top Chinese and international brands each year and host more than 5,00,000 trade visitors from around the world. Throughout the pandemic, CIFF has suffered no decline: the latest edition of CIFF Guangzhou reported a 20% increase in visitors!

The China International Furniture Fair (CIFF), held alternately in Shanghai and Guangzhou each year, is the country's largest and highest-level event in the home furnishing industry, playing an important role in promoting trade and boosting consumption across the globe.

The 48th CIFF (Shanghai), which was originally scheduled to be held from September 3 to 6 this year, will be postponed to September 25 to 28, 2021. However, the venue remains the National Exhibition and Convention Centre.

The 49th CIFF Guangzhou will be held in Guangzhou Pazhou from

A highlight will be the East Design Show, positioned as an 'incubation platform for young, up-and-coming designers'.





Design discussions will feature on how furniture can improve people's well-being and quality of life.

Design Show, positioned as an "incubation platform for young, up-and-coming designers", bringing the leading brands in home furnishings together with Asian designers and design schools in an exploration of the value of design.

Much space, both physical and conceptual, will be dedicated to the most advanced technologies applied to furniture and furnishings. The 4th edition of the Shanghai International Furniture Machinery and Woodworking Fair will be held in Halls 7.1 and 8.1.

For visitors who find it difficult to attend, there will be no shortage of articles, digital live-streaming programmes, and resources to make everyone feel present and central. (www.ciff.furniture)

At CIFF Shanghai this year, there will be over 2,000 exhibitors, occupying an area of 4,00,000 square metres, and over 1,50,000 buyers, mainly from China – due to the COVID-19 restrictions imposed by the Chinese government.

The 48th CIFF Shanghai will have its primary focus on the value of design and

the culture of good living, expanded and interpreted across all sectors of the fair. It will feature discussions on how and to what extent good furniture can improve people's well-being and quality of life, especially after the lockdowns during the pandemic.

A standout in this panorama is the East



Marian Service

New Ideas With Good Values

Come and See Live Demos at our Experience Centre

C/3, Industrial Park, Moula-Ali, Hyderabad. INDIA. Pin # 500 040
 Mob # +91 94414 11995 +91 77022 14357 Off # +91 8121784357
 Website: www.marianservice.in
 Correspondence : mervyn@marianservice.in
 Sales : sales@marianservice.in
 Service : office@marianservice.in

Ligna makes comeback, in digital avatar

September 27 this year will mark the launch of the Ligna.Innovation Network (Ligna.In) from Hannover (Germany), a new digital format for the international woodworking and wood processing industry spread over 3 days.

In the face of the on-going challenges posed by the global Covid-19 pandemic, this digital event, combining an expo with a series of conferences and networking opportunities, is being warmly embraced by the industry.

Companies such as Biesse, Bürkle, Dieffenbacher, Fagus-Grecon Greten, Homag, Hymmen Maschinen-und Anlagenbau, Imos, the Dresden-based Institute for Wood Technology (IHD), Leuco, Mafell, Minda, SCM, Siemens, Siempelkamp, Spänex, Steinemann, Stela Laxhuber, Weima, Weinig and 20-20 have already committed to presenting their equipment, products and innovations at the Ligna.Innovation Network.

And the motivation is clear. In a Ligna year, the industry feels the need to discuss current trends, showcase innovations and network with interested players, says Christian Pfeiffer, Global

Director, Ligna and Woodworking Shows at Hannover-based Deutsche Messe.

Raphaël Prati, Chief Marketing and Communications Officer at Biesse Group in Italy, underscores the significance of the digital format: "Ligna's success is based on its ability to adapt to changes in the industry and technological developments. The Ligna.Innovation Network is a clear example of this adaptation, and Biesse is taking the same approach."

In addition to the expo and networking segments of the event, the Ligna.Innovation Network's two-day conference programme also offers new formats for learning about the latest trends and making new contacts. One example is a series of interactive conferences that will be broadcast live from the two H'Up stages in Hall 18 at the Hannover Exhibition Centre.

Summit & conference

These events will replicate the well-known Ligna Wood Industry Summit for the primary industry as well as the Ligna.Forum for the secondary industry. The content of the two-day conference programme is based on the focal topics for Ligna.

The Wood Industry Summit Digital will focus on 'Process technologies of the bio-economy', highlighting the economic and

technical innovations resulting from new ways of working and processing wood, as a key renewable resource.

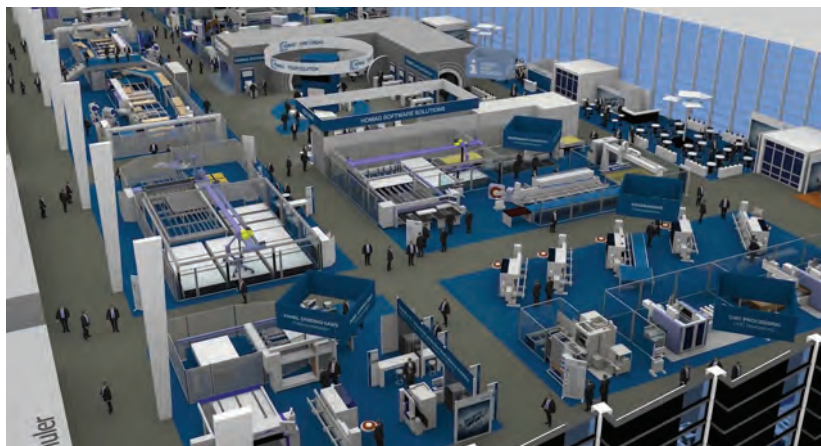
New ideas for the use of wood as a raw material, the promotion of start-up companies and the market launch of new products, the use of wood in construction, and the implementation of the first wood-based bio-refinery in Germany will be highlighted.

The Ligna.Forum Digital will feature recognised experts on the focal topics of transformation in woodworking and pre-fabrication processes in timber construction. The agenda will include presentations on robotics in the wood and furniture industry and the production of a sample piece of furniture using RFID technology.

Visitors will also be able to see how digitalization can be used to carry out project business, commercial business and contract work with the same resources, from order entry to planning, production and assembly. Trends and developments in flooring production will also be discussed.

DIPA programme

The programme for the second symposium of the Digital Printing Association (DIPA) conference has also been fixed. It will bring together international experts and users from the industry on September 29, to highlight current trends on the topic of 'Create your own Surface'.



Feature on



New Challenges
Fresh Solutions

Page No. 81

FORMAT 4[®]

TIME FOR A CHANGE. TIME FOR A TEMPORA.

Simply convincing: completely revised, solid machining units for the highest demands in a new design, a solid, heavy-duty machine base-frame as well as precise dust extraction. The m-motion and x-motion Plus control ensures highest repeatability-setting accuracy and allows you to generate individual machining programs and to minimize setup time for fast processing and material change.



**CALL NOW
FOR YOUR
SPECIAL
OFFER**

tempora F400 45.03L



FELDER GROUP INDIA
CALL TODAY FOR MORE INFO 1800 274 3040
www.felder-group-india.com



Due to the Covid-19 pandemic, the conference will be held as a hybrid event in Hannover this year. The presentations in German and English language will be translated simultaneously and they, as well as the panel discussions, will be streamed live

from the H'Up in Hall 18 at the Hannover Exhibition Grounds.

The programme begins with a session that will shed light on the ingredients required for successful digital print projects, business model, online connectivity, colour and quality

management, and print technology.

There will be presentations from Plantag Coatings, Teknos Group, Durst Group, Adler-Werk Lackfabrik, Interprint GmbH, Surteco Decor, Cefla Group, Egger Holzwerkstoffe, ColorGate Digital Solutions, Homag Group and Hymmen.

DIPA's offer is aimed at all companies involved in the value chain of an individually designed surface: from companies that already use digital printing successfully, to suppliers of machinery or consumables, to other service providers who support the creation of an optimal individual surface.

Registrations for participation in the conference, both on-site in Hanover and via live stream, are now open online. You can register at: www.dipa-surface.com

Zow prepares for Feb 2022 re-opening

The third edition of Zow – the supplier fair for the furniture and interior design industry – will take place from 8 to 10 February 2022, in Cologne (Germany) under the management of Koelnmesse GmbH.

According to representatives from Koelnmesse and event host, Messe Ostwestfalen GmbH, the Covid-19 situation will gradually ease towards 2022, making the supplier fair in February to be one of the first to allow in-person interaction again.

The next Zow is expected to be a trade fair brimming with rekindled contacts, personal face-to-face discussion, communication and the presentation of many new developments from supplier

companies – some of them long delayed.

For reasons of geographical proximity alone, Zow is of great strategic importance for a large proportion of companies operating in Germany's furniture and, in particular, kitchens industries with respect to their product innovation cycles. This makes Zow one of the most vital business platforms for central Europe in general.

By introducing a new conceptual approach, in which networking and communication enjoy the same status as the presentation of product developments, Koelnmesse has returned Zow's focus to the core factors at the heart of its success.

Next year, the fundamental concept of the trade fair will be retained, but some aspects will be significantly further developed. Experts from Ott-Design, Steinhoff and Nobilia will be on hand to support the organisers of Zow 2022, to attract new exhibitors.

In terms of content, the business event focuses on the hot topics affecting the furniture and supplier industries: digitalisation and smart living, sustainability, environment and climate, hygiene, air and water quality, mobility and logistics, as well as the continuing trend towards a fusion of interior spaces in an increasingly urban world.



Lamination & wrapping machinery

BARBERÁN SYSTEMS

for Plywood & MDF profiles



▲ Discover more about RP & PL Series

Profile wrapping machines with wooden veneer, CPL or paper, and EVA/APAO hotmelt adhesives.

panel top and bottom laminating line



Discover more about IT Series ▲

Single or double-sided assembling stations for foils, laminates and other materials in sheets

Digital printing **JETMASTER SERIES** • **TEXTURE** generation • High Gloss **COATING LINES** • Flat Lamination **SYSTEMS**

WOODTECH
CONSULTANTS PVT. LTD.

BARBERÁN Authorized Dealer

No 31/2, Nadakerappa Industrial State
Andhrahalli Main Road, Viswanedam Post, Near Peenya II Stage,
Bangalore 560091. Phone: (+91) 80 2836 4584/85
info@woodtech.in www.woodtech.in

TB BARBERÁN
Solutions since 1929
www.barberan.com www.jetmasterseries.com

Xylexpo teams up with Bi-MU

A new, big exhibition concept dedicated to manufacturing technology will be launched at FieraMilano-Rho from 12 to 15 October, 2022, resulting from a partnership between Bi-MU and Xylexpo, respectively organised by Ucima-Sistemi per Produrre (Association of Italian Manufacturers of Machine Tools, Robots and Automation) and Acimall (Association of Italian woodworking machinery manufacturers).

In times of unprecedented challenges, also for exhibitions, the two events will offer a new scenario where operators will have the opportunity to find

expertise, solutions and ideas for a common goal: producing with more and more sustainable and efficient methods, according to Industry 4.0 principles.

As reference events in their respective industries, 33.BI-MU (biennial exhibition of machine tools, robotics and automation, additive manufacturing, digital and auxiliary technologies) and Xylexpo (biennial exhibition of woodworking technology and furniture industry components) will be presented as distinct but complementary events, highlighting their respective peculiarities while leveraging every possible synergy.

This decision will expand the audience of potential visitors for exhibitors on one side (unified access to the trade fair

ground will allow them to visit both exhibitions), and on the other, it will help the visitors from the sectors of furniture, design, industrial plants, machinery for aluminium, composites and next-generation materials, interested in both events, to make the most of their trip to Milan.

Besides a wider technology line-up, visitors will have access to a rich agenda of additional events, in-depth debates on technical, technological and economic topics relevant for both sectors, through presentations, seminars and conferences.

Special attention will be dedicated to the big topics of digital and sustainability, two key concepts for the future development of the industry and the global economy. The two worlds that will meet in Milan in October 2022 have been experiencing a momentous evolution that will be visible during the joint event.

Barbara Colombo, President of Ucima-Sistemi per Produrre believes that the merger of Bi-MU and Xylexpo will help the industry represented in both exhibitions.

Advertorial

■ made
■ in
■ Germany



KLEIBERIT[®]

ADHESIVES • COATINGS

KLEIBERIT 605.1: innovative STP adhesive

Adhesives based on silane-terminated polymers (STP adhesives) create highly resilient construction joints and have become increasingly popular. The wide range of use and excellent processing properties make this adhesive technology a true all-rounder.

STP adhesives are used for a variety of industrial applications as well as for assembly (furniture) and construction (interiors), and are excellent for bonding glass or metal-to-metal.

Industrial users are increasingly relying on the advantages of modern STP technology. STP adhesives are excellent for bonding glass or metal-to-metal (stainless steel). STP adhesives are also frequently used in Bus-Truck-Rail applications. Due to its excellent resistance against weather and UV light, the STP technology is also used for wind turbines.

There are probably as many STP adhesives as there are adhesive manufacturers. As a rule, these are paste-like assembly adhesives that are offered in cartridges, buckets or drums. The comparatively broad adhesion spectrum and the high moisture resistance are a matter of course for this class of adhesive and therefore make it unique.

However, if a user is interested in a 1C STP with similar flow properties as a PVAC dispersion or a 1C PUR glue; if a user also had a need for real water resistance in addition to moisture resistance, and for high adhesive strength when wet, we found that there was no flow able 1C STP that achieved resistance class D4 according to DIN EN 204.



The Kleiberit 605.1 is a liquid 1C D4 STP and there is nothing it will not bond – except for brass, copper, PP, PE and Teflon.

Kleiberit 605.1 does not contain water. Its joints will, therefore, not shrink when setting. It does not produce CO₂ when setting. Its joint will, therefore, not expand either.

Kleiberit 605.1 does not require permanent pressure. Only a short joining pressure is required. If one is making constructive bond, then it presses according to its minimum pressing time and only transport the bonded part afterwards. A liquid 1C STP is not an instant glue.

TECHNICAL DATA

- Density: 1,4g/cm³
- Viscosity (mPa*s): ca 30,000
- Open time: up to 15 minutes
- Press time: from 30 minutes.

www.kleiberit.com



1C PUR Coating

Universal sealing of concrete, cement floor and facing or other coating applications with high resistance to water and chemicals

KLEIBERIT 555.3
1C PUR Coating

Competence **PUR**

AHMEDABAD:

M/s. M P ASSOCIATES - AHMEDABAD / Mr. Pankaj Kumar Sakalchand Patel / Mr. Minesh Patel / +91 97252 08021 / +91 97252 08023 / +91 97256 26851
pankaj@mpassociates.co.in / minesh@mpassociates.co.in

AURANGABAD:

M/s. WEKO PRODUCTS / Mr. Vijay Govindrao Borade / +91 99305 30558 / wekoworld@gmail.com

BENGALURU:

M/s. VICTORY COMFORTS / Mr. Arun Kumar / Mr. Gura Prasad / +91 94482 92444 / +91 94485 63582 / +9180222 33799 / victorycomforts@gmail.com

BENGALURU:

M/s. MEGHA PANELS Pvt. Ltd. / Mr. Manish Jain / Mr. Manoj Dugar / +91 97313 01667 / +91 97313 01669 / +91 80654 76474 / megapanelsales@gmail.com
megapanel@gmail.com;

BENGALURU:

M/s. BALAJI PLYWOOD / Mr. Varun Sihotia / +91 98867 07251 / arunsihotia@gmail.com / balajiplywood07@gmail.com;

BHUTAN:

M/s. UMA ENTERPRISES / Mr. Ashok Mittal / +91 90023 62500 / uma909@yahoo.com;

CHURU - RAJHASTHAN:

M/s. MAHAVEER CHAND SALECHA & Co / Mr. Prasant / Mr. Mahaveer Salecha / +91 83869 73533 / +91 94141 22183 / salecha_mahaveer@yahoo.in

CHENNAI:

M/s. MEGHA TRADING COMPANY / Mr. Kavin S / +91 94426 20726 / +91 42243 73559 / +91 42243 73560 / meghatradingcom@gmail.com

COCHIN:

M/s. MEGHA TRADING COMPANY / Mr. Kavin S / +91 48448 51343 / +91 94426 20726 / meghatradingcom@gmail.com;

COIMBATORE:

M/s. MEGHA TRADING COMPANY / Mr. Kavin S / +91 94426 20726 / +91 42243 73559 / +91 42243 73560 / meghatradingcom@gmail.com

COLOMBO:

M/s. LEE TRADE ENGINEERS (Pvt) Ltd. / Mr. Chaminda Disanayake / Mr. Sampath Rathnayake / +94 7762 17772 / +94 7743 71447 / chaminda12384@gmail.com
sampathrathnayake2015@gmail.com;

DELHI:

M/s. M S KLEBSTOFFE / Mr. Ashish Rawat / +91 99111 21636 / +91 99111 21736 / ashishrawat@gmail.com / info@mski.in

DELHI:

M/s. DYNAMIC POWER TOOLS / Mr. Dinesh Kumar / +91 96508 07166 / dynamicpowertools@gmail.com

GOA:

M/s. VIKAS ENTERPRISES / Mr. Kamalaksha Vasant Desai / +91 94220 59641 / +91 83225 14010 / desai@vikasenterprises.in

GUWAHATI:

M/s. TASHVI TRADING / Mr. Vinod Jain / +91 94351 11408 / tashvittrading@gmail.com

HUBLI:

M/s. VIBAGANI AGENCIES / Mr. Somashekar Balachandra Mensinkai / +91 70190 90655 / vibaginiagencies@gmail.com

HYDERABAD:

M/s. PYRAMID IMPEX INTERNATIONAL / Mr. Hussain Ali Asghar Kagalwala / Mr. Salim / +91 99894 75152 / +91 98855 15771 / +91 82979 01184
+91 88858 58184 / pyramidimpex@gmail.com / apexhardwaresolutions@gmail.com

INDORE:

M/s. D & S ENTERPRISES / Mr. Ajay Kumar Ladha / Mr. Alok Ladha / +91 94253 11239 / +91 94250 65039 / +91 73140 40800
shreejee2009@rediffmail.com / shreejeeh@gmail.com;

JAIPUR:

M/s. M P ASSOCIATES - JAIPUR / Mr. Manish Kala / Mr. Rakesh Patel / +91 99500 98023 / +91 97252 08022 / manish@mpassociates.co.in
accounts@mpassociates.co.in;

JODHPUR:

M/s. MAHAVEER INTERNATIONAL / Mr. Bhoor Chand Bothra / +91 99296 70939 / +91 29127 42468 / mahaveerinternational@rediffmail.com

KOLKATA:

M/s. ROYAL TRADING / Mr. Sanjay Shaw / +91 99037 02428 / royaltrading29@gmail.com

KANNUR:

M/s. ADI SALES CORPORATION / Mr. Pradeep / +91 98953 44484 / adisalescorporation@outlook.com

LUDHIANA:

M/s. AWAL TOOLING / Mr. Mandeep Singh Mangat / +91 95010 12365 / +91 16150 27198 / +91 82644 12365 / awaltooling@gmail.com

MADURAI:

M/s. MRI POWER TOOLS / Mr. Padmanabhan B / +91 99447 94931 / mrpowertools@gmail.com

MUMBAI:

M/s. TRISHUL TRADING CO. / Mr. Milan Prakash Bhatt / Mr. Prakash Bhatt / +91 98211 08292 / +91 93203 57219 / +91 22277 91195

Info@trishultrading.com / ttcbusiness@gmail.com

NAGPUR:

M/s. PRANJAL ENTERPRISES / Mr. Rajkumar Fattuji Dharpure / +91 93731 00887 / rkdharpure@yahoo.com

PUNE:

M/s. SHRI KRISHNA ENTERPRISES / Mr. Sankar Prasad Chettariyil / +91 81499 67968 / +91 99702 95291 / shrikrishnaenterprises.pune@gmail.com

RAIPUR:

M/s. SHREE JEES HARDWARE / Mr. Dhruv Ladha / Mr. Abhishek Thakur / +91 96300 63458 / +91 77730 14905 / shreejee2009@rediffmail.com

shreejeeh@gmail.com / dhruvladha@gmail.com

THANE:

M/s. SHIV AAKRUTI / Mr. Narottam Navji Limbani / +91 93243 87205 / info@shivaaakruti.com



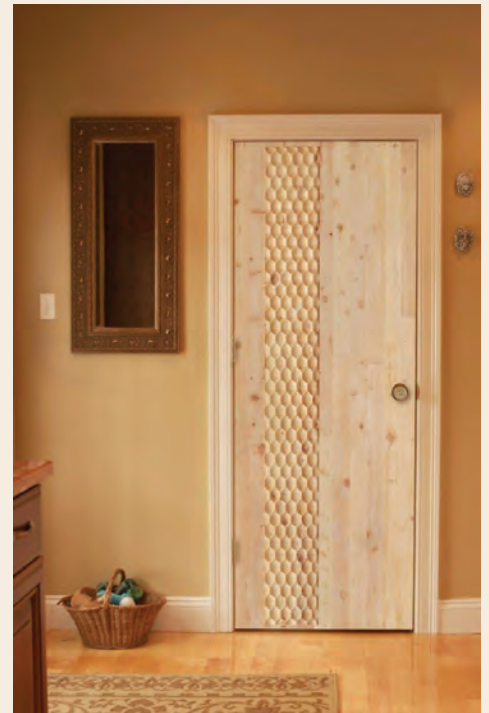
For further information please contact us:

KLEIBERIT Adhesives India Pvt. Ltd.

3 I, 3rd Floor, No. 6, Rediffice Signature, Hospital Road,
Shivajinagar, Bangalore - 560 001, Karnataka, India
Phone: +91 80 2559 6667, +91 80 2559 6669
Email: info@kleiberit.com

www.kleiberit.com

Canadian Wood benchmarks door solutions



A beautifully carved Western red cedar solid wooden door (L) compares with another door made of Western hemlock (R).

Doors and windows play a very significant role in the aesthetic, design and energy performance of any building, be it institutional, commercial or residential. In continuation with the WoodInnovations webinar series, Canadian Wood recently conducted the second webinar focused on the door industry, by emphasising its relevance to the Indian woodworking industry.

Forestry Innovation Consulting India, better known as Canadian Wood, has been actively involved in promoting the concept of

building with wood sourced from the sustainably managed forests of British Columbia, Canada.

In the doors segment, wood has been a very popular raw material, especially in the traditional and luxury markets, where it has been widely used for the manufacturing of doors, doorframes, and door jambs (*chaukhats*).

The natural warmth, elegance and beauty of wood, when used in developing doors, instantly elevates the look of a space and adds character, which cannot be replicated by any other material. As wood has been a preferred building material for doors, the next essential step is to choose

appropriate wood species, which define the price, performance and durability of the product.

While looking for appropriate wood species, manufacturers often consider the dimensional stability, screw and nail holding ability, resistance to rot, termite, and decay, suitability for carving (if needed), ease of installation, and maintenance requirements. Demand for safe and fire-resistant wood products has increased with new regulations coming for new-age constructions.

Seasoned & certified

Canadian wood species are best suited

for solid wooden doors, flush doors and door jambs with wood species such as Douglas fir, Yellow cedar, Western red cedar, and Western hemlock as excellent alternatives to hardwood species owing to their consistent high quality, durability and resistance.

Canadian wood is sustainable, certified and the wood species come in standard grades and sizes. The wood is seasoned scientifically in kilns to the right level to ensure suitability for end-use. Canadian timber has been well received as an alternative to teak and meranti, fulfilling the necessary requirements for making frames and doors.

The recent Canadian Wood webinar was driven by reputed leaders from the Indian door manufacturing industry, including Mr T.R. Krishna Murthy (E-Door Solutions, Hyderabad), Mr Jitendra Goyal (Dormak Interio, Jaipur) and Capt. Edwin Saldanha (Doors & Doors Systems, Mumbai).

The speakers presented an impressive range of doors along with the best practices and effective use of Canadian wood species for solid wood door manufacturing. An hour-long informative session also shared light on how home and building owners today are becoming experimental while choosing doors.

Yellow cedar

Krishna Murthy said E-Door Solutions had

been using Canadian wood, specifically timbers, in the manufacturing of conventional door frames for three years. Some residential and commercial developments have deeply benefited from its services.

"We discovered that Canadian wood products are both user-friendly and polish-friendly. With Canadian timber, we are developing finger-jointed, edge-laminated frames, and for panel door shutters also, we have used Douglas fir and Yellow cedar widely in our projects," he said.

"We can foresee that the game-changer in the Indian door market will be the demand for oversized entry doors. These floor-to-ceiling doors are popular among architects and interior designers and are available in a variety of styles and aesthetics," he added.

After having worked in the door industry for over 12 years, E-Door Solutions has realised that the quality of doors and the kind of finish it provides is extremely important for builders and architects.

"We have been using Yellow cedar for door manufacturing in our projects across locations. Customers have been appreciative of Yellow cedar as it furnishes a pigmented view of doors, and is indeed delivering good results," Krishna Murthy added.

Fire doors

According to Jitendra of Dormak Interio, Canadian wood species have been known for great quality, longevity and stability. "From a design development perspective, dowel joint has become very prominent in the market, followed by the evolution of fixing method of the doors," he said.

Capt. Edwin of Doors & Doors finds Western hemlock and Douglas fir best suited for internal and exterior door frames. "We have test certificates for 60-minute fire door and frame with Douglas fir. We want to have 120-minute test certificates in the future. We look forward to lighter fire doors made of Canadian wood species," he said.

Commenting on the door industry, Mr Pranesh Chibber, Country Director, Canadian Wood, said: "The availability of sustainably sourced and certified wood is encouraging industry professionals to make a responsible choice. Manufacturers, developers and architects in the hospitality and real estate industry are looking at building villas, country homes, farmhouses and resorts with Canadian wood species."

India is witnessing an increase in consumer spending on the construction and renovation of commercial and residential buildings. "We're optimistic that this market demand will drive Indian doors market growth. We see increased adoption of appropriate species, techniques and hardware by wooden door manufacturers in India," he said.



A Yellow cedar entrance door (L) and another made from Douglas fir.

Homag's concepts take on 'life'

Pix courtesy: Homag Group AG



SawTec B-130, the smallest Homag saw, can be equipped with a cutting length of 3800 mm.

B-300 with storage system StorTec S-200, or the robotic SawTec B-300 FlexTec and SawTec B-320 FlexTec), basic equipment or with customized extras: Homag showed how customers can process their panel cutting orders with greater flexibility, faster and more economically. ▶

Live.Homag, a virtual event concept that enabled greater connection by using webinars, live demonstrations and personal conversations, was organised by the company recently, culminating on June 10, 2021.

The digital events were broadcast live from Horb and Holzbronn (in Germany) to provide attendees with first-hand information about Homag solutions, machines, plants, production technologies, concepts and software.

Homag wants to support all woodworkers in their day-to-day workshop tasks, with practical digital assistants to make tasks easier. Here we present some more of Homag's solutions highlighted at the event.

Which saw best fits your production requirements? What support do Homag saws provide in times of shortage of skilled workers? And what role does the end-to-end data integration have from planning work and material storage to cutting and stacking? These and other questions were answered at Live.Homag.

Customers learnt everything about panel saw sizes, from S to XXL.

Whether single saws (SawTec B-130 and SawTec B-200) or saw cells (SawTec

The SawTec B-300 FlexTec saw can be operated manually, but a fully automated batch-size-1 cutting process is also possible because of the integrated robot.



THINK WEINIG



WEINIG OFFERS MORE



Contact Details
MICHAEL WEINIG ASIA PTE LTD
Tampines Biz Hub #04-08
11 Tampines Street 92
Singapore 528872
www.weinigasia.com
Phone +65 6758 5178 Fax +65 6758 4691

Dayanand Bhat, Cell: +91 9341815210
E-Mail: dayanand.bhat@weinigasia.com





Each TransBot can carry 1,200 kg, detect people and objects in its travel path, and travel at up to 60 metres per minute.

The focus was not only on cutting, but also on simplifying the upstream and downstream processes, thereby optimising the smooth flow of parts. The intelligently integrated Homag software solutions were also discussed to demonstrate lean processes and maximum material utilisation.

Simply efficient

It starts with the SawTeq B-130 that costs a little more than a well-equipped sliding table saw, while providing a much more precise, efficient, ergonomic and safer cutting process.

In addition to the standard of 3200 mm, the SawTeq B-130 is now available with an optional cutting length of 3800 mm. This means that, if required, larger panel formats can be easily and conveniently processed on the entry-level saw.

A further benefit is that, with a cutting length of 3800 mm, the SawTeq B-130 can also be equipped with Easy2Feed for automatic feeding. To enable this, a scissor lift table is integrated in the rear machine table, which can be conveniently loaded with entire panel packages from the rear machine area to ensure a better work-flow.

To ensure an intuitive and faultless cutting process, the SawTeq B-130 is already available with the intelligent intelliGuide basic operator guidance. In addition, customers can look forward to the SawTeq B-130 and SawTeq B-200 being a highlight at Ligna!

Storage integration

The SawTeq B-300 with automatic storage system integration goes a step further. Customers saw a complete version boasting numerous extras for high material throughput and ergonomics.

These include the StoreTeq S-200 automatic storage system, an integrated pre-stacking table with panel labelling system, Power Concept professional, the fully equipped intelliGuide professional operator assistance system and the Lite de-stacking module.

Maximum flexibility is one of the most important skills in woodworking shops. Many batch-size-1 orders are on the agenda, which must be processed as automatically as possible.

Another situation may require series production jobs, with large batch sizes in a package. And in between there are always express jobs. So, what a benefit it is that Homag offers, in the SawTeq B-300 FlexTec, a saw that covers the entire range of requirements.

The saw is equipped with an industrial robot that completes cutting in batch-size-1 over long lines completely

autonomously — up to 800 parts are produced per shift. If required, the operator can simply switch the saw to manual operation.

Driverless fleet

Logistics tasks between processing machines, cells or even manual workstations are handled automatically by the TransBot vehicles from Homag. The robot navigates freely around rooms, without needing any aids such as rails or tracks.

The entry-level solution scores with simple operation and does not require a higher-level control system. The vehicles are navigated via a tablet or the operating terminal on a Homag processing machine.

Intelligent fleet management ensures a smooth workflow. If changes are made in the production process, such as adding new machines, the travel paths in fleet management can be effortlessly adapted to the new conditions.

The transport vehicles can also be easily and retrospectively integrated into an existing production facility. Companies also benefit from less time spent searching and picking. The material provision is demand-based, errors are significantly reduced and quality costs are also lowered.

Hammer®

CNC CREATIVITY

THE NEW HAMMER CNC-ROUTER, COMPACT AND PRECISE

The new Hammer CNC makes the world of CNC-routers affordable for everyone. Ideal for demanding do-it-yourselfers, ambitious model makers, quality-conscious small-series manufacturers as well as training facilities and schools. The HNC 47.82 removes the limits of manufacturing possibilities and impresses with its Austrian mechanical engineering quality.

<http://fg.am/hnc-us>

Watch our exciting new CNC videos!

- ▶ CNC-router for unlimited creativity
- ▶ Testing the new CNC machine in model making
- ▶ Technical data and precision check
- ▶ Commissioning and first steps
- ▶ DIY Project High-End Jazz Bass Guitar



Call now
for special
introductory
pricing



FELDER GROUP INDIA
CALL TODAY FOR MORE INFO 1800 274 3040
www.felder-group-india.com

No kidding!



Child health and safety and easy functionality are primary concerns for Pink Guppy when designing and manufacturing furniture for them.

For want of a safe and durable baby's crib, an entire children's furniture line was born! Ms Sonal Ramnathkar, Director of Mumbai-based Eudora Enterprises, tells Dhananjay Sardeshpande what makes her Pink Guppy brand unique, and how making furniture for minors is no child's play.

A friend's quest for a safe and durable crib for her expected baby sent Sonal, a Mumbaikar, on a frantic search for one in the southern quarters of the metropolis. She came across some wooden ones with shaky joints, some with paint peeling – and even one whose bottom gave way during inspection!

Sonal had not factored all this: with a burgeoning population, most of it taking root in urban conglomerations, she had expected a wide variety of options. What she got was unreliable pieces lying in dusty and dark corners and attics of some stores.

She realised that traditional Indian ways of welcoming a baby into an extended family – with grandmas, live-in in-laws, aunts, nieces and domestic help to care for the newcomer – defeated the purpose of having cribs and separate beds for infants. But there were other thoughts that nibbled away at her brain.

"We are no longer living with our parents and in-laws. In nuclear families, it is essential to have safe cribs for the mother to settle her child in when she attends to domestic chores and her daily ablutions. And these days many mothers also attend to work calls and matters of career!" she notes.

That sowed the seeds of launching a separate brand of children's furniture for the Indian market that had, until then, little or no options. She first approached many furniture manufacturers, but they made cribs without accompanying mattresses, safety barriers or soft padding.

"I found that furniture manufacturers in Rajasthan were not ready to match my specifications. Chinese suppliers, on the other hand, demanded huge volumes in order to make furniture for me," she recalls.

Safety first

Sonal's family has been in business, with offices and markets in India and abroad. That, combined with her own background in banking and shipping, pushed her to start her own brand, Pink Guppy, with a manufacturing facility in the industrial town of Nashik (Maharashtra) in 2012.

All Pink Guppy furniture is modular (knock-down) in construction, with interlocking joints to minimise the use of screws. All mothers have safety on top of their minds; so it was natural for Pink Guppy to adopt strict safety guidelines in design and construction.

The implementation of norms laid down by the US Juvenile Product Manufacturers' Association, and the California Air Resources Board (for VOC-free panels and paints) was a logical progression for Pink Guppy furniture.

Besides, Eudora Enterprises also maintains international global safety standards for children, as recommended by the American section of the International Association for Testing Materials.

The solid wood components in the range of children's furniture – convertible cribs, cots, bunk-beds, wardrobes, desks, table-chair sets, study tables, dressers – are mainly fashioned out of beech imported from Germany. Most panels (mainly MDF) are sourced from a multinational supplier based in Belgium.

The choice was natural, according to Sonal. "The beech we get is a kiln-dried and certified hardwood that has good screw-holding capacity. It is not brittle and, what is more, it can be steam-bent to suit our designs and manufacturing requirements," she says.

The sources for both are certified for sustainability and legality by the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC).

Design essentials

"Every child is a miracle capable of great invention and creativity. They are completely open to learning from and adapting to their environment. I believe

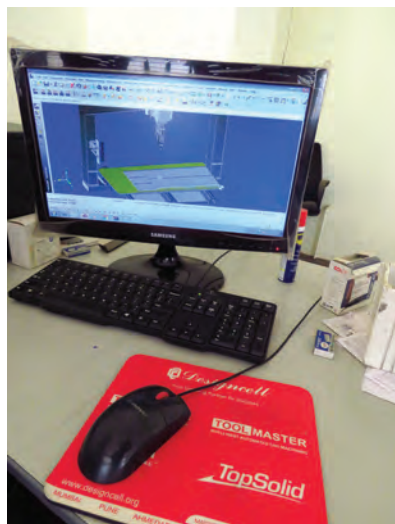
an aesthetically creative and stimulating environment leads to greater development of the child's mind," says Sonal.

This belief forms the foundation of Pink Guppy's design effort. "An eye for detail helps my designers to create a balance between furniture, room spacing, colours and accessories. We want to deliver a perfect environment for every child to grow up in," Sonal says.

Apart from her Mumbai-based design bureau, Sonal has taken care to employ trained people to run her enterprise resource planning resources, factory and machine operators and CNC programmers, including at least one wood expert from the Forest Research Institute, Dehradun.

Pink Guppy is not about furniture alone: it designs and sources customised bedding, sheets, quilts, pillows, carpets, curtains, lights, wallpaper, even soaps and toiletry for children. Its 4,000-square-foot Pink Guppy store in Mumbai is a one-stop-shop for anything required in a child's room!

Adding to automation in design and manufacturing, Pink Guppy designers in Mumbai now have the state-of-the-art CAD/CAM from France's TopSolid (L), while the Eudora factory in Nashik boasts of a 3-axes CNC router from Thermwood (R).





The semi-automated painting booths at the Nashik factory are another important asset.

Apart from children's furniture, Eudora Enterprises has catered to furniture for home and office spaces too, also under the Pink Guppy brand. Sonal has supplied to top companies in the shipping, aerospace, medical and energy sectors. Its 600-odd designs and products are now also available on important furniture e-commerce portals such as PepperFry, FlipKart and Amazon.

Factory fundas

In the factory, the usual woodworking machines from Indian and foreign suppliers are all lined up for various jobs: from

panel saw, planer and thicknesser to spindle moulder, multi-boring machine, CNC lathe and routers.

But there are cherries for topping: a 3-axes CNC router from Thermwood, a semi-automated spraying booth that imparts the special and superior finishes to all furniture manufactured there, and infra-red drying ovens. Low-VOC paints and stains are imported from Italy.

In 2014, Eudora Enterprises contracted Mumbai-based DesignCell CAD/CAM Solutions (www.designcell.org) to buy, install and train employees on the state-of-the-art CAD/CAM software from the French expert, TopSolid – the latter even supplies software suites to Airbus

Industrie, manufacturer of large commercial aircraft.

According to Sonal, there is minimal intervention after the product designing stage because the TopSolid Wood software automatically and correctly interprets all machining operations. "This means what you design is what you get, irrespective of the scale of manufacturing," she emphasises.

It helps in planning of material, components, fittings, accessories and machining requirements, along with accurate estimates of production costing. Apart from the efficient use of materials, TopSolid Wood executes accurate joinery, precise application of adhesives and replication in scale. "It is a great interface between designing and manufacturing," Sonal says, vouching for the software suite.

Low-VOC paints and stains are imported from Italy for the superior finish imparted to all Pink Guppy products.



SOPHISTICATED EDGEBANDING TECHNOLOGY FOR THE TRADE.



Maximum performance:
The Altendorf F 5 is
the solution for edge-
banding in demanding
workshop operations.



Top rate technology for complete
edgebanding: The Altendorf F 4
produces completely finished edges
on space-saving 4 m machine length.



Safety and ease of operation:
Reduced to the essentials, the
top 2000 plus has proven itself
in workshops all over the world.



Powerful and robust: Developed for the
highest demands, the K 36 represents
absolute reliability and productivity in
daily use.

More and more owner-run trade operations are being won over by the sophisticated engineering, precise edge processing and convenient operator controls of Altendorf's edgebanders. Optional specification elements can be added according to the individual requirements. Altendorf edgebanders are thoroughly practical solutions made in Germany and combine excellent performance with unbeatable quality.

Altendorf India Pvt. Ltd.

No: 1427/1 · Hennur Main Road · Kacharkanahalli · Bangalore 560084 · India
Phone +91 80 25447291 · sales@altendorf.in · www.altendorf.in

 **ALTENDORF GROUP**

'Communication of the future'

Django Ornek using MyMessenger at Polytec's composites plant in Roosendaal, the Netherlands.



Two Dieffenbacher partners share their views on trouble-shooting app, MyMessenger

Introduced at Ligna 2019 (Hannover, Germany), Dieffenbacher's MyMessenger ticket and messaging app has proven its benefits for customers from the wood-based panels and composites industries for two years.

Sukanya Huangdee, Project Coordinator and Logistic Officer at Thai fiberboard producer SKN, and Django Ornek, Head of Technical Department and Process Engineering at Polytec Composites

NL in Roosendaal, the Netherlands, use MyMessenger and report about their experiences with the app.

"I use MyMessenger at least once a week. It's un-bureaucratic and informal, and that makes communicating through the app fast and easy," says Django. "We all get way too many e-mails every day, and it takes so much time to discuss things by e-mail."

In Django's opinion, e-mail should only be for formal communication – such as requests for quotations, cost discussions

and information about important decisions. "For everything else, it's more efficient to communicate in an informal way, as we do with MyMessenger. That's the communication of the future," he says.

Sukanya agrees. "For trouble-shooting, which we mainly use MyMessenger for, it's so much more convenient than e-mail," she says. "If we have a problem, we just open a ticket. We no longer have to think about whom to contact for which kind of problem, because all the Dieffenbacher experts can see the ticket and they will choose the right one to support us."

She sees that somebody at Dieffenbacher takes responsibility for the ticket responds with appropriate feedback right away. "MyMessenger helps us solve urgent problems very quickly," Sukanya beams.

An SKN real-life example shows how MyMessenger taps expertise at Dieffenbacher's headquarters in Germany and at local offices around the world. "We had some issues with a gearbox at the diagonal saw, so I opened a ticket, described the situation and added pictures and a video," Sukanya explains.

"The regional service team at Dieffenbacher (Asia-Pacific) in Kuala Lumpur took over the ticket and also included a technical engineer from Dieffenbacher Finland, whose advice ultimately helped us solve the problem," she recollects.

In contrast, at Polytec, Django uses MyMessenger for planned projects such as machine repairs or modifications, rather than troubleshooting.

"Everybody at Dieffenbacher and Polytec knows the status of the project at any time. Short questions and answers are exchanged within minutes, and if

unforeseen issues occur they are addressed immediately," he says.

"Communication improves a lot through the app. I strongly believe that some of our past projects wouldn't have run as smoothly without MyMessenger," Django says.

What is more, he believes that communication via MyMessenger is friendlier due to its informal character. "The app has a positive impact on our cooperation and strengthens our partnership with Dieffenbacher," he says.

Django sees additional potential for the app. "MyMessenger is also a great documentation tool. You can always review past tickets and learn from problems that have already been solved.

"I think of the regular meetings we have with Dieffenbacher every quarter. Wouldn't it be great to have everything that's discussed in these meetings and every other aspect of our cooperation

included in MyMessenger? That would give us the perfect overview of all topics and their current status," he adds.

Dieffenbacher's MyMessenger is a combination of a Fticket system and messaging application for smartphones, tablets and desktops. Service cases can be quickly processed and documented, with users communicating with each other in the same app.

Pictures, videos and documents can be exchanged to facilitate documentation and understanding. Another advantage is that users write in their native language and let the app take care of the translation. MyMessenger is available for every new and existing Dieffenbacher plant.

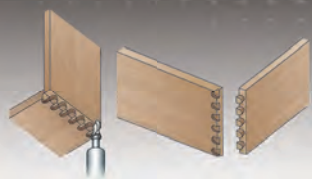


YOW CHERNG MACHINERY CO., LTD.

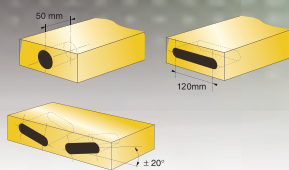
No. 41, Ln. 168, Fuzhuang St., Shen Kang Dist., Taichung City 429, Taiwan

Tel: +886-4-2563-3967 / 2563-3863 Fax: +886-4-2563-3770

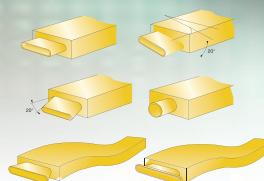
E-mail: yowcheng@ms15.hinet.net <http://www.yowcherng.com.tw>



YC-480 / YC-480A
Continuous Dovetailer



YOM-120
Oscillation Mortiser



YRT-115
Rectangular Tenoner



YC-TF7
CNC Automatic Milling
Tenoning Machine

Taiwan-made Products !

WOODTECH

WOODTECH CONSULTANTS PVT. LTD.

31/2, Nadakerappa Industrial Estate, Andrahalli Main Road,
Near Peenya II Stage, Vishwanedam Post, Bangalore, 560 091.

Tel.: +91-80-2836-4584/5 Fax: +91-80-2836-1166

Email: info@woodtech.in Website: www.woodtech.in



ICA checkmates with 'The Queen's Gambit'



Rechapados Ferrer has produced, amongst many other products, the chessboards for the hugely popular series The Queen's Gambit.

Rechapados Ferrer chessboards, finished with ICA coatings, are now more famous than ever, after being selected to appear in *The Queen's Gambit*.

You will have heard of *The Queen's Gambit*, the mini-series distributed by Netflix, which has engrossed huge numbers of viewers, especially those gripped by the intriguing world of chess.

Many of the chessboards that you see in the series (including those used in the final match) were created by Rechapados Ferrer and coated with ICA Group Iridea coatings. Rechapados Ferrer has been producing wood veneers since the 1950s.

It all began in La Garriga, just

outside Barcelona, Spain. This small municipality is where Rechapados Ferrer was founded, specialising in wood veneers and starting its business working for furniture manufacturers and carpenters.

At the start of the 1960s, the company decided to also design and produce its first chessboards, creating a collection and taking orders for custom products. And demand just kept on growing.

Today, Rechapados Ferrer is one of the leading exporters of chessboards in the whole world, manufacturing thousands of units every year that travel across Europe, the United States, Canada, Australia and Japan, to finish in the hands of the most dedicated chess players.

What do the most demanding players want from a chessboard? Quite simply:

perfection. This means perfectly even surfaces, an impeccable and tactile finish, with excellent resistance to wear.

To guarantee all of these qualities, Rechapados Ferrer has chosen ICA Group Iridea UV-curing coatings, with a matt, anti-reflection finish that will not strain the eyes during the game and a silky effect that makes play even more enjoyable.

"Since founding our business we have always striven to achieve excellence in our products. The chessboards that we produce are the base of every game and, along with the pieces, offer the perfect result," says Mr David Ferrer, General Manager of Rechapados Ferrer.

"ICA Group coatings have enabled us to reach our quality goal and we have been rewarded with this prestigious recognition: our chessboards have been chosen for many of the games in the excellent Netflix series," he says.



Perfection in chessboards means perfectly even surfaces, an impeccable and tactile finish, with excellent resistance to wear.

For chess players, the game is truly ceremonial. The chessboard is the centre of this and it must be impeccable. In this

constant search for perfection, ICA is particularly proud to have been chosen for the high standard of its products.

The chessboards are made with Mahogany, Walnut, Sycamore, Rosewood and Wenge.

ICA Group has always been able to guarantee high standards in terms of its short lead times and on-time deliveries, thanks also to its innovative infrastructure and logistics.

At its production plant in Civitanova Marche, Italy, the manufacturing cycle is highly automated, using computerised systems that ensure perfect replicability of the production recipes, precision weighing of the different substances involved in the production cycle and maximum safety in the handling of dangerous substances.

Once the production phase has been completed, tests are conducted on each batch in order to verify that the product corresponds to the stated requirements. If the coating passes these quality-control tests, it is ready to be filtered and packaged for sale.

MASTER PIECES FROM TAIWAN FOR BOTH SOLIDWOOD & PANEL INDUSTRIES

CE
APPROVED 認證合格



DET-2000-E6
DOUBLE END TENONER
(Plus Auto. Feeding Machine)

Perfect trimming cut for wood block & narrow panel.



DET-4000-L6
DOUBLE END TENONER

Special machine for CLT material such as flooring, ceiling and wall panel. Max. working width up to 6,000mm or more.



SD-550P
AUTOMATIC EDGE
BANDING MACHINE
FOR SOLID WOOD
Max. Edging Thickness
up to 25mm



The 'fine art' of drying timber

American hardwoods tend to be kiln-dried to around 9% moisture content; European hardwoods at around 12%.



NEIL SUMMERS

In the last issue of Technical Matters (*WoodNews*, May-June 2021), we discussed the complex relationship between moisture and wood, and the need to dry wood to an acceptable moisture content level so that it can be used for commercial applications. Today we will focus on how timber is dried and also on some of the complications that can arise if timber is not dried correctly.

The simplest method of drying timber – and still probably the most common method of drying timber found in India today – is air drying. As the term implies, this method relies on the naturally

occurring atmospheric conditions to dry the moisture out of the wood.

Until the fairly recent development of modern steam kiln technology, this was the only method available for drying timber and it worked satisfactorily for most applications. All that air drying really involves is stacking the cut boards of timber in a pack with sticks placed horizontally between each layer to allow the air to flow over all of the surfaces of the boards.

And that's about it: a cheap and simple way to dry timber!

Air-drying cons

Air-drying does, however, have its drawbacks. It is not an exact process and

relies solely on natural atmospheric conditions. A long, hot spell in the Indian sun can have the effect of drying the lumber too quickly, while a prolonged period of rainy weather can delay the drying process.

This can also affect the final quality of the timber. It also takes quite a long time to dry timber outdoors, even in a hot country like India, and particularly with thicker stock material.

As a general rule, oak takes a year per inch of thickness to air-dry. So it will take 3 years to properly air-dry a 3-inch-thick oak board!

Another issue that has been more recently encountered is the introduction of air-conditioning in buildings, which can have the effect of drying the timber out while it is in service to a lower level than the

YOUR PERFECT COMPANION FOR FLAWLESS EDGE BANDING.

Presenting the New Modula
Edge Banding Series,
a one of kind machines with the
power of performance and precision.



Made in India. Made for India.



Timber is never completely dry, but should be at the right moisture content for its intended application.

natural moisture content level achieved by prior air-drying outside.

I wrote about this in the previous article, where timber is always trying to find its equilibrium moisture content (EMC) in its surrounding environment.

This is where the modern-day method of kiln-drying has the benefit of being able to dry timber down to a low enough moisture content level to suit the modern indoor building conditions without causing any problems such as shrinkage or distortion.

Just how 'dry'?

But the term "kiln-dried" can be misleading to the uninitiated, as it can lead to the understanding that the timber that comes out of a kiln is 'dry'. To a degree it is, but it is

never completely dry, and it should be at the right moisture content for its intended application.

American hardwoods tend to be kiln-dried to around 7% to 9% moisture content, which is ideally suited to interior use. European hardwoods are slightly less dry, at around 10% to 12% moisture content.

Modern-day kilns are usually very large chambers, capable of drying big volumes of wood at a time to make the process economical. In layman's terms, they are really a warm and damp shed.

The kiln drying cycle, or 'schedule' as they are called, begins by placing the timber in the chamber. In the case of American hardwoods, this may have been previously air-dried, depending on the timber species and the thickness.

The kiln is then gradually heated up while a high level of humidity, in the form of

steam, is introduced. This is so that the cells on the outside of the boards do not lose their moisture too quickly and dry out too soon and potentially trap moisture inside the board, which could lead to irreversible damage to the timber.

As the process continues, the temperature is gradually turned up and the level of humidity is reduced, which encourages the moisture in the middle of the boards to migrate to the surface and then evaporate.

Pest riddance

Over many years' experience by kiln manufacturers and operators, different kiln schedules have been developed for different timber species, as not all of them dry at the same rate. Lower density hardwoods, such as American tulipwood, dry much faster than denser species such as American red or white oak.

Even with kiln drying, it is impossible to get each board in the drying chamber to exactly the same moisture content and, therefore give a single value, so the moisture content is provided in a range usually +/- 2% of a central figure. For American hardwoods, this would be 8% +/- 2%.

The drying process is also a significant contributor to the final cost of the imported timber, so it is a fine art to get the timber dried correctly, but at the same time, efficiently. All American hardwoods are exported kiln-dried, unless otherwise specified.

Shipping un-dried timber means shipping more moisture and less wood, and can lead to a whole host of other, unwanted, issues when the wood arrives at its final destination.

The kiln-drying process is also a way to ensure that any pests in the wood are destroyed. Ordering kiln-dried American hardwood lumber is one more way to ensure that what arrives is ready-to-use without further treatment.

Modern-day kilns are usually very large chambers, capable of drying big volumes of wood at a time to make the process economical.



– The writer is a Technical Consultant with the American Hardwood Export Council. For more information on American hardwoods and to download the latest publications and industry facts, visit www.americanhardwood.org.

CABINET VISION

The complete solution for the casegoods industry

From cutlists, renderings, shop drawings, bidding and pricing, to CNC output, CABINET VISION makes the easy jobs simple and the complex ones possible.

- Custom cabinet & room designs
- Photo realistic renderings
- Material Optimisation
- Full costing direct from design
- Cutlists & bill of materials



Hexagon Manufacturing Intelligence c/o Vero India Software Pvt. Ltd.

1st floor, B wing, 101-105, Sai Radhe, Kennady Road, Adjoining to Hotel Grand Sheraton, Pune,
Maharashtra, 411001 | Email: rahul.mallikar@hexagon.com | moazam.ahmed@hexagon.com |
ashwini.bobale@hexagon.com | Mobile: +91-7722049967 / 8329141885 / 9845198874 | hexagonmi.com

FFSC in overdrive to achieve mission 2025



**FURNITURE
& FITTINGS
SKILL COUNCIL**
कुशल • सक्षम • आत्मनिर्भर

The Furniture and Fittings Skill Council (FFSC) celebrated its 6th Foundation Day on 10 July, 2021, through an online event to recognise what has been achieved, explore what lies ahead and launch new initiatives to empower the council for future opportunities.

Over the past 6 years, FFSC has created a first-of-its-kind skilling ecosystem for the furniture and allied industry with the support of over 70 stakeholders, including industry partners, academia, associations and engagement partners.

Twenty-two job roles, aligned to the National Skills Qualification Framework (NSQF), created a benchmark of the industry's quality workforce and drove the skilling initiatives.

FFSC training programmes have impacted more than 2 lakh candidates across India. A pool of around 180 certified trainers and assessors in over 40 training centres across the country and a pool of Skill Ambassadors has helped FFSC achieve this milestone.

The focus on demand-driven skills training and apprenticeship are the critical aspects of FFSC's roadmap ahead.

New identity

With the 'Azadi ka Mahotsav' theme and a new brand identity and logo, the organisation plans fresh initiatives aimed at moving ahead in its mission to skill, reskill and up-skill 5,00,000 aspirants by year 2025-26, and build a 'Kushal, Saksham, Atmanirbhar Bharat (Skilled, Capable and Self-reliant India).

Speaking at the event, Mr. Anil Goel, Chairman of FFSC and Managing Director of Hettich India, emphasised the importance of skill, reskill and up-skill in terms of the changing landscape of the industry and the emerging trends in the sector.

Mr. Rahul Mehta, FFSC's Chief Executive Officer, appealed to the industry and skilling partners is to make the most of the opportunity to strengthen the training infrastructure and ensure quality skilled capital by collaborating and contributing via the FFSC regional skill chapters and industry-led skill academies.

Mr. Narsi Kularia, Co-Chairman of FFSC and Managing Director of Narsi Interior Infrastructures, focused on the importance of industry players from all segments coming together to be a part of the skilling initiatives to take forward the 'Skill India' vision.



Key initiatives

Highlights of the goal-based key initiatives that were launched include:

- FFSC Regional Skill Chapters (FRSC) to be formed to understand the industry's skill gap at the regional level and provide skilling solutions locally. FRSCs will be built on a hub-and-spoke approach, comprise of OEMs, raw material suppliers, machine and hand tool suppliers, interior designers, institutions and social help groups.
- FFSC Skill Pavilion will have the dual identity of FFSC's headquarters and India's model skills training academy for the sector. It will support and facilitate conducting of training-of-trainer and training-of-assessor programmes.
- Subject matter experts will act as trainers, assessors and workshop managers to help FFSC conduct customised training for higher-level job roles.
- FFSC will kick-start a Furniture Skills Global Conclave in August 2021 with various events, culminating in the finale in August 2022.



Spray Technics

Estd:1996

AN ISO 9001:2015 Certified Company

REVOLUTION IN FURNITURE PAINTING



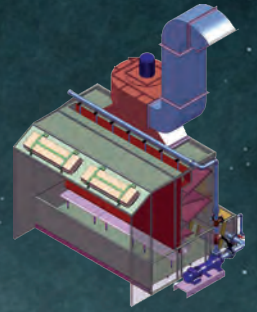
Sanding Wall



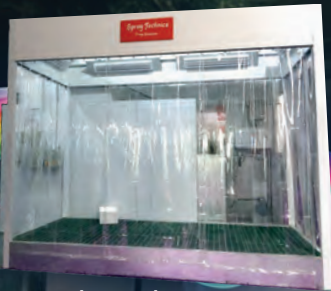
Open Dry Booth



Sanding Table



Wet Spray Booth



Wood Sanding Station

Advantages

- Power Saving
- Considerable Fuel Saving
- Soft Start
- Optimize Filter Life

Special Features

- Fire Retardant filters, Insulation & wiring
- Step Down Transformer, 24V control Panel
- Over & under voltage Protection
- Over pressure release Mechanism
- Safety Thermostat
- -ve pressure Cut off Switch

Introduces Inverter Technology

Professional Spray Booths, Ovens & Pre-painting Stations

- Leading Manufacturer & Supplier of spray booths, ovens & Prep Stations.
- Over 4500 installations across India & abroad.
- Approval from all major Paint Manufacturers.
- A state-of-the-art Manufacturing Facility.
- Fully Automated setup using most upto date total CNC Machines.
- Installations at major Furniture Manufacturers.

Spray Technics

ATUL KUMAR PESHAWARIA,
PLOT NO. 49 & 50, TOYCITY, ECOTECH-III, GREATER NOIDA, U.P-201306,
MOB: +919810154076, TELEFAX: +91120-2397019, MAIL ID: info@spraytechnics.com

www.spraytechnics.com

Skill-strapped US launches 'You Wood' project



Sarah Provard attended wood shop class in high school in West Jordan, Utah. Today, she is a high school graduate with more than US\$ 1,750 in prize money for her woodworking accomplishments, plus new educational and training opportunities to hone her skills.

The Wood Industry Resource Collaborative (WIRC) in the United States has announced the launch of an industry-wide career awareness campaign, 'You Wood', to attract young people to careers in furniture-making and panel production, which has long been a challenge.

Developed by several industry trade associations led by AWFS, WMIA, and WMMA, in partnership with Nashville-based Industrial Strength Marketing, the WIRC campaign aims to communicate wood industry career pathways and attract new talent.

The 'You Wood' campaign features a website with career resource information, including profiles of high-demand positions, career quizzes, links to educational

resources like schools and scholarships, industry information, and an events calendar.

The site will be continually updated, and features will be added, including career pathway information, and custom video content and spotlights on industry professionals.

"This campaign is the culmination of over 3 years of communication, research, and hard work," said WMMA chief executive officer, Fred Stringfellow. "Companies in the industry are still struggling to find skilled workers as they grow to meet demand. We are excited to launch this campaign as a way to expand the pool of candidates for our future workforce."

The campaign is geared towards two audiences: high school students and those in their mid-20s to late 30s who are seeking a career change, including military veterans.

WIRC conducted a survey of these audiences in early 2020 and found that over 70% of all respondents had no awareness of wood industry careers; however, 23% would consider a career in the woodworking industry.

"We realise how critical it is to increase awareness of our industry and the career opportunities which exist for both students and those seeking a career change where they can utilise skills they've already developed in the workplace," says WMIA president and CEO, Larry Hoffer.

"It is our objective that the 'You Wood' website will serve as a portal for those unfamiliar with the wood industry to learn more and begin exploration of their wood industry-related career journey," Larry was quoted by woodworkingnetwork.com as saying.

Officially founded in 2018, the charter members of WIRC agreed to the following goals and identified those influencers who can effectively drive interest in the wood industry as a career path:

Attract Employees: increase student and career-seeker awareness of wood industry careers; increase parent awareness of wood industry careers; increase student engagement; and increase high school counsellor awareness of wood industry careers.

Retain employees: increase association memberships; improve association member engagement and satisfaction; and improve work culture at member companies.

Improve perception: develop and communicate the stories of the industry; increase positive media coverage; increase engagement with legislative and educator communities; and involve more associations in WIRC initiatives.

For more information, visit <https://youwood.com/>

Looking for the better door ?



Sauerland Spanplatte

*7 Reasons
to use
Sauerland
Boards*

1 Doors with ideal weight



2 Doors resisting daily stress



3 Doors production with high efficiency



4 Doors that close properly



5 Doors with a perfect surface



6 Doors reducing sound transmission



7 Doors protection from fire



Solution for the better door!



WE OFFER :

Support in Door Construction
... following your specific requirement.

Testing in the Sauerland Lab
... regarding all technical demands.

Sauerland Door Concept



Sauerland Service

Please compare your actual door construction with the option to apply the **Sauerland Door Concept**.
You will improve quality and performance.
Please do not hesitate to contact us.

Door manufacturers interested in new technology Contact :

Sleek Boards Marketing Services LLP

20, "Landmark" 4th Floor, Paud Road,
Kothrud, Pune 411038. INDIA

TEL: +91 7447446760

sleekboardsmarketingservices@gmail.com

www.sauerland-spanplatte.de

Educating tomorrow's mobile workforce



Early adopters of digital trends portended the arrival of a mobile workforce prior to Covid-19, but the pandemic has irrefutably accelerated its timeline. In March 2020, students and workers went home, and one year later, potential consequences from unfettered spread of disease continue to redefine both education and corporate environments.

No one expected “tele-schooling”, but the landscape of education changed more rapidly than our systems were prepared for. From investment bankers taking calls on their smartphones to ride-share drivers checking their app for new riders, “mobile” has redefined how each of us participates in the ecosystem.

There are two main types of mobile workers: information

workers and frontline workers. Information workers rely on mobile devices as part of their job, which may be completed at the centralised office space or in a decentralised fashion.

Frontline workers, on the other hand, are less dependent on mobile devices. Mobile workers are predicted to grow faster than the overall workforce in the US over the next 5 years.

In concert with technology, our physical spaces must adapt to reflect the same kind of flexibility that we have come to expect from our mobile devices. A partially decentralised model is a space that accommodates both individual work and small group work for project sprints and brainstorming sessions.

Individual workstations that can be moved around and then returned to a central pod structure, such as the SmartDesks product line of active

learning furniture, are ideal examples of the kind of furnishings that a mobile workforce requires.

SmartDesks works hand in hand with clients to furnish safe learning spaces for in-person, hybrid, and remote learning. Apart from its computer and conference desks and tables, it offers home and business office furniture.

Its SafeDesk (in photo) is the latest in a line of social distancing solutions for retail, office, commercial, and educational facilities, with accessories to divide and reconfigure spaces.

All SafeDesk products convert high-density work spaces into flexible, low-density zones where separation is required to facilitate socially distanced work spaces. These privacy shields and sneeze guards are easy to set up, install and keep clean. Learn more at <https://smartdesks.com/>

"MADE IN TAIWAN" adjective

Definition: Might not be the cheapest but always a bargain for manufacturers who value product quality and service with integrity.

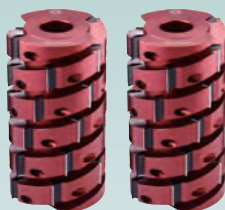
30 Years of High Quality Cutters Still In Action



Heavy Duty Helical Planer
Cutter Heads
with Changeable Knives
Knife: 14 x 14 x 2 x 30°
14 x 14 x 2 x 37°



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°
60 x 12 x 1.5 x 35°



Changeable Knives / TCT



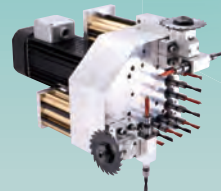
Flooring cutters
Finger joint cutters
wooden round rod cutters
all kinds of woodworking cutters



We Can Customize for Your Request



CNC Drilling Heads Series



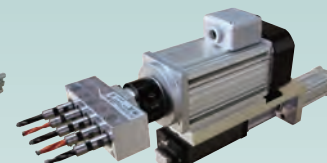
CNC-WF3213L-2S-2H



CNC-WF3209L



H707+WD213



H707+WF3205

CNC Drilling, Boring and Aggregate Heads Series



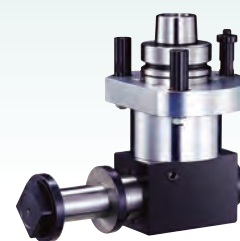
WHC3001L



WHC3019L



WHC3002L



WHC3003L

Adjustable Drilling Heads Series



WD213

MODEL	PITCH
WD211	14~82mm
WD212	32~160mm
WD213	18~100mm



WD315

MODEL	PITCH
WD314	14~96mm
WD315	20~122mm
WD316	32~192mm

Adaptors and Quick Change Chuck Series



AGENT WANTED एजेंट चाहते हैं



Wen Chih Machinery Industrial Co., Ltd.
Tel.: +886-4-2523-8221 Fax: +886-4-2528-9737
No.3, Alley 37, Lane 535, Sec 2, Feng Shin Rd., Feng Yuan Dist, Taichung, Taiwan

E-mail: wen-chih@umail.hinet.net <http://www.wenchih.com>



TONG FONG CUTTERS CO., LTD.
No. 347, Pei Yang Rd., Feng Yuan Dist., Taichung 42084, Taiwan.
Tel: +886-4-2522-8562 Fax: +886-4-2528-1127

<http://www.tongfong.com.tw> E-mail: tfcutter@ms47.hinet.net

A good tinkerer never gives up!



"If a work piece is bigger than the carpenter's bench or round, keep away from it. It's not worth it," said grandfather Josef Niedermeier. Rupert Niedermeier, however, did not follow his recommendation, and specialised in round wooden forms. His success proves that he made the right decision.

The master carpenter and managing director of Holz in Form Niedermeier GmbH, Rupert employs 20 people and

manufactures wooden counters, desks and staircases for joiners, shop fitters, trade fair builders and interior fitters throughout Europe.

"Together with my father, we worked in the workshop and offered classic carpentry. At the same time, though, we tinkered around with special, round forms. It was a lot of fun, and we became known for it among our carpenter colleagues," Rupert recollects.

At the beginning of the 1990s, the idea

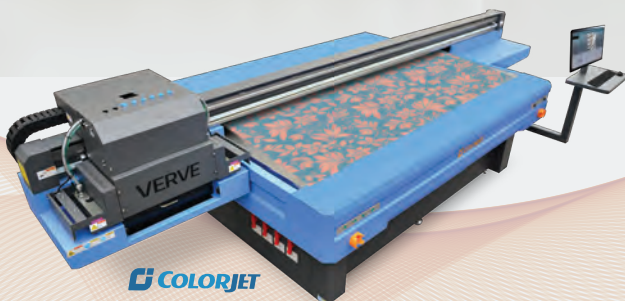
Lamello has become indispensable not only with classic manual machines, but also with state-of-the-art CNC technology.

came about to make the round work pieces their main business. Holz in Form Niedermeier GmbH was born out of this idea in 1999. ▶

A wooden sphere (L) with a diameter of 2 metres, made from oak veneer for a reception area. Rupert's company built the 9.5-metre-long staircase (R) for the restaurant at Munich's Rock Museum.



MEET YOUR GOAL OF **PRINTING AND CARVING** ON WOOD WITH PERFECTION.



ColorJet | Verve LED Flatbed Printer



High Endurance Work



Low-running Costs



Long-lasting High-quality Digital Prints



Higher Productivity



Apsom | CNC Router



High-performance, High-speed



Accurate, Low-noise, Strong Cutting Abilities



High-load Bearing



Experience 3D Embossment, Line & 2D Engraving, Beveling & Drilling



Omega headphone stands produced by Holz in Form Niedermeier since 2009.

Customers' demands are becoming increasingly complex, and the company is taking on new challenges every day to meet their wishes. This is incredibly exciting, and has led to many further developments.

"For example, we designed a special mould press for wooden boards. This allows us to shape the wood into almost any form. Today, we can do things that weren't even conceivable 3 years ago," Rupert says.

Lamello connection

Lamello's connectors are particularly helpful in his projects. Rupert's father was already working with Lamello machines at that time. Since the company has been focusing entirely on round forms, the machines and connectors have been in use every day.

"Lamello has become indispensable not only with classic manual machines, but also with state-of-the-art CNC technology. The machines and connectors help us enormously in implementation. I'd put it this

way: Lamello is standard equipment with us!" Rupert says.

Especially for round wooden parts, the use of clamping tools is cumbersome. Many woodworkers can get around this with the Tenso connectors, as they enable quick fixing without the need for clamping tools. All of the other P-System connectors have a low installation depth as well, making them ideally suited for tight radii.

The Clamex and the magnet-driven Invis connector are also easy to use and detachable. This makes assembly child's play for the customer as well.

"Another advantage is that we can work in the groove both on the CNC and with the manual machines. This offers a lot of flexibility in production," Rupert explains.

The P-System connectors have a low installation depth and are therefore optimal for work pieces with tight radii.

For many years, Holz in Form Niedermeier has been working with 5-axes machines that are configured to its needs. This allows the company to implement more complex projects more efficiently.

What has been Rupert's most elaborate project so far? For the Olympic Tower in Munich, his company produced an increasingly curved handrail for the stairs

in the revolving restaurant.

"The customer wanted 9.5 metres of handrail as a single piece. It was so large that it had to be delivered by heavy transport. Once there, it wasn't clear at first how to get it up the tower. Fortunately, with the help of the transport lift, it worked out," Rupert says.

What makes his company tick? "A good tinkerer scrutinises everything and tests the physical limits. And they never give up!" Rupert says.

The company was commissioned to develop headphone stands. They had a lot of ideas, but nothing worked. "One of my employees re-examined the glue systems, machine settings and the flexibility of the wood. In the end, we created an incredibly fantastic result that we are very proud of," says Rupert.

(Courtesy: www.lamello.com)

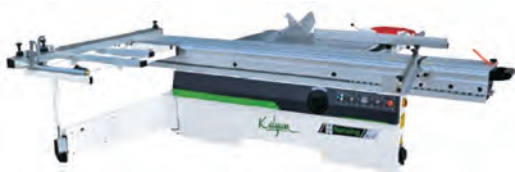
Wide Belt Sander



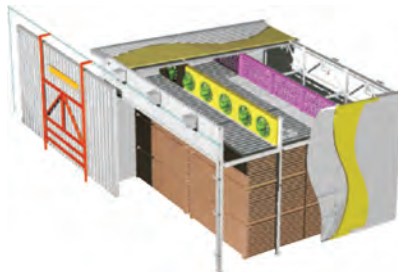
Spiral Cutter Heads



Sliding Table Panel Saw



Seasoning Kiln



Straight Line Rip Saw



Multiple Rip Saw



Gang Rip Saw



Vertical Band Re-saw



Four Side Moulder



Double Side Planner



Heavy Duty Automatic Copy Shaper



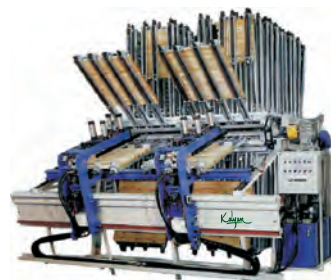
Oscillation Mortiser



Rectangular Tenonner



Clamp Carrier



Automatic Finger Joint System



Eco-credentials impress world's top leaders



The 125-year-old hotel was redesigned in 2018 with carefully selected materials that would contribute positively to the hotel's environmental footprint.

large bays at either side. It has six chimney stacks, two on top of either bay and two in the middle. It has several extensions and a large conservatory at the front, overlooking the beach, which was refurbished in 2015.

Built 125 years ago, the Carbis Bay Hotel estate comprises 125 acres within which is situated the 38-room hotel and most of its coastal properties.

When world leaders get together to chew the fat, you could be forgiven for thinking they might select a venue based on high thread counts, Champagne on tap, gargantuan-sized hot tubs, and the like.

It was not so for the prominent figures who attended this year's G7 summit, who chose the host hotel for quite different reasons. Leaders from seven of the world's largest economies (the UK, Canada, France, Germany, Italy, Japan and the US) sat down to talk about the big issues of the day – from Covid-19 to climate change.

Hosting the government representatives was the waterfront Carbis Hotel near St Ives in Cornwall (UK), chosen for its award-winning eco-credentials. The luxury hotel has been constructed using the latest

innovations in sustainable materials, including its on-the-sand beach lodges clad in sustainable modified wood Kebony.

Architects The Bazeley Partnership, who designed the hotel's luxury beach lodges and suites in 2018, carefully selected materials that would contribute positively to the hotel's environmental footprint. Its unique wooden aesthetic delicately weathers over time, blending into the surrounding landscape.

The hotel is also partnered with British Divers Marine Life Rescue on protecting distressed seals, porpoises, dolphins and whales around the UK coastline.

The lofty guests enjoyed private sun decks, bay-facing balconies and the use of a motor yacht, not to mention crayfish sarnies and homemade pies at the restaurant.

The hotel is a traditional cream-painted building, three storeys high with two

On-the-sand beach lodges, clad in sustainable modified wood Kebony, are the highlights of its award-winning eco-credentials.





TECHNO MATT-SRT™
SCRATCH REMOVAL TECHNOLOGY

MONOTONIC MATT SURFACES WITH ELECTRON BEAM CURING TECHNOLOGY.

- ① SCRATCH REMOVAL TECHNOLOGY FOR MICRO SCRATCHES
- ② SOFT TOUCH SUPER MATT
- ③ ANTI FINGER PRINT
- ④ ANTI STAIN
- ⑤ NON PORUS MATERIAL
- ⑥ ANTI BACTERIAL

THE INTELLIGENT MATERIAL FOR INTERIOR DESIGN. MADE IN ITALY.



📍 B, 19 Pravasai Industrial Estate, Off Aarey Road, Next to Durian Estate, Goregaon East, Mumbai - 400069.

☎ +91 9820064060

✉ dhaneshbhatia@aryamman.in

🌐 www.aryamman.in



Malaysian furniture manufacturers offer high-value and value-for-money timber products, exporting to more than 170 countries.

'Sawn timber catching up with log imports'

Malaysian Timber Council COO, Mr Roger Chin, answered some topical questions posed by WoodNews recently. Excerpts:

How big is the Malaysian timber industry?

Based on global export rankings in 2020, Malaysia is the 5th-largest exporter of plywood; 6th-largest for both wooden furniture and wooden frames; 9th for mouldings and 13th for sawn timber. It has customers in 170 countries.

The timber industry employs about 1,40,000 workers. With over 1,900 active mills in Malaysia, the industry offers a wide range of timber products: sawn timber, panels (plywood, fibreboard, particleboard, chipboard, LVL), mouldings, builders' joinery and

carpentry (BJC) products (decking, flooring, doors, staircases, laminated scantling, window and picture frames) and wooden furniture for indoor, outdoor and office use.

The timber industry is the 3rd-largest sector in Malaysia in the commodities industry, after palm oil and rubber. In 2020, its export value stood at US\$ 5.24 billion, which represented 14.6% of the total contribution from the commodities sector and contributed 1.6% to the country's GDP.

Among its major global exports in 2020 were wooden furniture (US\$ 2.53 billion), plywood (US\$ 676.3 million), sawn timber (US\$ 569.8 million), BJC (US\$ 231.4

million), fibreboard (US\$ 173.1 million), mouldings (US\$ 163.8 million), logs (US\$ 121.3 million), veneer (US\$ 22.4 million) and wooden frames (US\$ 21.9 million).

What are the main export destinations?

As a net exporter of timber products, Malaysia accounted for 2.2% of the global export value in 2020. In the Asian region, Malaysia was the 3rd-largest exporter, after Vietnam and Indonesia.

Malaysia has seen its export of value-added timber products increasing significantly over the past 5 years. This was largely due to the rise in the export of wooden furniture, representing 48.3% of

Malaysia's total export of timber products in 2020 – compared to only 34.4% in 2016.

The main export destinations for Malaysian timber products have seen some changes over the past 5 years. In 2016, Japan was the top export destination for Malaysian timber products, particularly for plywood and wooden furniture, followed by the US, India, Australia, and Singapore.

However, in 2020, the US was the top export destination, mostly for wooden furniture, followed by Japan, China, Australia and Singapore.

What was the scale of Malaysia's exports to India over the last 5 years?

India remained one of the top 10 export destinations for Malaysian timber products in 2020. In 2016, India was the 3rd-largest export market for Malaysia's timber products with 6.9% export share. It accounted for US\$ 185.4 million in 2020, or around 3.5% of Malaysia's total export of timber products.

What is the range of wood products that is exported to India?

If I were to take figures for 2020 for benchmarking, the major products exported to India were logs (US\$ 75 million), sawn timber (US\$ 52.2 million), wooden furniture (US\$ 31.4 million), BJC (US\$ 7.7 million) and fiberboard (US\$ 7.6 million).

What Malaysian wood species are popular among Indian customers?

Malaysian sawn timber is highly regarded for its durability and strength. Red Meranti

is popular in the north Indian states of Delhi, Punjab, Uttar Pradesh and Rajasthan, as well as Central and South India.

Common applications are for door and window frames, architraves, beddings, and handrails.

The southern states of Tamil Nadu, Kerala and Karnataka utilise Merbau, dark red Meranti and Kapur for solid wood and panel doors, besides windows, wooden beams and pillar support.

Meranti, Balau, Merbau, Kapur and Keruing are household names in India. The other Malaysian species exported to India are Sipoh, Kelat, Mersawa, Mengkulang, Rasik and Selangan Batu.

What Malaysian panel products find a ready market in India?

Hardwood core plywood of Keruing, Meranti, Mersawa and mixed light hardwood are in demand for their core strength, gluing properties and finish. Thin panel commercial plywood of up to 6mm is much sought after due to the low tensile strength of local plywood in India.

Flexible plywood, termed as bending plywood in India, is in shortage due to high consumption by furniture manufacturers, interior designers and contracting companies there. Acacia and rubberwood finger-jointed laminated board (4'x8', 17mm and 21mm) is in high demand in India.

We have also seen an uptake in natural veneers (Keruing, Meranti and Merbau) during the first quarter of 2021.

What about wooden furniture from

Malaysia?

Wooden furniture such as bed sets, wardrobe, semi-solid-wood dining table sets, sofa sets, lounge chairs, kids' beds, study tables, cabinets are imported as they are considered strong and long-lasting.

Office furniture, such as executive chairs, tables, cabinets, workstations is also in demand. Outdoor furniture made of treated hardwood such as Balau and Kempas is popular for resorts, large villas, and independent houses in India.

What advantages can Malaysian suppliers offer Indian importers?

Malaysian timber-based manufacturers also have the capacity and capability to produce products from the conceptualisation and design stages to manufacturing them, while complying with international standards.

The multitude of colours and grains available represents an artist's palette, enabling an endless expression of creativity for architects and interior designers.

In 2020, India imported US\$ 185.4 million worth of wooden products from Malaysia, including sawn timber (L), fibreboards, wooden furniture and builders' joinery products (R).





We would like to promote lesser-known timber species in the form of finger-jointed sawn timber. These products are tried and tested for tensile strength, durability, density, etc. We are willing to provide samples.

– Mr Roger Chin, COO, Malaysian Timber Council

Finger-jointed laminated board (FJLB) of Acacia, Mersawa, and other low-medium hardwood will be promoted, considering the interest of some importers and wood-based manufacturers. India can also benefit greatly from the technical prowess of Malaysian manufacturers who produce FJLB.

Engineered flooring could be promoted to discerning clients in India who are interested in refurbishment of offices, restaurants, cafés, apartments and villas.

Home furniture (space-saving, compact and mid to low-cost) such as beds and sofa beds, sofa sets, lounge chairs, and dining tables are also on the cards.

Quality and affordable office furniture (ergonomically designed executive and staff chairs, multi-utility desks, cabinets and workstations) are good offerings for India.

The demand for modular furniture available in flat-pack is growing as more people are working from home. With space being a constraint in most homes, people are looking for multi-functional furniture, which is easily available in Malaysia.

What are the biggest challenges that MTC faces in the India market?

The Indian economy had experienced an abrupt slowdown since 2019 due to the introduction of major fiscal reforms such as the Goods and Services Tax (GST), demonetisation of some currency denominations, and recently the Covid-19 pandemic.

India's import statistics (India's Union Ministry of Commerce) showed a declining trend for timber products from the world over the past 5 years. But India remains a potential market with its huge population driving domestic consumption.

There could also be an increase in the market share for the import of sawn

timber, plywood, mouldings and BJC in India in 2021.

Supply of timber and timber-based products to India are some of the biggest challenges. Certain species such as red Meranti, Merbau, Balau and Keruing are in demand, but are rather difficult to fulfill.

Shortage of sawn timber for the Indian market has forced several Indian importers to look for other reliable sources, preferably round logs which can be sawn to preference. However, peninsular Malaysia has long prohibited the export of logs.

Commercial thin-panel plywood is in high demand in India, including flexible plywood, which Malaysian exporters are unable to send due to raw materials shortage and other commitments.

How does MTC propose to address these challenges?

We would need to promote lesser-known timber species in the form of finger-jointed sawn timber and provide samples that could be tested for tensile strength, durability, density, etc.

Malaysian businesses see a challenge in convincing price-sensitive Indian timber product importers and consumers to appreciate the value of Malaysian timber products and furniture. We need to advocate the message that Malaysia manufactures high-value and value-for-money timber products.

MTC has set up a regional office in Bengaluru to take up more promotional activities such as business matching missions, trade enquiries and participating in trade fairs in India and its surrounding countries.

In 2021, MTC predicts an increase in the market share in India for decking, flooring, doors, staircases and laminated scantling.





India's finest range of complete Panel Processing Solutions designed with global standards



OptiSaw 3.2 - Panel Saw



OptiCut 2.8 (Auto) - High Speed Beam Saw



OptiDrill 2.3 - Three Head Boring



OptiEdge 6.5 P - High Speed Auto Edge Bander



OptiEdge 8.5 High Speed Auto Edge Bander Specialized 45° Edge Bander



OptiBore 6.12 - 6 Side CNC Boring



OptiRoute 6.9 V - Nesting CNC Router



Jai Industries Ahmedabad - 380 023, Gujarat, India.

Contact us on : +91 74860 10345 • optimus@JAIindustries.com • www.JAIindustries.com

Sales & Service Centres : Ahmedabad • Bangalore • Chennai • Delhi • Guwahati

• Hyderabad • Indore • Jaipur • Kannur • Kanpur • Kochi • Kolkata • Mohali • Mumbai • Nagpur

• Patna • Pune • Raipur • Surat • Vijaywada

Globally Compatible
Optimus from



WWF blames EU for large deforestation



Between 2005 and 2017, about 65 million hectares of tropical forests (5 million hectares a year) were converted to agriculture for the cultivation of oil palm, soybeans or cattle. Imports by the European Union (EU) account for 16% of the deforestation linked to world trade.

A study by the Worldwide Fund for Nature (WWF) points out the responsibility of the EU in the degradation of tropical forests. The study this month, entitled 'When Europeans consume, forests burn', regrets the EU's responsibility for deforestation of tropical forests. It is also a reminder of the importance of their sustainable forest management.

The report shows a clear link between European consumption and deforestation. The products imported by the EU come from areas where plantations, pastures

or crops extend on sensitive natural ecosystems, particularly in the Cerrado and Amazon in Brazil, and the Chaco in Argentina and Paraguay, "hot spots" of deforestation.

European demand is thus causing land conversions in the main identified deforestation fronts. In addition, international trade pressures increasingly on regions previously less affected by forest degradation.

New conversion fronts are emerging, notably in West and Central Africa, and in the Mekong region in South-East Asia.

Main defaulters

However, regulations in producing countries are not sufficient to protect forest ecosystems. "Even without illegal deforestation, 7 million hectares of land in Paraguay, 10.5 million hectares in Argentina and 88 million hectares in Brazil could still be legally converted," the report regrets.

It is, therefore, essential that consumer countries adopt effective measures to

stop the destruction of tropical forests.

Among EU member states, France is one of the main culprits of imported deforestation, particularly for its imports of soybeans for animal feed (more than 3 million tonnes per year, according to WWF) and its imports of palm oil for diesel.

In 2018, however, it committed to combating the destruction of forest ecosystems by adopting a National Strategy to Combat Imported Deforestation. As France will hold the EU Presidency in the first half of 2022, WWF France calls on the President of the Republic to make the adoption of European legislation against deforestation a priority on his agenda.

Sustainable forestry

This report is a good opportunity to recall the relevance of the sustainable forest management model to preserve forest resources in tropical countries. On the one hand, the use of certified tropical timber gives an economic value to the forest: when timber is a source of income, producing countries are less inclined to convert forest areas into agricultural land.

However, to preserve ecosystems, timber imported by the EU must be produced under the principles not only of legality but also of sustainable forest management certification.

By recognising certified producers as key actors in the protection of tropical forests, by adopting public policies promoting certified tropical wood for its technical, economic, environmental and social qualities, the EU could implement a new model of responsible trade.

This ambition must include zero tolerance of illegal timber and the promotion of certification, which requires effective monitoring of the EU timber market.

WOODWORKING TECHNOLOGIES



DOUBLE SURFACE PLANNERS



STRAIGHT LINE RIP SAW



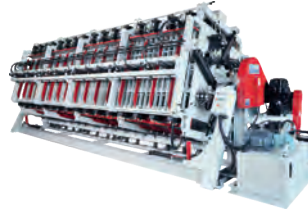
HIGH FREQUENCY PRESS



BRUSH SANDER



AUTOMATIC FINGER JOINTER



ROTARY COMPOSER



AUTO COPYING & SHAPING MACHINE



TOP & BOTTOM WIDE BELT SANDER



CNC BEAM SAW



HEAVY DUTY MULTI RIP SAW



COPY SHAPER



EDGE BANDING



VENEER SPLICER



SINGLE KNIFE VENEER GUILLOTINE



PANEL SAW



CNC DOVETAIL



HIGH FREQUENCY CABINET
& FRAME ASSEMBLY.



HIGH FREQUENCY DRAWER ASSEMBLY



DUST COLLECTOR



Lets Walk 'Tree' To 'Table' Together

FALGUNI ENTERPRISES

18, Shree Gopal Nagar, Near 21 No. Bus Stand,
Panchyawala, Sirsi Road, Jaipur-302034 (Raj.) India
E-mail : falgunienterprises0107@gmail.com
Contact : +91-8890337607
Website : www.fewcut.com | GSTIN: 08ASTPM6024H1ZD

Service Network :

Rajasthan, Delhi, UP, Haryana, Punjab & Bangalore



We Work Together

Moulded plywood: Bend it like the Eames!



In most of Europe, beechwood is largely used for moulded plywood; in northern and eastern Europe birch finds favour, while North America uses hard maple.

Moulded plywood is the term for two- or three-dimensionally shaped products from multiple layers of veneer, glued together through heat and pressure in a press. The veneer layers are arranged cross-wise at an angle of 90 degrees.

Moulded wood is used for flat furniture components such as seats, backrests and seat shells. When the veneer layers are arranged in the same direction, it is called laminated wood. It is used for armrests and chair frames.

After pressing, the blanks are processed mechanically. A particular feature is the ability to produce different variations of shapes from the blanks. Due to its immense strength and low weight, moulded wood is particularly suitable for interior decoration, seating furniture, bed slats and vehicle construction.

It was an American named Isaac

Cole who first took out a patent for the process of the production of moulded wood in 1874. He designed a chair made of glue-laminated wooden strips.

In 1830 the famous furniture designer, Michael Thonet, had already begun experimenting with gluing of veneer layers. But he only managed to produce two-dimensional deformations though. He went on to develop the bentwood process to produce three-dimensional moulded solid wood components.

His company, Gebrüder Thonet, launched the first cantilever chair in 1931. To make

the chair very comfortable without padding and to give it a light appearance, the designer used three-dimensional plywood parts for its seat and back.

In 1940, architect-designers couple, Charles Eames and his wife Ray, developed a spectacular plywood furniture collection for the US furniture giant, Herman Miller.

Laminated wood

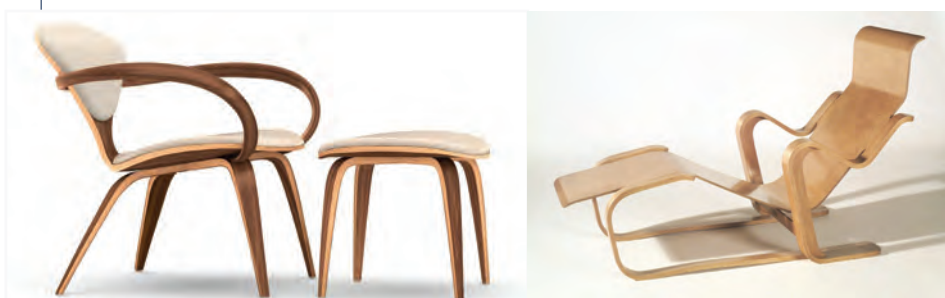
The thin veneers that are glued together in an interlocking pattern greatly reduce swelling and shrinking and generate more resistance in the plywood surface. These properties are used in two-dimensional moulding such as seats, backrests and shells.

The veneer qualities can be put together for visible or upholstered moulded plywood parts. The inner layers are made of less expensive peeled veneers. The top layers can be selected from peeled veneers, fine-wood sliced veneers or laminates.

Laminated wood is the term for mouldings, where the grain in all layers runs parallel. To increase the bending strength and reduce the swelling and shrinking behaviour, laminated wood is interlocked with some transverse veneers for certain applications. Laminated wood is used for chair frames, cantilever side parts and armrests.

By employing laminated wood gussets (triangular), the wood joints can be pressed at the same time. The thickness of the moulded parts can be varied by ▶

A replica of Eames moulded plywood lounge chair set (L) and Marcel Breuer's Long Chair (R) made in 1936.



THE FACE OF FURNITURE

The first impression

you have of a piece of furniture is its surface. It could be the colour, the shine or the high gloss. But those are just first impressions.

senosan® furniture films go a lot deeper, also impressing with their "inner" values such as amazing scratch and chemical resistance.



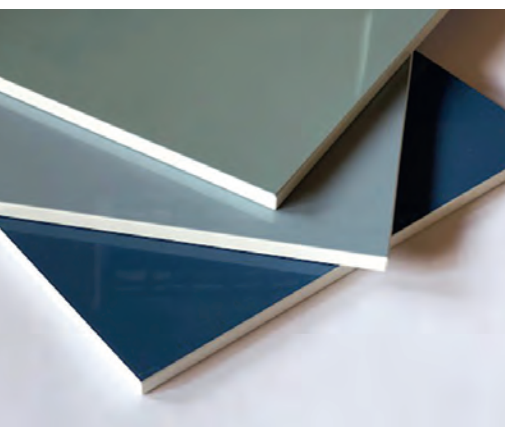
Antibac®



High Gloss
Scratch Resistant

senosan®

AM1800TopX – Premium high gloss film





Charles and Ray Eames' child's table and pair of stools (L) and a Capelli stool (R).

using partially ground interior veneers. Compared to moulded plywood, the tensile strength is significantly higher.

Veneer production

The production process is divided into three steps. First, the peeled veneer is produced, then pressed into moulded plywood or laminated wood blanks, which are subsequently processed. This results in ready-to-install furniture or interior design components.

In Europe, beech wood is largely used because it is available in large quantities from sustainably managed forests. In Northern and Eastern Europe, birch finds favour, while North America uses hard maple.

The tree trunks are harvested only during the winter, outside the sap-flow period, and need to be sprayed with water in the storage area or stored under water.

For the production of veneers, the logs are steamed with hot water vapour in steam pits at 85 degrees Centigrade to make it high in moisture and pliable. The logs are then separated and debarked. The lengths of the log sections are based on the veneer sizes required for the orders.

In the peeling line, the peeling blade is led with high pressure against the rotating log section. The result is a continuous veneer strip which is cut into the required widths in thicknesses ranging from 0.6 mm to 2.3 mm.

The peeled veneers are automatically sorted according to their visual qualities: one for visible use, and one with knots and cracks that are used for mouldings that will later be fully upholstered.

Compared to wood-based panels (MDF or

chipboard), moulded plywood and laminated wood are more reliable. Therefore, they are suitable for a wide range of applications.

The tensile strength is 110-135 N/cm², depending on the type of wood. This ensures high load capacity and pleasant vibrations of cantilever chairs. The compressive strength is between 50- 62 N/cm², guaranteeing long-lasting furniture that endures even frequent use as in schools.

Through chemical or thermal changes it is possible to produce weather-resistant moulded plywood and laminated wood. By introducing salts in the production process, moulded wood is made flame-retardant. This is an important aspect for interior design and in the creation of train seats.

Design possibilities

When the veneer is prepared for an order, a pressing tool is incorporated into a press. This tool can be made of two parts (for seats, backrests and shells) or several parts (for U-shaped moulding that also requires pressure from the side).

The pressing begins with glue being spread onto the veneer. The glue is made of urea-formaldehyde resin with a hardener that becomes thermosetting during the pressing process.

A so-called veneer packet is then inserted into the pressing tool that is at 100 degrees Centigrade. The press is fed in and the pressure is approximately 25 N/cm². The pressing time depends on the thickness of the moulded parts. The thicker the part, the longer it is pressed.

An exception is the high-frequency gluing, where the glued joint is heated via

a capacitor field, which significantly reduces the pressing time. This method is suitable for very thick mouldings.

Since veneer is a natural product, it is necessary to observe certain limitations in the pressing process. The smallest radius is dependent on the veneer thicknesses used and is 12 mm at a 90-degree angle. A taper of the moulded parts is possible.

There are hardly any limits for the possibilities of three-dimensional deformation of upholstered parts. Decorative wood allows for light deformations up to the occurrence of cracking or buckling of the veneer.

What can be formed out of firm cardboard can also be made of moulded plywood, since both behave in a similar way. These limits can be exceeded by the use of special 3D veneers – but they are expensive to produce and entail additional costs.

The three-dimensional moulded plywood blanks for seats, shells and backrests are contour-milled with multi-axis CNC milling machines and bored if needed. After sanding the edges and the assembly of the fastening mounts the parts are ready for finishing.

Special joining techniques can be used – such as screws, dowels, springs or mortise-and-tenon joints – to produce pre-finished components or complete racks.

The surfaces of veneer cross-plywood and laminated veneer lumber can be designed in many different ways by pressing the top layers of fine wood sliced veneers, including those of oak, maple, cherry, ash and walnut.

Further design possibilities offer coloured melamine and decorative films, digital prints, decorative laminates and water-based opaque or transparent paints.

nova si 400

Panel Saw

- 10 years warranty on sliding table.
- Circular saw with 45° tilting.
- Scoring unit adjustment by memory pins.



gabbiani p 75

Beam Saw

- Selectable air blowing table: an essential tool.
- Saw carriage with independent raise of the blades.
- Increasing of productivity up to 30%.



minimax me 20

Edge bander

- Simple and intuitive.
- Ideal edge application.
- Quality finishing and versatility.



minimax me 40 t

Edge bander

- Premilling.
- Partial corner rounding.
- Scraping.



olimpic k 360 r

Edge bander

- 11 m/min panel feed speed.
- "AUTOSET" pneumatic positions of units.
- Pre-milling, corner rounding, scraping units.



stefani kd

Edge bander

- 10-20 m/min panel feed speed.
- Solid wood up to 12 mm thickness.
- "SGP" glue pot for EVA or PU glue.



stefani xd

Edge bander

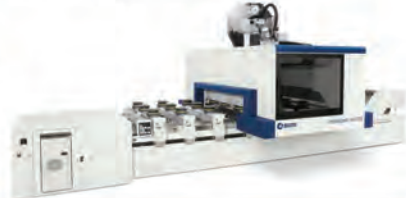
- High productivity with corner rounding up to 30 m/min.
- The use of EVA and Polyurethane glue is made possible.
- Zero glue line possible with "AirFusion" technology.



morbidelli m100

CNC machining centre

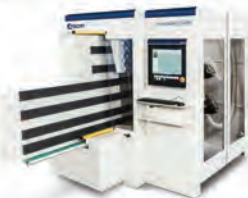
- PRO-SPACE safety systems, it requires less floor space.
- JQX : 5-axis direct-driven spindle head.
- 60% time saving in drilling cycles.



morbidelli cx 200 r

CNC drilling centre

- +60% of Productivity: Two Drilling Heads.
- Zero play during machining with new RO.AX technology.
- Machining cycles of up to 600 pieces/shift.



minimax fs 41 es

Planer-thicknesser

- An optimal planing with minimal effort.
- Professional, massive and compact.
- Cast iron thicknessing table lifts on 4 spindles.



minimax cu 300 c

Universal combination machine

- 5 Function Combination Machine.
- Incredible cutting of very thick solid wood and panels.
- Professional and very sturdy.



minimax tw 45 c

Spindle moulder

- 4-speed shaper with sliding table.
- Cutting height of 100 mm.
- The maximum tool diameter 210 mm.



profiset 60

Throughfeed multi spindle moulder

- More productivity and improved finishing.
- Inverter for the stepless speed adj. from 5 to 25 m/min.
- "T-SET" rapid tool locking device.



dmc sd 60

Wide belt sander

- The best finish with any material. Higher quality results.
- "Logic SC" electronic programmer: easily avoid mistakes.
- Diamond-shaped belt: no slipping of the work pieces.



compact 3 r

Spraying machine

- Double arm reciprocator.
- Pressurized cabin with double filtration system.
- Lacquer reclaiming unit.



Stripped to perfection

Cork flooring can also stand up to commercial applications



Cork is 50% air and is soft underfoot; but it is dense enough to withstand heavy weight and traffic.

As a unique material, cork tends to evoke images of wine stoppers and school bulletin boards. But as a flooring option, cork is completely renewable, making it one of the most environmentally friendly resources on the planet.

Cork flooring can provide unparalleled comfort in the form of sound absorption, compressibility and thermal insulation. Moreover, it is cost-effective, compared to other traditional flooring materials.

Cork is harvested from the bark of the cork oak trees. The stripped bark is steamed in boilers to eliminate contaminants. Wine stoppers are punched out of the planks, and from there the scraps are processed into flooring materials. That means that every part of the bark is used.

The raw material is ground, mixed with resin binders, compressed and then cut into large sheets.

Those sheets are baked at varying temperatures to produce different shades of colour and cut into planks or tiles.

Multi-layered planks are made with a bottom layer of compressed cork, a core layer of high density fibreboard (HDF) and

The waste-free production process of flooring, combined with the fact that the trees regenerate their bark every 9 years, makes cork a highly renewable and sustainable material.

a top layer of cork, while the tiles are solid, homogenous cork.

Overall, this waste-free production process, combined with the fact that the trees regenerate their bark every 9 years, makes cork a highly renewable and sustainable material.

Versatile material

Cork's environment-friendly attributes can help builders gain LEED certification points because it is a renewable resource and low-emitting material. Cork flooring can achieve high ratings in energy efficiency, comfort and health benefits.

The traditional shade and texture of cork is one we're all familiar with. But innovations in the design of cork flooring materials have opened up exciting visual opportunities for flooring system designs.

Designs can range in colour from warm, off-white to deep browns and striped patterns. Textures can mimic aged leather, or even the appearance of wood or tile. Planks offer a seamless look, while tiles of different colours can be placed in patterns to complement the room layout and aesthetic.

Cork is 50% air and has a unique softness underfoot. But it is dense enough to withstand heavy traffic and weight — which is why it has historically been used in museums and government buildings. ▶





BACCI ATLANTIS CNC BAND SAW



BACCI COPY SHAPER



BACCI MASTER 6 AXIS CNC



MORTISING MACHINE



TENDONING MACHINE



3 HEAD BORING



SINGLE HEAD BORING



SERRA SAW MILL



DOOR SINGLE END CNC TENDONER



DOUBLE SIDE PLANER



WIDE BELT SANDING



CLAMP CARRIER



HF PRESS



PAUL MULTI RIPS AW

**WE PROVIDE SPECIALIZED CONSULTATION
FOR TURNKEY PROJECTS IN**
 .Door Production Plants
 .Solid Wood Furniture Plants
 .Panel Processing Plants

We also provide Taiwan & Europe machines
as per customer requirements

No. 47/2, 1423, Gidadakonenahalli, SMV Layout, 8th Block, 60 Ft. Road Vishwaneedam Post
Bengaluru, Karnataka - 560 091, INDIA



AUTO WRAPPING & PACKING MACHINE



SPRAY MACHINE



Cork absorbs sound and is naturally resistant to mold, mildew and insects.

Those same air-filled cells also provide insulation against heat and cold. Floors will feel warmer throughout the year, making them an optimal choice for yoga and recreational areas – as well as for children's rooms and facilities for the aged.

Cork absorbs sound, helping achieve better impact isolation class ratings. Cork is naturally resistant to mold, mildew and insects. It is anti-microbial too, making it a viable option for health care facilities and R&D

laboratories.

Minimal maintenance

Cleaning and maintaining a cork flooring system is simple and straightforward; brooms, vacuums on bare floor settings and pH-neutral cleaners (similar to are used on hardwood floors) will take care of regular and periodic cleaning.

However, standing water can permeate and lead to warping of the core; so it is best not to install a floating cork floor in areas in high moisture areas.

Cork is available in two install applications: glue-down cork flooring and floating cork

flooring. The first method is used with solid cork tiles and calls for contact adhesive. Glue-down cork flooring is recommended for high-traffic commercial and residential areas.

Floating cork flooring is installed by clicking planks together using a tongue-and-groove system, without the need for tools or adhesives. This system can sit right on top of virtually any surface. But installers must make sure the substrate is smooth and dry.

Like wood, cork is subject to changes in dimension due to temperature, humidity and moisture. So installers must make sure the space is enclosed with functioning HVAC units before starting the installation.

Like any resilient or wood floor, preventing damage is important. Coating the cork flooring can maximise protection; furniture glides can prevent scuffing; and use window coverings to prevent fading due to UV exposure from sunlight.

Cork is among the floors that allow you to refinish them to restore their beauty. It is an advantage since it gives you a chance to sand away scratches and other surface damages for an entirely new surface!

But sanding is only possible if the flooring is solid cork. If it's veneer or composite, apply wax and a sealer instead to conceal stains, scratches and dents.

A bamboo and cork floor by Oshkosh Designs, US.



SLIM LIFT - TRIPLE E



Estd. in 1974



Scan here for Application Video

ADVANTAGES

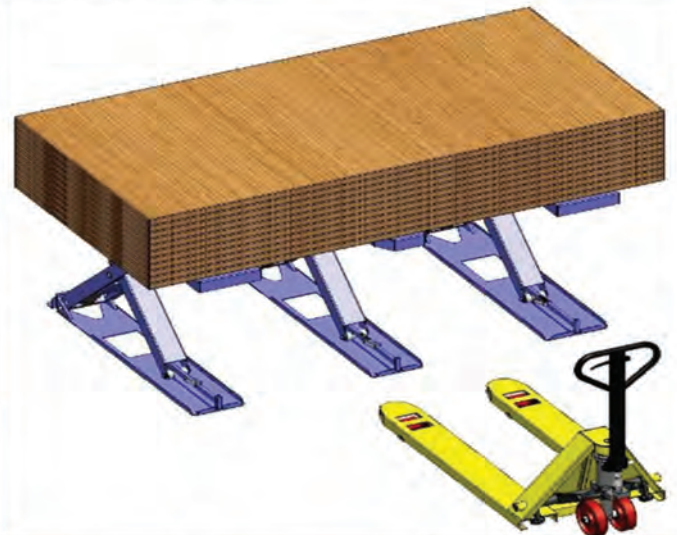
- ★ Improved Productivity.
- ★ Payback in a Few Months.
- ★ NO PIT Required
- ★ Reduced Worker Injury.
- ★ Reduced Worker Dependency.
- ★ Can be Easily Relocated

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



SANDING Machine



BEAM SAW Machine

FERRO FOUNDRIES PVT. LTD. Mercara Road Belawadi P O Mysore – 570 018

Mob: +91 9035021612 | +91 9900062789 | +91 9900074070 Office: +91 821 4254607

sales.plyhub@ferrotiger.com | sales@ferrotiger.com | www.ferrotiger.com |

American hardwoods gain acceptance in India



RitikaaWood has been primarily working with Accoya and has completed more than 600 installations across 50 cities in India.

US hardwoods have found another foothold in India as commercial manufacturers have now begun to realise the potential benefits of using sustainable and high quality American hardwoods, according to the American Hardwood Export Council (AHEC), the leading international trade association for the American hardwood industry.

Leading the way are established names such as Furnicheer, Ebco and RitikaaWood, who are all either trying out or commercially using imported American hardwood species, including red and white oak, and tulipwood.

Whilst the much-publicised potential offered by India for American hardwood exporters has

not yet been realised, these developments prove that the market is at a turning point.

Furnicheer & Ebco

Founded in 2013 as a bespoke manufacturer of solid wood furniture, the story of Furnicheer actually took shape over two decades ago, under the creative-perfectionist hands of interior designer Subhangi Vaidyanathan.

After years of experience in interior design, Subhangi decided to launch Furnicheer and established the brand's flagship retail store in Navi Mumbai. Her passion for handicrafts, the need for modular furniture in urban spaces, and love for solid wood, are the inspiration behind the company.

Positioning itself as a brand of solid wood, modular furniture and lifestyle

accessories, crafted specifically for the Indian home, the company has been primarily manufacturing customised home furniture including beds, wardrobes, chests, study, TV consoles, dining sets and coffee tables.

According to Subhangi, her initial preference was to create her designs with solid woods, such as locally-sourced sheesham (*Dalbergia sissoo*) and mango, built in-house by skilled craftspeople on high-tech machinery. Besides being hardwearing, their shades and textures perfectly complement the sunny tropical climate in India.

Working with indigenous species, however, posed several challenges. In addition to being CITES-listed (in the case of sheesham), the biggest challenges in working with mango and sheesham were



—STEEL—BELTS—AND— —SERVICE—SUPPORT— —FOR—THE—INDIAN— —WBP—INDUSTRY—

IPCO is a world-leading manufacturer of premium quality steel belts used in the production of wood-based panels. Choose IPCO as your partner in WBP productivity and get the best of all worlds: 'Made in Sweden' quality; the strength of a global business; and the local understanding of an Indian-based sales and service team.

- Swedish-based multinational: 600 employees, 30+ sales/service offices.
- World class belt manufacturing: 1.2 to 3.5 mm thick, up to 4620 mm wide.
- Engineering expertise based on 120 years' partnership with wood industry.
- Certified to ISO 9001:2015, ISO 14001 and ISO 45001:2018.

ipco.com/wbp

ipco



the lack of consistency in quality, in terms of seasoning (kiln-drying) and also resistance to insect attack.

Having been introduced to kiln-dried American tulipwood, Subhangi took the decision to order a container of this unique American hardwood species in 2017 and has never looked back.

"Currently, about 50% of our production is in tulipwood. Not only is tulipwood easier to work with, the finish is far superior in comparison to the timbers we were using previously," she says.

Testament to her belief in American tulipwood, she has recently started working with Ebco, one of India's oldest and leading manufacturers in the furniture hardware sector.

Previously, Ebco was crafting all of the wooden elements for its accessories using steamed beech. This new agreement means that all wooden accessories for Ebco will now be produced in American tulipwood in the factory in Navi Mumbai, Subhangi adds.

RitikaaWood

RitikaaWood is India's premier timber engineering company, specialising in outdoor solid wood

products and its extensive applications. An organisation embedded to practice sustainability in all aspects of its business, along with ensuring healthy working environments, the company offers the widest range of solutions right from cladding, decking, windows, doors and screens made to European standards.

In addition, the company sources environmentally-friendly raw materials from responsibly-managed forests, and also ensures the durability of its products, reducing the need for maintenance and replacement, thereby further reducing the burden on limited natural resources.

"Our products are the preferred choice of clients and architects who desire the natural elegance and warmth of real wood, but with little to no maintenance. We've been primarily working with Accoya and have, to date, completed over 600 installations across more than 50 cities in India," said Anuj Divanji, Managing Director, RitikaaWood.

"We have recently started looking at American red oak as it has a beautiful aesthetic and figure pattern. We do see a good potential for its use in India in the limited market that we are focusing on currently, which includes doors and windows," Anuj adds.

Exponential demand

India's appetite for sawn temperate hardwoods has been increasing over the

Established manufacturers such as Furnicheer (L) and RitikaaWood (R) are commercially using imported American hardwood species, including red and white oak, and tulipwood.

past few years and, according to Trade Data Monitor (which replaced the Global Trade Atlas), India imported some 11,000 cubic metres of sawn oak in 2019, with the vast majority coming from Germany and France.

At the same time, India's imports of sawn beech reached around 20,000 cubic metres, with more than three quarters being sourced from Germany.

According to AHEC, the majority of European hardwoods are being used in furniture and joinery production for the domestic market, where the 'exotic' look of temperate wood species is becoming increasingly popular.

"Demand for oak in India has also been increasing in recent years and a better

understanding of red oak, coupled with lower prices in recent months, has allowed it to make some gains over European oak in the market," says Roderick Wiles, AHEC Regional Director.

However, more education is needed to help Indian end-users understand the added value of using kiln-dried hardwood lumber, which requires little to no further processing before use, he concluded (www.americanhardwood.org)



AXCENT AIR FLOW TECHNOLOGIES

MANUFACTURERS OF AIR POLLUTION CONTROL AND AIR HANDLING EQUIPMENT

PORTABLE DUST COLLECTORS



MODULAR DUST COLLECTORS



CENTRALIZED DUST COLLECTOR



PAINT BOOTH



CENTRIFUGAL FANS & BLOWERS



AXIAL FLOW FAN



No.3, Sy.No.107, 1st Cross, Near Machohalli Village, Kadabagere Cross, Dasanpura Hobli, Magadi Main Road, Bangalore - 560 091.
Tel.: 080-29775878 Mob.: 9900456878 E-mail: axcentaft@gmail.com / axcentairflow@gmail.com / axcentairhmk@gmail.com / krishnamh_68@yahoo.com
Website: www.axcentairflow.in

'Black gold' of mushrooms tamed



The honey fungus is a common saprophytic fungus that grows in forests (Wikipedia)

Researchers in Switzerland have succeeded in extracting the pigment melanin in large quantities from the gigantic Armillaria fungus, one of the largest and oldest living organisms in the world.

The potential applications for its "black gold" (melanin) range from wood preservatives to the construction of water filters and historic musical instruments.

The properties of the fungus are astonishing and its applications manifold. Melanin protects human skin from harmful UV light, gives colour to skin and bird feathers, and is a veritable treasure trove for new materials and technologies.

Although the miracle substance occurs naturally, the complex bio-polymer can only be produced artificially at an industrial scale through expensive and complex processes, during which some of the compound's properties are lost.

To date processes for extracting

natural melanin from micro-organisms only have low yields. It is therefore not surprising that the substance is many times more expensive than gold.

Water filters?

Researchers at the Swiss Federal Laboratories for Materials Science and Technology (EMPA) have now developed a method to produce melanin in a simple and highly scalable process.

Melanin is extremely stable when exposed to environmental influences and is interesting not only as a pigment but also far beyond for the development of innovative composite materials.

The researchers, headed by Francis Schwarze, came across the *Armillaria cepistipes* fungus, which is common saprophytic fungus that grows in forests.

Its amazing metabolism enables the fungus to bind heavy metals, make wood glow in the dark – and produce melanin on a massive scale.

"This fungus allows us to produce around 1,000 times more melanin than with other fungi," says Schwarze. *Armillaria cepistipes* is cultivated in a nutrient fluid, and, in the presence of a precursor, tyrosine, it releases melanin into the environment.

The scalable and sustainable production of melanin now enables EMPA researchers to advance projects to develop innovative materials for a range of industrial applications.

Armillaria cepistipes culture showing dark areas contain melanin (Empa)



Since melanin binds heavy metals, it can be used to develop new types of water filters. The team found that this melanin-based composite membrane can remove up to 94% of lead from polluted water.

The Serpentino is a brass wind instrument with side holes. It is usually a long cone bent into a snake-like shape.



'Trick box'

In nature, fungi use melanin to protect themselves against other organisms that compete for nutrients and space in the environment. With the new technology, melanin can be used to conserve tropical forests, where highly priced and much sought after ebony grows.

Tropical ebony wood is particularly precious because of its unique dark colour. When spruce wood is impregnated with a melanin suspension, a deep dark wood can be produced that is comparable to ebony.

To enable the black melanin to penetrate the wood, the researchers used another "helper" from their fungal trick box: *Physisporinus vitreus*. This white-rot fungus also colonises wood, and preferentially decomposes lignin within.

At Empa, the wood is first treated with the white-rot fungus for six weeks to allow the melanin suspension to penetrate deeply into the wood, without altering the wood's stability.

To develop a melanin-based wood preservative, Empa researchers are participating in a recently launched inter-disciplinary project supported by Innosuisse, the Swiss Innovation Agency. The goal is to reconstruct a historical wind instrument, the Serpentino.

The instrument was used over 400 years ago and was the godfather of modern instruments, such as the saxophone and the tuba, and creates sounds that are rich in overtones. The EMPA team is working on the reconstruction of the instrument.

It has tied up with the University of Applied Sciences and Arts and the Basel Historical Museum for the practical implementation of the research project.

IMPORTED BOLT • NUT • SCREWS FOR FURNITURE

- KNOCK DOWN
- MODULAR
- GENERAL

MAKE YOUR PRODUCTS LOOK GREAT



ADD VALUE TO YOUR PRODUCTS



FASTENERS FOR FACADE, CLADDING AND INTERIORS

Hi-Tensile Mini-fix

Heat Treated forged Steel Cam

Steel Roller type screw

Thread options:
• Metric or
• Self Tapping

Superior plating quality

High quality Nylon bush

PRICES
SLASHED

KAPASI INC.
KAPASI FASTENERS

No.83, 1st main road, New Binny Layout, (opp. Balekai Mandi), Tank bund road, Bengaluru-560023.
E-mail: info@kapasinc.com Tel: 91-80-26745566, 26740233

www.furniture-screws.com

IMPORTED BOLTS, NUTS & SCREWS FOR
MODULAR, KNOCK DOWN, GENERAL FURNITURE

Scientists convert waste wood into biofuel



Courtesy: Lawrence Berkeley National Laboratory

Teams from Lawrence Berkeley National Laboratory and Sandia National Laboratories have collaborated to develop a streamlined and efficient process for converting woody plant matter – such as forest overgrowth and agricultural waste – into liquid biofuel.

Their research was published recently in the journal *ACS Sustainable Chemistry & Engineering*. According to a recent report, by the year 2050 there will be 38 million metric tonnes of dry woody biomass available each year, making it an exceptionally abundant carbon source for biofuel production.

However, according to Ms Carolina Barcelos, a senior process engineer at Berkeley Lab's Advanced Biofuels and Bio-products Process Development Unit, efforts to convert woody

biomass to biofuel are typically hindered by the intrinsic properties of wood that make it very difficult to break down chemically.

In a study led by Barcelos, the scientists used non-toxic chemicals, commercially available enzymes, and a specially engineered strain of yeast to convert wood into ethanol in a single reactor, or "pot".

Subsequent technological and economic analysis helped the team identify the necessary improvements required to reach ethanol production at \$3 per gasoline (petroleum) gallon equivalent (GGE) via this conversion pathway.

The work is the first-ever end-to-end process for ethanol production from woody biomass featuring both high conversion efficiency and a simple one-pot configuration, which means lower water and energy usage.

In a complementary study, at the Joint BioEnergy Institute (JBEI), a team fine-

tuned the one-pot process so that it could convert California-based woody biomass with the same level of efficiency as existing methods used to convert herbaceous biomass, even when the input is a mix of different wood types.

Ethanol is already used as an emissions-reducing additive in conventional automotive petroleum, typically constituting about 10% of the gas pumped into cars and trucks. Some specialty vehicles are designed to operate on fuel with higher ethanol compositions of up to 83%.

The ethanol generated from plant biomass can be used as an ingredient for making more complex diesel and jet fuels, which are helping to de-carbonise the difficult-to-electrify aviation and freight sectors.

These studies indicate that woody biomass can be efficiently broken down and converted into advanced biofuels in an integrated process that is cost-competitive with starch-based corn ethanol. These technologies can also be used to produce "drop-in" biofuels that are chemically identical to compounds already present in petrol and diesel.

The next step in this effort is to develop, design, and deploy the technology at pilot scale, which is defined as a process that converts 1 tonne of biomass per day. The Berkeley Lab teams are working with Aemetis, an advanced renewable fuels and bio-chemicals company based in the Bay Area, to commercialize the technology and launch it at larger scales once the pilot phase is complete.

Need for plastics reduced by natural fibres



Materials based on natural fibres are an interesting alternative to replace fossil-fuel derived plastics. In the future, they may replace plastics in, for example, packaging, hygiene products, building materials and textiles.

The Piloting Alternatives for Plastics project brings together a wide range of Finnish and international companies to take materials developed in laboratories towards more industrial production. It is funded by the European Regional Development Fund, VTT Institute and companies.

The biggest challenge for plastic products is their recyclability.

Only 14% of plastic packaging is recycled, so the majority of plastic ends up being incinerated or dumped in landfills and, unfortunately, also improperly disposed of in forests and oceans.

In a 3-year piloting project, VTT is working with companies to take the manufacture of new generation fibre products towards the scale of industrial production. The pilots are being carried out at VTT in Jyväskylä, with access to, among other things, the first research environment in the world to utilise the foam-forming process.

The selected piloting targets include fibre-based materials to replace the plastics used in, for example, food packaging, filters, textiles as well as wiping, hygiene and construction

materials.

The challenge is to select the most interesting from a wide range of raw material and manufacturing options, and to reduce the time it takes to scale the results obtained on a laboratory scale to commercial production scale.

The development work done in the project will result in expertise in various raw materials, equipment and manufacturing technologies. Companies can move to the product development phase for different solutions in company-driven projects.

The Piloting Alternatives for Plastics project started on 1 April 2020 and ends on 31 March 2023. Its total budget is 6.7 million Euro.

Tele-presence robots take virtual viewing to the next level



A GoBe robot (left) sanitises a surgery theatre in an Italian hospital; and then US President Barrak Obama (right) takes a good look at another model.

Blue Ocean Robotics develops, produces and sells professional service robots while its subsidiary GoBe Robots specialises in tele-presence robots. The company recently announces the production of a new generation of its climate-friendly telepresence robots with significant demand driven by Covid-19 pandemic.

Tele-presence robots give the experience of being there without actually going there and replace travel with a remote presence. Users remotely control the robot and get a distinct feeling of being where the robot is as they receive live video streams of the location as the robot moves around it. This enables collaboration and interaction between people, no matter how far they are from each other.

The robot is remotely controlled and allows communication through a 21.5-inch screen that reproduces the user's face in natural size. A zoomable 4K camera and a wide-angle front camera give the "robot pilot" a clear overview of the location it discovers.

The new generation of GoBe Robots also stands out with an open system that creates even more applications and allows users to maximize the potential of the technology. For example, trade show organizers can give remote attendees the ability to book themselves directly into the tele-presence robot and experience booths and events while engaging with exhibitors.

As the pandemic spreads, GoBe Robots is quickly emerging as an effective tool that overcomes closed borders, while reducing travel budgets, working hours and transport time. It is now also launching the next generation of the world's most climate-enhancing robot.

The company has more than 1,50,000 existing users of its tele-presence robots, which contribute to colossal CO2 reductions. Customers have been able to cut as much as 90 % of their security inspection costs because they have placed 30 of such robots at their factories around the world.



LIPI MARKETING PVT. LTD.

Follow Us at



Cold Press

Model: MYJ50T

Digital Panel Saw

Model: MJZ3200D

Automatic Edge Banding

Model: MD60-6AB

3 Head Multi boring Machine

Model: MZ73213X3

Hot Press Single Layer

Model: MZ73213X3

CNC Router

EM-1325MT

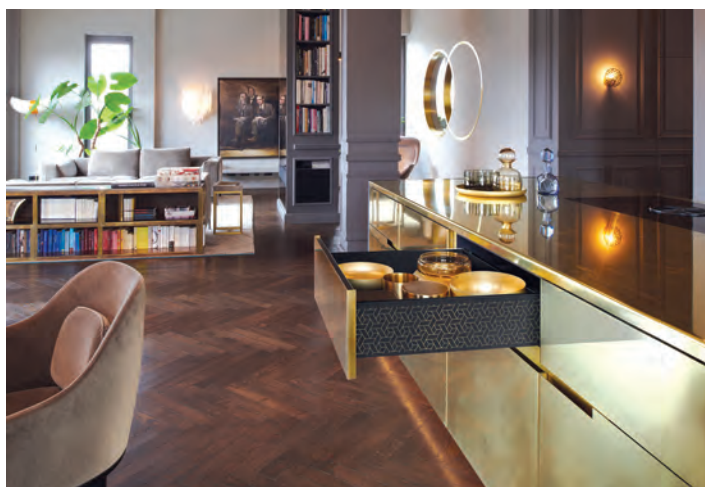


LIPI MARKETING PVT. LTD

No: 28, 3rd Cross St, Venkateswara Colony, Nehru Nagar, Kottivakkam, Chennai - 600041

+91 94443 95477 / +91 94443 95467 ✉ sales@lipimarketing.com 🌐 www.lipimarketing.com

Dark or colourful: Blum has it



Design is no longer just on the surface, it has also moved inside the furniture, such as with the Legrabox special edition in noble rust (L). Surfaces with a metallic look create special effects (R) with large, golden, printed drawer sides.

Blum aims to achieve furniture with the 'wow' effect through its fittings for wall cabinets, doors and pull-outs. At Interzum 2021, not only did customers see which design trends are currently shaping the furniture industry, they also saw the fittings manufacturer's response in their product range.

The Austrian fittings manufacturer highlighted four selling points that are currently shaping furniture design. Blum uses furniture transformed with fittings from the existing and soon-to-be-extended range to present all four of these trends.

Dark materials are increasingly determining the outward appearance of furniture. Now Blum is taking this trend inside as well, with dark fittings. Entire living areas with a harmonious colour concept can be delivered across all applications.

The Blum range for Aventos lift systems includes dark cover caps in dark grey. There is an extensive product line of Clip-top Blumotion hinges in onyx black, suitable for doors. And Legrabox pull-outs in carbon black matt bring a dark elegance to the base cabinet.

Legrabox individually enables unique furniture design. With the new box system design level, you can create your own drawer side designs through printing, laser engraving or embossing in a mix of colours or materials.

Blum also provides manufacturers with an easy way to stand out from the crowd: customisable branding elements. You can position your logo throughout, on hinges, lift systems and box systems.

Elegant accents can be set with metallic elements. Some excitingly staged applications that were on display on the Blum trade show stand: hinges in onyx

black, branding elements in metallic gold, silver and copper, and Legrabox drawer sides in stainless steel, with an anti-fingerprint finish and with metallic print colours.

Clear, straight lines, a design that is reduced to the basics, and large surfaces were another important design element presented by Blum. The new, concealed lift system, Aventos HKi, is hidden in the cabinet side.

Handle-less fronts that owe their implementation to servo-drive, tip-on Blumotion and tip-on motion technologies ensure a minimalist furniture design. The Expando-T fixing system allows thin fronts made from exceptional materials to be used.

Blum provides matching dark fittings and cover caps for lift systems, doors and pull-outs.



WOOD
MASTER

AN ISO CERTIFIED COMPANY

PANEL PROCESSING MACHINES

Website: www.woodmasterindia.com

100
YEAR
LEGACY

HIGH PRODUCTIVITY WOODWORKING MACHINERY DESIGN

Bringing Excellence of Engineering to Wood Industries



DIMENSION SAW WITH SCORING CUTTER

MODEL: WM-245 TLT



EDGE BANDING MACHINE

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.

Head Office:

St. no. 7, Bachittar Nagar,
Ludhiana-141003 Punjab, India

Mobile: +91-98156-27422, 98782-20422

Service Department: 98760-63422

Telephone: +91-161-5034422

Pune Office:

Sr. No. 27, Burhani Ind. Estate
(Near Excel Polymers)

Kandohwa Budruk, Pune - 141048

Mobile: +91-90110-27422

Delhi Office:

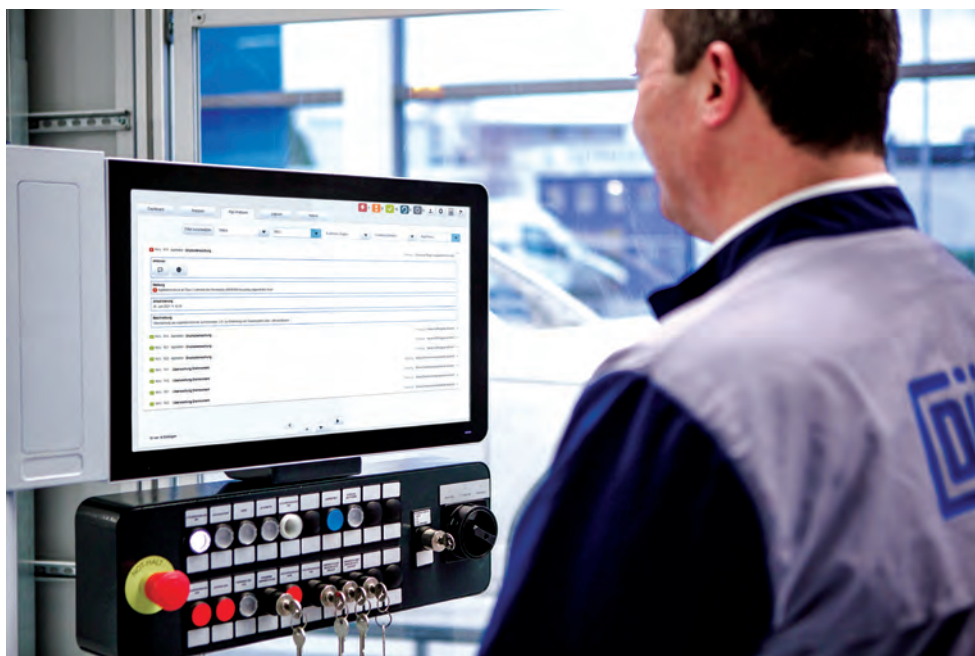
F-14, Vishwakarma Colony,
(Opp. Container Depot),

M.B. Road, New Delhi - 110044

Mobile: +91-98103-73452

Get in touch with us info@woodmasterindia.com, ludhiana@woodmasterindia.com

Dürr expands market-ready AI for paint shops



Using artificial intelligence, advanced analytics detect defect sources at an early stage during the application of paint, now also on high-viscosity materials.

Identifying defect sources, determining the optimal maintenance schedule, improving manufacturing processes: until now, artificial intelligence (AI) only made this possible in a paint shop equipped with state-of-the-art robots.

Now, however, Dürr is significantly expanding the scope of its AI applications with the enablement of analysis software from the DXQ product family for sealing. In addition, a unique interface solution makes it possible to incorporate robots from existing paint shops for the first time.

Factories in the automotive industry have enormous amounts of latent data about manufacturing processes, raw materials and products. The key to leveraging this asset is connectivity – in other words having the right interface at the control level to get at the information provided by robots, ovens, cathodic electro-coating

systems or conveyor technology in the first place.

Increasing application quality and plant availability using modern digital technologies involve recording relevant machine data, such as axis positions and temperatures, or events like alarms and the start and end times of programs, in real-time and uploading them to a database.

The goal is then to combine this with historical data and machine learning to detect previously unknown defect sources or to precisely plan maintenance intervals.

Existing plants

Although the demand for digital applications is high, operators in existing plants are constrained because most of their systems do not have connectivity and the right interface for data acquisition is found only in the later generation of Dürr robots.

Earlier, models and robots from other manufacturers and technology outside of paint application could not be connected.

But Dürr found a way to bring connectivity to almost all common robots and disciplines.

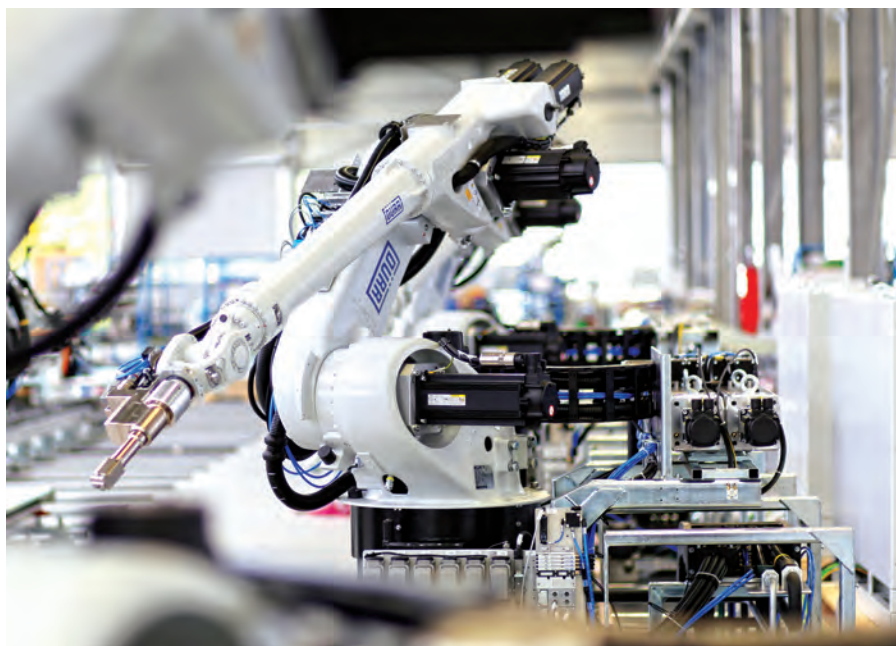
The solution is an adapter made up of hardware and software components that can connect to all current Fieldbus Technologies and that provide data in the necessary high temporal resolution of a few milliseconds.

The adapter is offered by Dürr in cooperation with Techno-Step, a specialist in systems for process data analytics and diagnostics that has been part of the Dürr Group since 2020.

Operators are thus able to read the available sensor and actuator data from their existing plants and to integrate the entire spectrum of disciplines, from pre-treatment to application to conveyor technology, into one piece of analytical software.

Sealing too

With DXQ equipment analytics operators get detailed insight into the various process steps and all the systems involved in them along the entire value chain.



Dürr's DXQ software application for paint shops and is also available for sealing.

The software package includes the advanced analytics module, the first market-ready solution to date to use AI to increase overall equipment effectiveness in the paint shop.

Dürr has expanded this module for sealing by adapting the AI models that

analyse the robot and process data for this discipline's specific requirements. Dürr utilised its comprehensive expertise in production technology and manufacturing processes in the automotive industry and a high level of digital knowledge.

This will make it possible to use AI in the future to precisely detect defect sources at an early stage when applying high-viscosity materials and to determine optimal maintenance schedules.

One example is the detection of nozzle clogs. The sealing material partially clogs the application nozzle, changing the material jet and leading to quality defects that require rework to fix.

Unlike conventional control technology, the DXQ software detects this defect and enables earlier intervention. For details, email kabilan@durrindia.com.

Rich Fill
GLUE ABSORBER

Hide Glue Spots & Beautify Decorative Veneer



Without Application

With Application



Manufactured By

Richwood

INDUSTRIES PRIVATE LIMITED

Plot No. 37, Industrial Estate, Hotgi Road,

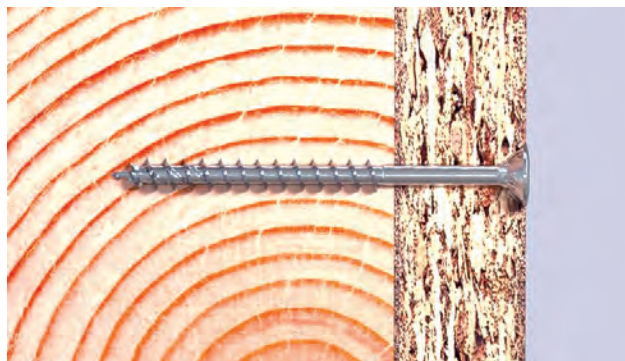
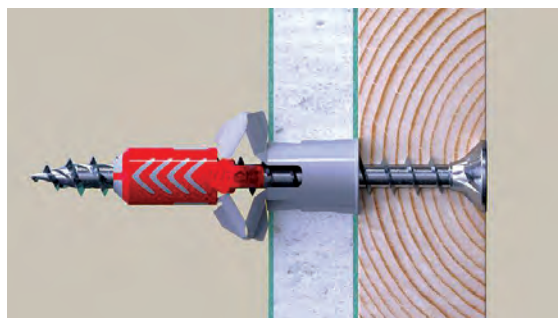
Solapur - 413 003, Maharashtra, India

Mobile : + 91 7722066777 / 771

Email : rich_wood@rediffmail.com Website : www.richfill.in



High-efficiency chipboard screw from Fischer



The PowerFast II from Fischer is a chipboard screw for fast and flexible applications, with the screw geometry designed to enable this. Its installation is easy, comfortable and flexible and the chipboard screw has significantly reduced splitting behaviour in comparison with standard chipboard screws.

High-performance wax coating reduces screw-in torque and allows smooth installation. In addition, the blue passivated zinc plating does not contain chrome VI and is therefore environmentally friendly.

The new recess sizes reduce the number of bit changes in the range from D3-D6 to only 2 changes (D3, 0 -> D3, 5 & D5, 0 -> D6, 0).

Salient features

- The three ribs on the tip ensure a quick bite and pre-drilling,

ensuring a fast bite and reduced splitting

- The special under-head geometry with optimised double cone and milling pockets ensure less cracking in timber and less damage to metal components
- For better-finished surfaces the increased thread pitch significantly reduces the installation time
- For fast assembly, the shank miller, in combination with the core miller geometry, is designed to reduce installation torque. This means that more screws can be installed with the same battery and with less effort
- Core miller geometry enables precise milling and perfect swarf removal, making small edge and spacing distances possible
- The Power-Fast II combines the highest technical know-how with excellent design.

Applications

- The new Power-Fast II is suitable for

use with Fischer plugs (Duopower and UX) and recommended loads

- This offers flexible application in the plug with high load-bearing capacities
- No special screws are required
- Safe and secure with Fischer plugs

The new screw geometry provides the perfect solution, no matter if it is hard or soft wood, and can be used in load-bearing wooden constructions, for connecting solid wood parts (soft and hard wood) as well as glued-laminated timber, cross-laminated timber, veneer-laminated timber, similar glued wood components and wood-based panels.

It is useful for connecting metal parts to wood, e.g. metal fittings, angles, beam shoes and other metal and wood connections, and is the ideal solution for a clean surface finish without damage.

The Power-Fast II chipboard screw combines technological know-how with high design quality. It is the winner of the German Design Award 2020 and the Red Dot Design Award 2020. (www.fischer.in)

India's First CNC Wood, Glass, Stone & Metal Design Machine Manufacturer **with Full Support**

VISHWAKARMA - 1525

Doors, Legs,
Staircase &
Statue



+ = OFFER*



BRAHMA - XZ-8050-1

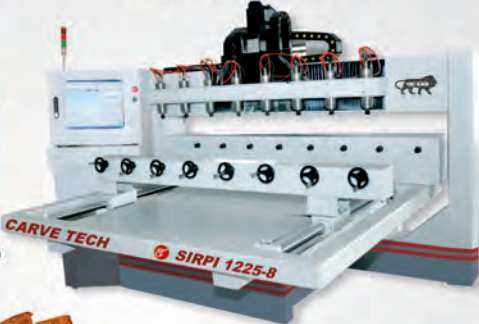


+ = OFFER*



SIRPI 1225-8 (4, 3 Axis)

8 Jobs Machining at the same time **Full Statue Machine**



+ = OFFER*



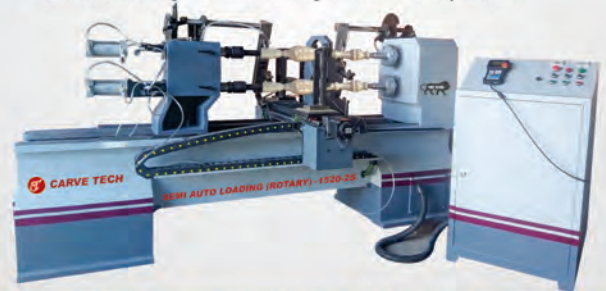
FULL AUTO LOADING - 1520

Full Automatic Loading
CNC Wood Turning Lathe



SEMI AUTO LOADING (ROTARY)-1520-2S

Semi Auto Loading CNC Wood Turning Lathe with Rotary Axis 2S



MATHA WOOD CARVING

Presents

CARVE TECH

The Complete Solution for CNC WOOD, GLASS, STONE, METAL CUTTING & CARVING MACHINERIES

An ISO 9001 : 2008 Certified Company

41/9, Kulithalai Road, (Maris Spinner backside), Manapparai, Trichy Dt. Tamilnadu, INDIA. Pin : 621 306.

+ 91 94434 22219, +91 94880 45688, + 91 94456 22219, (Tamil, English & Hindi)

wincetwood@yahoo.co.in, mathawoodcarving@gmail.com, carve tech2013@gmail.com www.carvetech.in

carvetech.carvetech.33 https://www.instagram.com/carvetech/ https://www.youtube.com/carvetech

Branch Offices : DUBAI | QATAR | OMAN | SRILANKA | MALAYSIA

Häfele has safe surfaces to light up imagination



The 'Terra' range of premium surfaces, including Cinnamon (L) and Vena Oro (R), comes in 20-mm thickness.

Every story reflects a personal style, unique thought and creative imagination. In the world of design, stories are expressed through colours, textures, style and functionality. But quite often a designer finds it challenging to find such colours, textures and styles that can express his/her strong design story.

Breaking these limitations is 'Terra', Häfele's in-house brand of premium surfaces, which comes with a uniform and high colour consistency that runs throughout the surface owing to the patented Breton technology.

Terra surfaces are made with over 90% quartz along with other compositions, giving it an eternal strength – along with an innate flexibility – to be designed to the tunes of your stories and imaginations.

Available in 20-mm thickness, Terra surfaces are easy to fabricate and install in different interior applications. They are food-grade safe and extremely easy to clean, maintain and use. Terra surfaces come in six colours, each having a soul and unique characteristic.

Owing to the inherent properties of quartz, Terra surfaces are non-porous as well as anti-bacterial, making them 100% safe, hygienic and long-lasting. They are also extremely immune to varying temperatures and do not decompose or change character when exposed to anything too hot or too cold.

Terra's Alba White encompasses all traits of minimalism with its fresh, pristine white colour that runs uniformly across the surface. It is a great companion to modern contemporary kitchens and other areas of the home, fetching for a simplistic design that never goes out of fashion.

Terra surfaces, such as Eggnog (L) and Moon White (R), are made with over 90% quartz with the patented Breton technology.



Terra's warm and woody Cinnamon shade imparts the right texture and colour tonality to bring in an essence of nature within homes. Be it wood laminates on kitchen shutters, or cabin-like wooden flooring; wood and wooden tones are seen everywhere around us.

White never goes out of fashion, and is still a favourite among designers. Terra's Himalayan White is an example of a warmer white shade that imparts immediate comfort and serenity to its surroundings.

Pastels are yet another favourite among designers and have been in the race for years. They impart character to any interior space and truly individualise it to a specific style. Terra's Eggnog is a creamy pastel shade interspersed with blending white veins that has the potential of becoming a top favourite among designers who are looking for something original yet different.

Terra's Moon White is a calming shade with a detailed spread of fine grains, forming an immediate connect with the therapeutic moonlight that beautifully contrasts the night. It can accentuate the look of light tones, or even beautifully contrast darker tones of any interior area.

Copper and rose gold are trending colours in home interiors and are being experimented with in kitchens, living rooms and even bedrooms. Bringing a subtle whiff of copper and gold as intricate veins running on a virgin white back-shade is what defines Terra's Vena Oro.





LONG HANDLE

WARDROBE COLLECTION

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



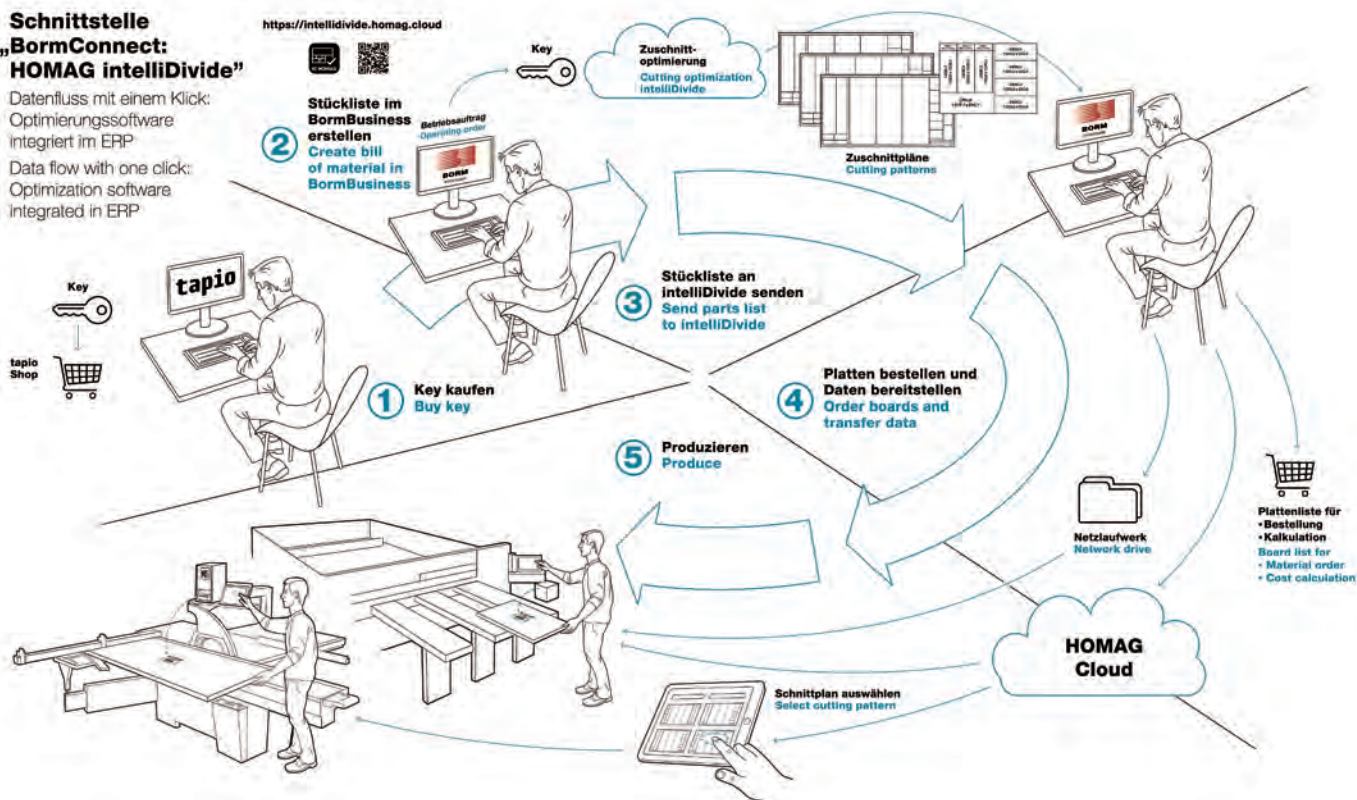
JB GLASS

www.JBGlass.in | +91 85270 99442

For local inquiries: Ahmedabad: +91 98250 23772, Bengaluru: +91 88844 64411, Jaipur: +91 98290 55008, Kolkata: +91 98300 14751, Ludhiana: +91 98789 33550, Mumbai: +91 98202 11262, Surat: +91 98241 44670.

Schnittstelle „BormConnect: HOMAG intelliDivide“

Data flow with one click:
Optimization software
Integrated in ERP



The new BormConnect: Homag intelliDivide interface connects BormBusiness' ERP with Homag's digital solutions — in this case with intelliDivide cutting optimisation. Whenever data is exchanged between the different

Once optimisation is complete, the user sends the final cutting patterns to a Homag panel dividing saw or from the

When the user logs in to their Tapio account, they can copy a unique access code for the interface and save it in BormBusiness. Data will be seamlessly exchanged between the two software solutions and there is no need to coordinate with software providers or to configure the interface.

New Challenges Fresh Solutions



MESSAGE

Proud to say we are an irreplaceable asset to the Indian Furniture Industry with the range of Products many of which are offered only by us.



NEW CAMPAIGNS

Giving our ergonomic range a new voice with #NoCompromiseFurniture.

VACCINATION DRIVE



In times of trouble, our first priority is the health and safety of our people. At the end of May 2021, Ebco conducted 1st dose vaccinations (Covishield) for approximately 1700 of its staff and their families, as well as many vendors and associates.

For our Palghar and Vasai locations, vaccinations were conducted at each respective factory in collaboration with dedicated medical staff from Sainit Hospital Boisar. For our Mumbai head office, vaccinations were conducted at Holy Family Hospital, Bandra. It makes us proud that Ebco was the first company in the district of Palghar to have its staff vaccinated. This was possible only because of a bold vision from our management, and an excellent team on the ground that executed the entire process professionally. This is the first of many steps we are taking to rebuild towards a better future after a very difficult year.

HEALTH AND HYGIENE INTERVENTION AT NANDORE AND KOLGAON - PALGHAR



Menstrual hygiene and COVID-19 are challenges in India. The underprivileged communities at Nandore and Kolgaon, Palghar do not have easy access to and cannot afford to buy sanitizers, masks and sanitary napkins due to their economic background. Ebco identified these issues and took the initiative, together with Concern India Foundation, to distribute free sanitizers and masks to underprivileged communities through ASHA and Aaganwadi workers. Sanitary napkins were also distributed to adolescent girls who were also educated about the menstrual hygiene system and healthy habits that can be practiced.

COVID SAFETY PRODUCTS



Safe Key



Door Opener
Pedal



Door Opener
Bracket



Table Partition
Clamp Slim -
Edge Mount

Table partition clamp
Edge Mount
Slim variation is ideal
for 4-20mm THK glass
or wooden partition.



- GEOFFREY NAGPAL -

2020 had been a most challenging year with uncertainty, and now the first quarter of 2021 with the surge of Covid-19 cases all over India, the year ahead is also going to be a tough one and will test any organization. We are fortunate to have the goodwill of our workers, staff who have adhered to safety protocols, cooperation of our distributors and faith of our customers. We organized 3 separate vaccination drives in Palghar, Vasai & Mumbai for over 1700 of our employees with immediate family, vendors and associates. Safety for all is our 1st priority.

While the 1st quarter of the past financial year was a washout due to the lockdown, the last quarter has been very strong with April still stronger. A major cause of concern is the huge increase in raw material costs, especially steel, up 80% in the last one year.

We have used the last year to consolidate our Range, remove bottle necks and increase our warehousing

space with new warehouse in units 5 & 2. Another building at Plot 11 in Palghar is coming up for Bed/Sofa Fittings. Signs of confidence in our future. Capacity augmentation & automation will be our priority in this year.

Brand building has also been strengthened with our promos in the Australia/India & England/India cricket series. After all we are proud to be an Indian brand with a presence all over India. Proud to say we are an irreplaceable asset to the Indian Furniture Industry with a range of products, many of which are offered only by us. With an average of 150 products introduced a year, we have the widest range in the Indian market. Every segment is being strengthened.



KITCHEN MIDWAY SYSTEMS



A new series of Kitchen Midway systems for best utilization of splash back area between overhead cabinets and below the counter cabinets. Easy to clip on shelves/ racks available that can be added/ removed or repositioned as per your work convenience.



Scan to view
product details

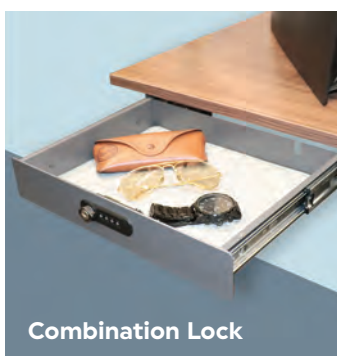
SAFE DRAWERS & COMPUTER MONITOR ARM



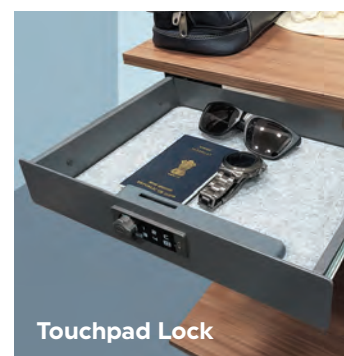
Single



Double



Combination Lock



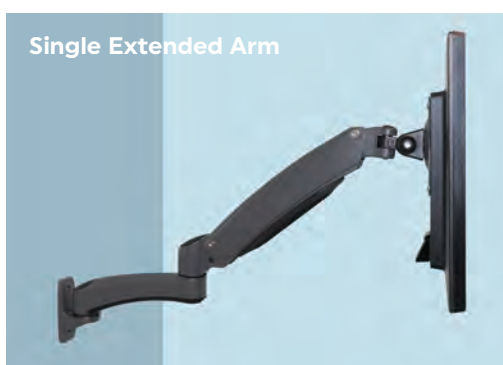
Touchpad Lock

Safe Drawers - Mini

Secure your belongings with ready to use ceiling mount metal Safe Drawers. Compact and modern solution with felt mat. Available in different variants.



Scan to view
product details



Single Extended Arm



Single Arm

CMA Single Arm - Wall Mount

TURN, TILT & LIFT to any position. A practical solution for work from home, commercial spaces, security offices, health care environments, etc.



WALL MOUNT
APPLICATION



TILT RANGE
+60° to -85°



SWIVEL RANGE
+90° to -90°



SCREEN ROTATION
360°



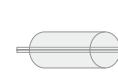
EXTENSION
385/560mm



VESA COMPATIBLE
75 X 75 & 100 X 100



SCREEN SIZE
15" to 27"



CONCEALED WIRE
MANAGEMENT



LOAD CAPACITY
6kgs/arm

FROM THE DESK OF THE TECHNICAL DIRECTOR



- A S H L E Y N A G P A L -

This last year, as you will all agree, has been one of the most difficult periods in the history of the world, our country and our company. However, we believe, that with challenges also come opportunities and keeping safety foremost in mind, we at Ebco quickly went about implementing protocols and SOPs to resume work with heightened safety standards ensuring the wellbeing of all our employees. We have worked hard at gearing up our production facilities to take care of disruptions on several fronts. We have over the last few years been investing in automation to help with productivity, improving quality and becoming less labour intensive. This year too was no different and many such projects were successfully implemented, steadily transforming ourselves into a world class manufacturing facility.

'When the going gets tough, the tough get going', remote collaboration tools are transforming work habits positively. A combination of videoconferencing, messaging, phone and email ensures continued progress and many of our products were re-engineered to enable us to 'work from home'.

Many new products have been launched, some Covid safety related and all of the highest quality. Our Kitchen Midway System, Safe Drawer Mini, Security Door Latch, Steel Fix 16mm and new Sofa Cum Bed Fitting Click, are only a few of

the dozens of products launched during this challenging period. We specialize in 'Value Engineering' and these products have been appreciated for their aesthetics, high quality, incorporating many new features, and pricing.

Currently on order we have new, higher capacity production machinery that will help us enter the arena of larger, higher value products using fewer operations, thereby cutting costs and ensuring even better quality. Laser cutting technology has also been implemented to help with small, critical batches, there by cutting our development lead-times.

Our solar generation has been a big success and we hope to recover the investment in another three years' time. Many CSR initiatives like solar streetlights in the Palghar villages and donation of medical equipment to the Palghar rural hospitals have been done by us and appreciated by local bodies. This is in line with our belief of giving back to society and helping the community.

As I sign off, I take this opportunity to wish you and your families a safe year ahead and thank you all for your valuable feedback which is critical for us to maintain our high standards.





As families try to adapt and adjust to lockdown conditions, home is becoming the only space from where all activities are being conducted. For adults and children. For office work, schoolwork, entertainment and leisure. Worksmart offers the perfect solutions to make your home truly work for each of these needs. The father's work desk for online meetings, the child's school desk for online classes or music lessons, and even a space for setting up the family's home entertainment centre!

Choose from a wide variety of options, from the simple laptop stand and table bracket to the more elaborate Smart Lift Desk, pole shelving systems that can provide table and shelf spaces in one unit, accessories such as charging stations and extension USB ports, almost everything that makes it convenient to work from home for adults and do homework for kids!

**#WFH #Worksmart #WSFH
THE SMARTEST WAY TO STUDY
AND WORK FROM HOME!**

SMART LIFTS

Worksmart Smart-Lift Desks are the perfect solution to enable you to **work sitting down or standing up**, at the exact height that suits your body! Choose from various options such as Electric or Gas lift technology, Height or Width adjustment, Single or Double pole structure, with tabletop or without tabletop, and Wall mount or movable.



Smart Lift Electric basic

Width Adjustment: 1150 - 1600mm
Height Adjustment: 710 - 1120mm
Max. Load:
Static - 80Kgs; Dynamic - 60Kgs.
Input Power: 100 - 240 V



**Smart Lift Single Leg -
Gas Lift - Centre Pole 3**

Height adjustment: 748 - 1142mm
Tabletop size: 690 x 480 x 18mm
Stroke: 394mm
Load capacity:
Dynamic - 5Kg, Static - 50kg



**Smart Lift Folding Table -
Gas Lift - Wall Mount**

Height adjustment: 646 - 1031mm
Tabletop size: 600 x 400 x 18mm
Stroke: 375mm
Load capacity:
Dynamic - 4Kg, Static - 40kg



**Scan to view
SmartLifts range**



FROM THE DESK OF THE
SALES & MARKETING DIRECTOR

- R A J E S H N A I R -

The last fourteen months have been most harrowing and desperate for all of us in India. The losses have been huge and most of them irreversible. However, it is important to not 'waste a good crisis' and change ourselves to become more resilient for the future. We have taken this opportunity to pause, to reflect on our priorities and to adapt to the new norm. We have become more conscious of our own health, more empathetic to the plight of others and more aware of the lifesaving contributions of our heroic health care workers.

This extraordinary time has also left millions of working professionals, students and teachers to explore new avenues to keep themselves on track. They were quick to adapt to online work and studies. Our ergonomic hardware solutions like SmartLIFT – height adjustable desks, simple folding table brackets became very useful and we have managed to deliver these even at the peak of restrictions, thanks to our distribution network. Our campaign 'HomeWork' creates awareness about 'Work and Study from Home' (we say WSFH instead of WFH) and the importance of having proper furniture, correct posture, being active and ergonomics.

Last year we took up the task of training our field sales force from every state by conducting online product training

sessions. In total, we have conducted over 200 sessions that covered more than 2500 individuals including that of our dealers and from furniture manufacturers. The results were amazing as we were able to train 7 times more than that of our usual training in Mumbai. These sessions not only provided the technical knowledge and confidence, but also kept many in positive frame of mind during the stressful lockdown period.

We completed and opened display centers in Nashik (NDC), Mysore (CDC), we doubled the Bangalore display center (in Koramangala) and a Livsmart Display at Gurgaon. Coming up this year are Coimbatore, Kozhikode and Chennai – all bigger and better.

On marketing front, we made a major shift from the traditional route by associating with cricket. Both India-Australia and India-England tournaments attracted mass attention. We have also extended our association with Jasprit Bumrah, Ebco's brand ambassador. We have assigned creative mandate to Infectious Advertising from this April.

As always, please do give us your inputs on products and services. Stay safe. Stay well.

SPECIALTY HINGES



E-Soft Hinge 3D – With Linear Mounting Plate

Specially designed hinge with 3D adjustment feature & 105° opening.



SAP IMPLEMENTATION

We have now transitioned to SAP from April 1, 2021 after a delay because of the disruption caused by Covid-19. The new system has many sophisticated features, which were not available on our previous ERP system. SAP's refined functionality allows the system to not just be used for accounting, but also stock management, production, job work, logistics, CRM all with real-time tracking and communication with all our locations, and improved data management and security. Many of our internal systems have been streamlined over the last 3 months in preparation for the new system. This is the first step (of many) in the direction of modernizing our internal IT infrastructure.



125° Hinge

This new soft close hinge is ideal for openable wardrobes with max opening of 125°.



155° Hinge (Zero Protrusion)

Specially designed ZERO PROTRUSION hinge ensures clear/non-obstruct opening of the cabinet door with 155° opening.



Thick Door Hinge 15-35mm (Soft Close)

Specially designed hinge for shutter thickness of 15-35mm with 95° opening.



Pivot Glass Hinge – 8mm

Specially designed hinge for small cabinets with glass doors of 6-10mm.



**FROM THE DESK OF THE
PROCUREMENT DIRECTOR**

- N I S H A N T N A G P A L -

The second wave of Covid-19 has been difficult for families and businesses alike. Despite never-seen-before raw material price spikes, an exponential increase in freight costs and a global supply chain crunch that came towards the end of 2020 and the beginning of 2021, our supplies have remained stable and our availability has improved greatly, especially during the 2nd quarter of 2021. We are in a strong position to respond to a market recovery and are working on strengthening the product range by responding to your valuable feedback. We are happy to inform you that Ebco now runs on SAP, we went live on April 1st. This was originally planned for 2020, but was on hold so that there were no further disruptions to an already

disrupted year with impact of Covid-19. All our plants and our head office have now settled with the new system. Once we achieve all our basic objectives in the next three months, such as ease and speed of use, data stability and accuracy, and advanced reporting, we will then move to make more advanced upgrades to various parts of our IT infrastructure.

We thank you for your trust and confidence in us and look forward to serving you better this year.



POLE SHELVING SYSTEM

A sophisticated shelving system minimal by design, versatile and exceptionally flexible. Redesign your shelving system with new range of adaptors for various applications. Install glass shelves or pullout baskets or simply use the wardrobe rail as per your choice of combination.



Scan to view
Pole Shelving
Brochure



Concealed Slide
Adaptor



Adjustable Glass
Shelf Support



Rectangular
Rail Support

ALL NEW ZIPCO

The new corporate logo of Effipress Engineering Pvt Ltd "Zipco" fortifies their continuing endeavour to offer a wide range of furniture hardware solutions by adding Hinges, Telescopic Slides and others.

Old Logo



New Logo



Powered by 

NEW INTRODUCTIONS BY ZIPCO



Slip on Hinge

Max. Opening: 95°.

Shutter Cavity: Ø35mm, 11.4mm deep.

Shutter Thickness: 14-22mm.

Finish: Nickel Plated.



Euro Slow Motion Hinge

Max. Opening: 105°.

Shutter Cavity: Ø35mm, 11.4mm deep. **Shutter Thickness:** 14-22mm.

Finish: Nickel Plated.



Friction Stay SS

Manufactured out of stainless steel.

Can be used for wood, aluminum and UPVC windows. Multi-link mechanism ensures 88°/65° opening.

Scan
to view

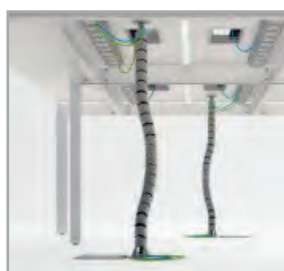




Scan to view
Cable Organizer
Brochure



● EASY TO INSTALL ● DO IT YOURSELF



Neat & Aesthetic



Heat Resistance



Extensive Application



Easy To Replace Cables



Size : Ø20 & Ø30



Flexible & Reusable



Customizable: Cut To Size



Black, White & Silver

Our time on this planet
is borrowed from
future generations.

Sustainability@Ebco

We conserve **500,000**
liters of rainwater,
reducing dependence
on our rivers and
lakes.

Sustainability@Ebco

Our ETP plant at Vasai
recycles waste water
which is then used in toilets
and other processes.

Sustainability@Ebco

ENVIRONMENT SUSTAINABILITY INITIATIVES

We understand our responsibility towards the planet and have ensured that our manufacturing facilities adopt environmental friendly practices like rainwater harvesting and solar power generation. We implemented a responsible waste management system that follows an effluent treatment plan, waste segregation and recycling. Our gardens and organic fruit and vegetable plantations ensure reduction of pollution and provide clean air.

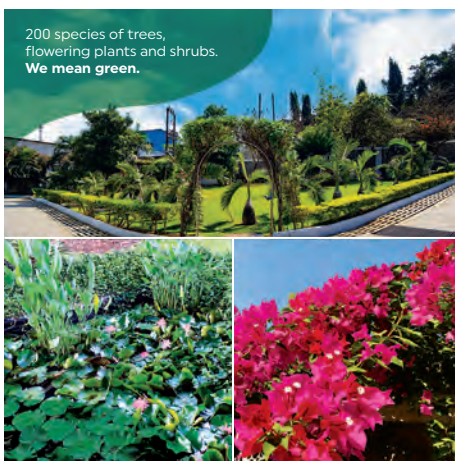
We recycle a 100% of all bio-waste
generated at all three plants and
generate sufficient compost for
our factory gardens.

200 species of trees,
flowering plants and shrubs.
We mean green.

Our organic vegetable and
fruit tree plantation is
a source of nutrition.

We generate power
while the sun shines.
509 kWh of it.

Sustainability@Ebco





Kitchen Pantry Unit – 450/600

This new kitchen pantry unit can be used with 125° Hinge. It is now available with two options – Flat Base Basket & SS Basket and in two widths of cabinets – 450 & 600mm. Height adjustment feature allows you to mount more than 6 baskets (SS304 Baskets are available separately).

Load Capacity: 60 Kgs.



Bottle Pullout Soft Close - 2 Tier

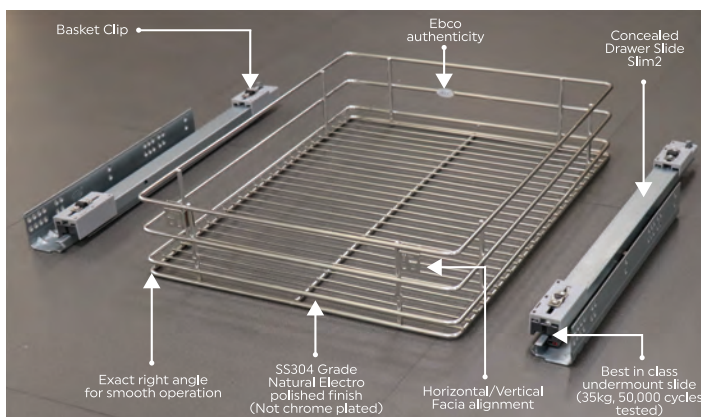
Ideal solution for kitchen narrow base cabinets where small and different things can be stored in an organized manner. Comes in full set with Baskets, Concealed slides & a Mounting kit. Available in three sizes: 100mm (For 150mm cabinet), 150mm (For 200mm cabinet), 200mm (For 250mm Cabinet).

Load Capacity: 30 Kgs



Double Corner Pullout Polymer - 450 (Soft Close)

Thoughtfully designed for corner cabinets. Soft closing with easy pullout ensures smooth & effortless functioning.



New Undermount Basket Series

This new series of SS304 Undermount Kitchen Basket with Concealed Drawer Slide Slim-2 & Basket Clips are space savvy and ideal solutions for storing kitchen utensils. Available in different variants to choose from - Plain, Cutlery, Cup & Saucer, Plate & Thali.



HI SLIDES

Hi Slide 90 Soft Close

Hi Slide 90 is now available with soft close and soft open feature which ensures effortless functioning.

Load Capacity: 90 Kgs.

Shutter Size :

Width = 950 mm (min.),

Thickness: = 18mm (max.)

for Twin Track.



Scan to
view Cabinet
Construction
Details



Hi Slide & Fold 20-25

Ergonomically designed for sliding folding shutters with soft close, soft opening function, and superior rolling system.

Details for Single Door:

Door Width: 300-600mm, **Door**

Thickness: ≥16mm.



Hi Slide 50 Reversible (Soft Close)

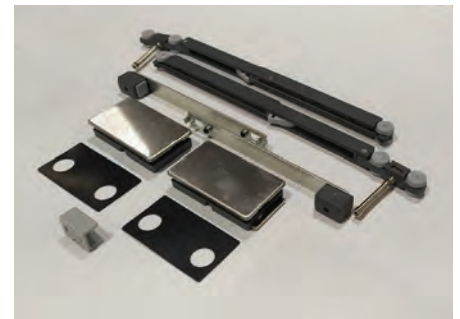
Effortless sliding system with soft close and soft open feature. Ideal for bulk volume production with surface mounting track and no routing required.

Single Door :

Load Capacity: ≤ 50kgs. **Door**

Width: 300 - 1200 mm;

Height: ≤ 2500 mm.



Hi Slide Glass Display - 15

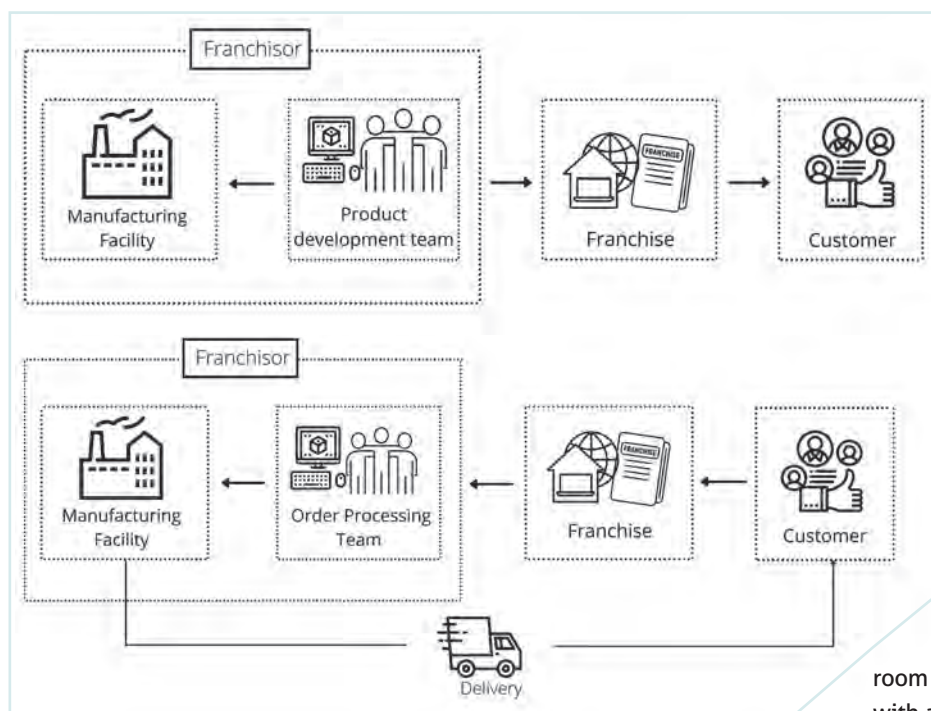
Ideal for retail display cabinet, showcase furniture like bookshelves and TV unit, kitchen wall unit, bathroom furniture, etc.

Max door size: (H) 700 mm x (W) 1200 mm.

Max weight per door: 15kgs.



Fiable fine-tunes franchise model



Catalogue deployment flow (top) and sales process flow (bottom).

There are several small and medium-sized furniture manufacturers in the world who would like to grow a successful brand and to offer them to franchises to reach more customers and spread their availability geographically.

The Fiable Furniture Technologies guides manufacturers through the required steps by defining clear short-term milestones to achieve the final goal. Catalogue and product development, pricing strategies, manufacturing details, etc., are all defined, developed and stored at the franchisor's end.

Hence, the franchisor becomes the epicentre of data development and deployment. To enable the transfer of this information to customers, the catalogue data must be deployed at the franchises. The designers at the franchises can represent the catalogue and product configuration to the customers.

Manufacturing data of the product catalogue should be transferable to the manufacturing facility, and

the IT infrastructure should be capable of handling or distributing this data flow from the franchisor's design team to all franchises on a regular basis.

The franchisor can control the data defined by him and ensure it is used by the franchises while the franchisor can be assured that the orders generated by the franchises are manufacturable.

After the catalogue is defined and the products with configuration are generated, the data, along with the output files, must be validated and tested for quality, correctness and manufacturability.

The feedback on deployed data at different franchises is recorded while the data development team keeps working on the catalogue development by adding new materials, textures and products. This results in continuous improvement and maintenance.

Sales process

The sales process should be planned from the point the end-customer walks into the showroom. The IT infrastructure of the franchise model should have the possibility to capture complete customer and shipment information.

It should be able to provide some basic

room designing features and visualisation with architectural elements to create the site for looking at furniture products. Each product in the catalogue should be unique and distinct, so that the customer views, or should be able to conveniently search, for the product s/he is looking for.

Product configuration is the most vital USP of any furniture manufacturer. It should be designed in a way that can cater to most of the customer-use cases and requirements. Product configuration should be consistent and should follow a systematic pattern throughout the product line.

Graphical images (texture, appliances, handles, etc.) should be used for quick and easy identification of the item. Labels and texts used in the configurator (quotation, plan and elevation view) should be in layman's terms.

The product configurator should be capable of instant cost calculation and the price should be live and dynamic to the configuration selected.

As soon as the orders are finalised, the franchise infrastructure should be capable of transferring the order data, along with head data and the configuration, from the franchise to the order processing team of the franchisor, where it will be inspected before manufacturing and delivery.

New veneer splicer with gluing system



Veneer is an essential material for panel wood furniture. A perfect veneer on panel furniture could even mimic the ones made of solid wood.

Built in Taiwan, Innovator's VeneerPlus G1 offers a better solution to help traditional workshops simplify the gluing process from two steps down to one, which saves labour and time and delivers high quality and stable result over time.

It can accurately and firmly bond the veneer edges with no visible joint line. The longitudinal veneer splicer is equipped with an integrated gluing system inside.

It is particularly suitable for the furniture industry and high-end decorative plywood.

After the well-cut veneer strips are aligned evenly by the synchronised infeed rollers, the veneers are directly conveyed through the singular gluing unit for gluing edges and then transported to the heating section for glue curing. Thus the veneer gluing and splicing processes can be accomplished within one single machine.

Coupled with Innovator's double knife veneer guillotines (CutMate-D series), perfect veneer cutting and splicing work can be easily achieved in a cost-effective manner.

Salient Features

- Complies with European safety standards
- Precise-cooling system for prolonging glue pot life
- Rigid welded machine body for stable splicing work
- Easy adjustment and quick access of integrated gluing system
- Specially-designed pressurised and heating mechanical structures
- Motorised driven in-feed discs instead of traditional rollers for smoother in-feed
- The latest transporting chains of engineering plastics for reducing the heat on veneers
- Reflective photocell sensor in the in-feed section to ensure perfect alignment of the jointed veneers
- Narrow heating zone with individual temperature controllers for minimizing the heat to avoid deforming splicing veneers
- Solid-state relay heating controller, different from the heater with a traditional magnetic contactor, for more accurate temperature control and longer life without sparks of contacts.

The VeneerPlus G1 is highly suitable for the Indian market due to its simplified functions and easy operation steps. For information email sales@InnovatorMachinery.com; service@InnovatorMachinery.com.

Interbuild's hardwax oil fights climate change

Interbuild is a global leader in solid wood countertops/worktops and furniture, primarily in high-quality acacia wood. All Interbuild solid wood products are treated with its specially developed hardwax oil that contains no thinner or other solvents (which is customary in wood treatment oils) and is approved (by the US' Food and Drug Administration) for being in contact with food.

It can be used for all kinds of wood, indoor and outdoor, from deck tiles, flooring and

patio furniture to worktops/ countertops and for cutting boards in the kitchen. The oil became so popular that it in 2018 was launched as a product to the end consumer, mostly in cans of 250 ml in the US.

In 2021, globally acknowledged climate effect auditor, South Pole, performed a life cycle analysis (LCA) of Interbuild's hardwax oil, determining how much emissions the oil is causing during its lifetime from the sourcing of components all through to usage and disposal at final customer.

It reported that Interbuild had compensated for the emissions actually caused and has committed to a plan for reducing the already low emissions caused even further and confirmed

Interbuild hardwax oil is climate-neutral (carbon-neutral).

The oil does not contain volatile organic compounds and has several major advantages:

- It does not give the user a headache even after working a long time with the oil
- Since a volatile component of other wood treatment oils evaporates when the oil is applied to the wood surface, the oil has substantially better coverage than oils containing VOC.
- The oil contained in the 250-ml can typically covers up to 10 m², making it a very competitive product for wood treatment
- Since the oil contains no VOC solvents, the climate impact on global warming from the Interbuild hardwax oil is very low.



Interbuild has taken this important step towards sustainability, thus giving the market the choice to be able to use wood treatment oil that is formally certified to have a net-zero of green-house gas emissions. www.interbuild.shop; Richard.mattus@interbuild.eu

New, sustainable paper solution for pallet wrapping

Mondi, a global leader in packaging and paper, collaborated with the Italian machine producer ACMI to create a new wrapping system for pallets that uses paper, instead of plastic.



The new Advantage StretchWrap is designed to wrap pallets for transport and offers a more sustainable choice for pallet wrapping. This innovative paper solution replaces the multi-layer plastic that is currently the industry standard for pallet wrapping.

By transforming the way pallets are wrapped, it reduces the supply chain's reliance on plastic, moving to a renewable and fully recyclable material.

Advantage StretchWrap (patent pending) can stretch and resist punctures, providing robust protection for goods during transit.

Along with ACMI's Rocket E-500 wrapping system, the new product makes it possible to switch to a fully recyclable pallet wrapping solution.

The paper's impressive stretchability and high-tensile strength make it a reliable alternative for transport. Acceleration tests to simulate transportation with ESTL equipment and real-life transportation trials confirmed that pallets wrapped with Advantage StretchWrap are safe.



Advantage StretchWrap is responsibly sourced from renewable materials in Scandinavia, and paper waste can be recycled at the end of its life, contributing to a circular economy. www.mondigroup.com.

Jai's Optimus and Modula pack a punch

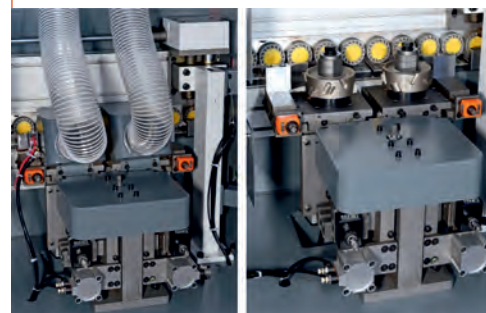
Jai Industries offer an unparalleled array of products that include woodworking and panel processing machinery and electric motors. It is well known for its engineering quality, technology and innovation.

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. Its machines are specifically produced to suit Indian working conditions that ensure performance and operating comfort.

The Optimus and Modula series are a range of solid wood machinery in the premium segment and have high-end features that are specially developed for units engaged in solid wood-craft business.

An optimal unit for panel edge pre-milling with two heavy-duty, high-frequency motors supplied with set of diamond cutters, as standard supply with machine.



OptiEdge 5.5 P - High Speed Auto Edge Bander

Salient Features

- High-performance machine with high feeding-speed of up to 18 m/min gives more production.

- Pre-Milling unit with diamond milling cutter for chip-free glue joints.
- Easy accessible, user-friendly, Smart-Touch PLC control panel. The Corner

Open View

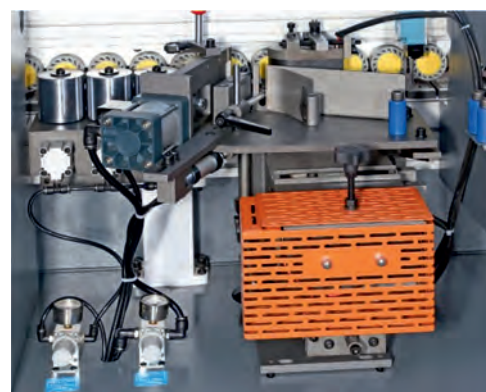


Technical Specifications:

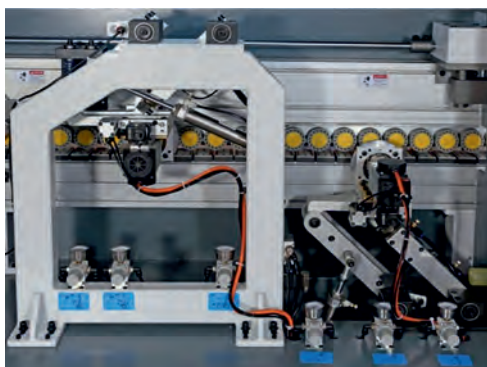
Work piece thickness range	mm	12 - 50
Minimum work piece width	mm	80
Minimum work piece length	mm	120
Edge banding thickness for PVC & ABS in coil form	mm	0.4 - 3.0
Work piece feeding speed	m/min	18
Pre-milling motor power	no/hp	2 x 3
End cutting motor power	no/hp	2 x 0.5
Fine Trimming motor power	no/hp	2 x 1
Round Cornering motor power	no/hp	2 x 0.5
Buffing motor power	no/hp	2 x 0.5
Air pressure required to 8	kg/cm ²	6
Working temperature range	°C	180 - 200
Glue pot capacity	kg	2.0
Total power	hp	17.33

rounding unit is controlled from the control panel, with the option of choosing the shape of panel.

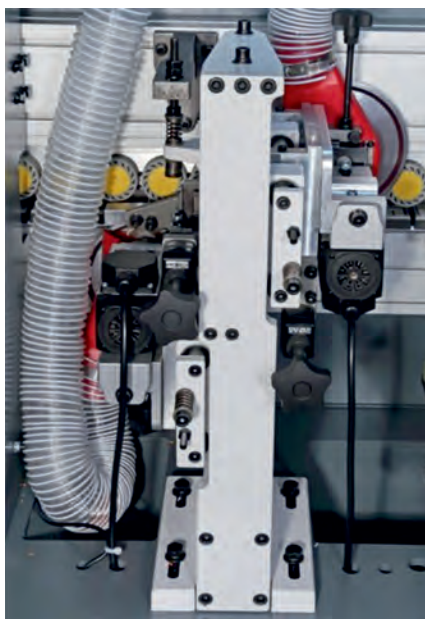
- Motorized up-down movement of pressure beam for easy thickness setting.
- High-frequency motors sliding on heavy prismatic guide ways for perfect finishing with trouble-free performance.
- Automatic lubrication system circulates lubrication to the required parts of the machine and ensures efficient operation and increase life of parts.



Glue spreading roller provides precise & consistent glue application. Perfect adhesion to the applied edge with heavy-duty pressure rollers. Heavy-duty knife with pneumatic pressure cuts the edge banding materials smoothly, up to 50 mm height & 3 mm thickness.



Compact and powerful high frequency two motor round cornering unit guarantees perfect finish on edge, sliding on two heavy prismatic guideways with recirculation ball bearings. Trimmer 2R cutter for PVC/ABS gives perfect rounding on edges of straight, chamfered & post formed panel.



Two compact and powerful high-frequency motors guarantees perfect finish on edge. High-level finishing thanks to the sturdy & heavy duty structure which is free of any vibration. Trimmer 2R cutter trims the perfect finishing on straight edge of panel.

- Glue-spreading roller provides precise & consistent glue application. Perfect adhesion to the applied edge with heavy-duty pressure rollers.
- Safety air tank provision for non-dropping of air during process.
- Robust feed chain & conveyor system with heavy-duty gearbox for effective pressure on panels.
- All electronic & pneumatic parts are from well-known international brands.
- Low maintenance machine, easy available cost-effective spares, best after-sales service support.



J-3045.in Curvilinear Edge Bander (45° & 90° Semi Auto)

J-3045.in Specialized 45° Edge Bander

Salient Features

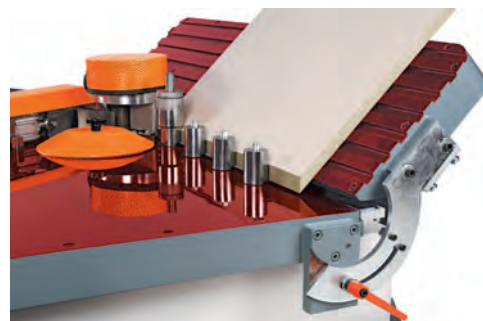
J-3045.in is an extremely flexible machine for application of PVC/ABS or veneer on straight, shaped or 45° panel. The Edge Banding is a semi-automatic machine for curvilinear work piece, wherein the predefined length of PVC/ABS to be glued to the laminate can be set for repetitive work piece and the digital temperature.

- 45° Edge Banding panels are widely used for manufacturing handleless drawer, door frame, worktable, etc.
- Pneumatic cutting device for pre-defined length, with foot switch.
- Electronic digital counter to adjust the length.
- Glue roller apply glue on board & tape for perfect bonding.
- German gearbox for smooth & power drive with long life synthetics lubrication.

- Easy regulation of variable speed 4 to 16 m/min.
- Revolving edge coil holder plate 525 mm. Ø.
- Automatic lowering of the glue temperature after a temporary non-use of the machine.
- Hard chrome-steel rollers to support & guide the work piece.
- Working table with specially-designed hylum surface for heat insulation & frictionless movement of work piece.
- Tilting working table from 0° to 45° with height adjustment up to 3 mm.
- Electronic digital temp. Controller with safety circuit, which allows the drive motor to start only when the hot glue has reached the set temperature.

Technical Specifications:

Table size (L x B)	mm	1150 x 900
Minimum work piece length	mm	280
Work piece thickness range		
- Inclined 45° Edge		
- Full Straight Edge	mm	10 - 25
Edge banding thickness for	mm	10 - 50
PVC / ABS in coil form	mm	0.4 - 2.0
Min-radius for curved edging	mm	20
Glue pot capacity	kg	3
Variable feed	m/min.	4 to 16
Front table adjustment (Up & Down)	mm	3
Front table tilt angle	Degree	0° to 45°
Maximum setting temperature	°C	180°
Compressed air requirement	hp/kg/cm ²	0.5 / 5 - 7
Heating element	kw	1.5
45° Tape groove motor	kw	0.73
Electric motor	kw	0.37
Power supply	voltage/Ø	415V, 3Ø
Machine dimension (L x B x H)	mm	2150 x 1000 x 1025
Approx. net weight	kg	330

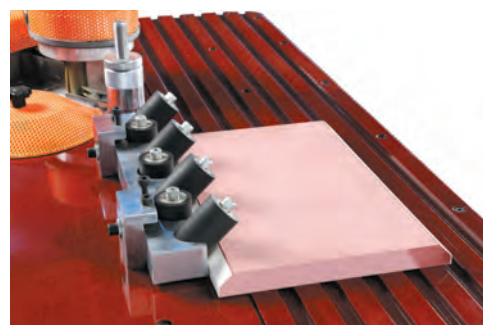


A specially designed hylum surface working table can be tilted from 0° to 45°

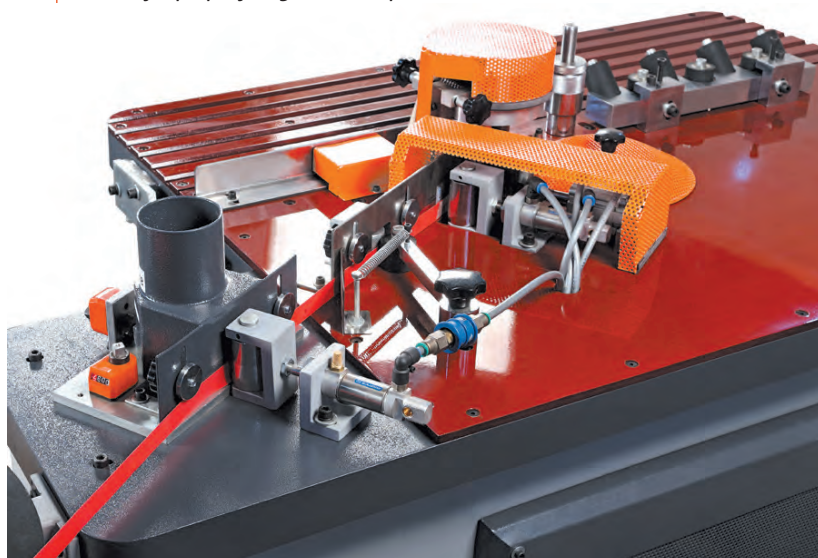


The glue in the glue pot, glue leveller, wiper, the extrusion screw and the heating element all make a bonding system, which gives an effective & efficient banding to the work piece.

Specially design height adjusting steel roller give perfection to the edge band for proper fixing with work piece.



Inclined 45° Edge Banding



A user-friendly, electro-pneumatic control panel that monitors & controls the operation

The pneumatic cutting device can be set to actuate the pneumatic cutter to cut the band for a pre-defined length using an electronic counter.

45° edge tape grooving for 45° inclined panel

JB Glass ups style quotient



See what the most stylish kitchens and wardrobes are wearing these days? Glass! It's not just the looks that are driving this trend; functionality tops it all. Toughened glass from JB Glass is enforced with a special safety backing film that makes it 100% shatter-proof.

Being a hard, non-porous material, it eliminates chances of germs breeding in it, making it ideal for the cooking environment. It is also scratch- and stain-resistant. So Indian kitchens can now have white interiors without worrying about spice stains.

JB Glass' Color Code gives the widest range of colour options, in both matt and gloss, as well as unique textures, to make the statement your customer wants.

The shutters are sleek, stunning and sophisticated; they are made with superior technology, and are available in myriad hues. Premium, durable, hygienic and maintenance-free, these shutters can transform a kitchen into a work of art.

The sophisticated single-edge profile of the shutters is made with a precise 45-degree chamfer, lending them a sleek, modern look, while keeping the edges

comfortable and safe. The corners too are seamlessly blunted to ensure smooth opening and closing.

All JB Glass shutters are made with a special vacuum adhesion technique that ensures that the glass is fixed firmly to the profile, eliminating any chance of air bubbles between the surfaces, giving it a flat and steady grip.

JB Glass has extended these shutter options to wardrobes, with many designs, colours, textures and finishes to choose from.

All JB Glass door frames use its signature anodized aluminum profiles in matte finish. Not only are they the most durable, they also blend in perfectly with all styles of interiors.

Anodized aluminium is durable, does not flake, chip or peel over time. It is easy to maintain with periodic cleaning with mild detergent and water.

It is also resistant to abrasion, corrosion and termites.



SCM upgrades door-window machining capabilities



The new Accord 600 has increased productivity, precision and speed by 30% compared to market standards.

SCM is changing the rules of the game for machining doors, windows, stairs and solid wood elements. At the heart of the new Accord 500 and Accord 600 models and the upgrade of the Morbidelli M200 lies the need for customers to regain control over their time, making significant gains in productivity.

'According to Wood': that is the claim chosen by SCM for the launch of its new range of machining centres for solid wood.

It describes SCM's desire to provide a vast range of technical solutions that are even more effective and better performing, with technical specifications and performances that are fully in line with market challenges.

The range is now being expanded and renewed from a completely new and strategic point of view, to stay abreast of the times and to rightly value customers' time, by optimising and speeding up production processes, while simultaneously guaranteeing excellent finishing quality.

Accord 500/600

The machining centres increase productivity by 30% compared to market standards thanks to the gantry structure with closed frame that, in continuity with the Accord project, allows for sturdiness and precision to be achieved even at maximum advancement speed and with the most difficult machining jobs.

The Accord 500 comes with additional tool storage (L), shavings conveyor (C) and machining unit (R).



The Morbidelli M200 (L) now comes with the FlexMatic table (R).



The routing speed is further increased and now exceeds 15 metres per minute with the new 5-axes KPX machining unit with Hiteco 17 kW electro-spindle, designed to always allow the most complex operations to be carried out rapidly and accurately.

Even the production cycle times are dramatically reduced with the exclusive BRC-S unit, which is even more flexible and compact and allows you to complete all the cutting, routing and drilling machining typical of window components.

Another significant new entry is the more than 100 tools readily available and easily ready for use with the new Caddy 35 storage, unique both for its capacity as well as its structure, because it is integrated into the machining centre without increasing the machine's bulk.

Tool management

Tool management is further optimised and simplified by the new Maestro Power TMS software, integrated with SCM's Maestro suite. Thanks to this program that maximises the ability of the storage and optimises programming, there is no need for the operator to waste time and energy in looking for the most suitable tool. The software will identify and indicate the tool's exact position in the storage, thus minimising machining times.

Cleaning the surrounding area is another crucial matter when machining solid wood and, in order to deal with the problem, SCM has devised a new shavings conveyor automatically positioned in accordance with the machining program that can ensure maximum suction efficiency under any condition.

The 'According to Wood' project is offered to the market with a range that fully satisfies the various production needs.

Accord 500 combines tradition, simplicity and compactness, without sacrificing high technology: ultimate power developed by the new 5-axes machining unit with 17-kW electro-spindle.

Accord 600 is the project solution that involves no compromising on performance. It offers a completely new, hyper-performing machining unit fitted with as many as three separate units. The 4-axes and JQX 5-axes electro-spindles, respectively from 21 to 13.5 kW with separate on-board storages, allow for tool change while the machine is running and even during machining of the separate front unit.

M200 upgrade

The Morbidelli M200 range, benchmark for CNC machining centres across the globe, confirms its technical features as the most popular on the market, like its

solid structure, its 250-mm component passage, its Prisma KT 5-axes and the FlexMatic table.

This machining centre has now been enhanced with new features that are ideal especially for the production of window elements: cycle time reduction with the FlexMatic table becomes even more flexible with its movements made simultaneously under the control of SCM's Maestro CNC software.

The performance of the piece-gripping system has been further enhanced thanks to the Multigrip clamp, designed to specifically machine elements for windows and doors that allow the work pieces to be positioned and blocked faster and more reliably.

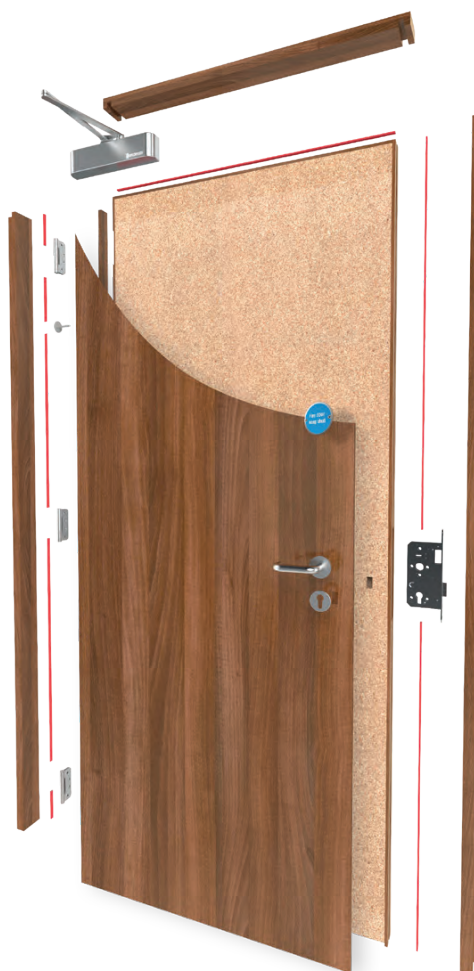
Important new entries for the JQX machining unit that is enhanced by an innovative shavings conveyor specifically designed to achieve maximum cleaning even in the presence of significant removals. The conveyor can always position itself directly in front of the jet of shavings to capture it as effectively as possible.



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.

Halspan fire doors boost safety



Every year in India, fire leads to hundreds of human casualties and loss of property. According to official figures, more than 1,30,000 people were killed by fires in India between 2010 and 2015. That's an alarming

average of 60 people every day!

It is now ranked the third-biggest threat to business in India, according to the Federation of Indian Chambers of Commerce and Industry and Indian Readership Survey. This is leading to stricter regulations to reduce fire risks and deal with protection.

There is, therefore, an increased focus on fire doors, which play a crucial role in a building's fire strategies. UK-based door supplier Halspan is helping India's construction industry rise to the challenge.

Cause-n-effect

When a fire is ignited, it takes some time to grow. Fuelled by the oxygen in the vicinity the flames begin to spread and a smoke layer develops. As the temperature rises, the smoke deepens and becomes more toxic.

In a confined space, there is a rapid depletion of oxygen, leading to inefficient combustion, which in turn produces large quantities of carbon monoxide. As little as 1% carbon monoxide in the atmosphere can be fatal.

Even with levels as low as this, people become disorientated in about 20 seconds and fall unconscious in around a minute, with death following soon after.

So what can be done to combat fire and smoke? Every building needs its own fire strategy and active and passive fire protection systems, both of which need to work together in the event of a fire.

Active fire protection measures include equipment like fire extinguishers and sprinkler systems, which require some degree of action, either manual or automatic, to operate. Providing they work properly, these active fire protection measures can help to slow the spread of fire or put it out altogether.

Fire-rated doors

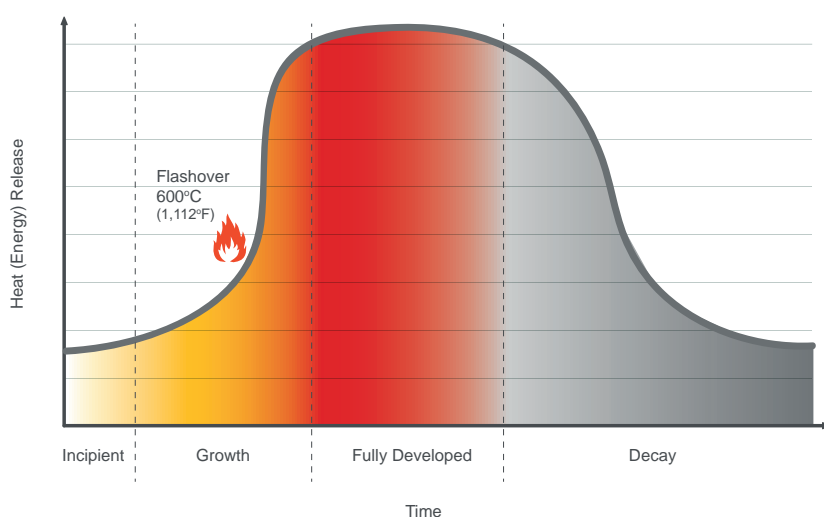
Passive fire protection measures include fire doors, fire-resistance rated walls and floors, and dampers for ducts. These help to slow or stop the spread of fire and smoke between rooms and different floors. They buy occupants valuable time for evacuation.

Halspan has invested millions of British pounds in testing and demonstrating its commitment to a rigorous and ongoing programme of third-party certification to ensure that its fire-rated doors meet the ever-more stringent demands of regulatory bodies worldwide.

"As stricter fire protection regulations come into force in India, there is a demand for greater consistency and quality in door manufacture. Halspan is ideally placed to help," says Mr Ashok Malav, Business Development Director who heads Halspan's Delhi office.

"We have been in the Indian market for a decade now. Several leading Indian door fabricators already recognise that having Halspan at the core of their doors is a sign of quality and assurance," he says. For further information, e-mail amalav@halspan.com.

Stages of Fire Development



Hydro-coating for water-resistant floors



BerryAlloc, a pioneer in hydro-coating technology, has launched Ocean+, its latest collection in laminate flooring. Ocean+ takes advantage of the hydro+ technology, making this an easy-maintenance floor for general residential and commercial use.

Hydro+ is a hydrophobic coating that is applied to all sides of the plank during the laminate manufacturing process. Repelling water away from joints and combined with a secure locking system, hydro+ makes Ocean+ completely water-resistant.

The Ocean+ collection features impressively natural, matt wood and life-like stone designs, offering a choice of modern and classic styles. The highlight here is the real wood structure with a matt finish, of which the natural

aspect is barely discernible from the look and feel of real wood.

The collection also boasts of several designs with a deep wood structure, an ultra-deep embossed texture and a super-matt finish that bring the knots and cracks of grain patterns to life for a true recreation of nature.

The collection consists of four different formats: Ocean 8 V4: a versatile 8-mm-thick laminate floor with a standard plank size of 190x1288 mm; Ocean 8 XL: with a plank size of 241x2038 mm and 8-mm thickness; Ocean 12 V4: a standard size (190x1288 mm) format with a 12-mm plank thickness; and Ocean 12 XL: with a plank size of 241x2038 mm and 12-mm thickness.

Technical specifications

- 100% water-resistant hydro+ technology
- Versatile Class 23/Class 32 8-mm laminate

- High-performance Class 33 12-mm laminate
- DuoLoc and 5G click installation systems
- V4 in 1288x190-mm format
- XL in 2038x241-mm format on selected wood designs
- Lifetime residential use warranty.

Ocean 8 V4 makes use of the DuoLoc locking, a proven click-to-install system that delivers excellent strength and a strong seal to maintain the integrity of its hydro+ water-resistant technology.

The compatible Excellence Plus underlay ensures that every Ocean+ floor can quieten impact sound by 21dB, helping to create a more comfortable atmosphere in a multiple-story property.

As with all of the company's laminate floors, Ocean+ is PEFC-certified and has an extremely low VOC emission.

TN plans furniture hub near Tuticorin port



The State Industries Promotion Corporation of Tamil Nadu Ltd. (SIPCOT) has announced a furniture-focused industrial hub spread across 1,150 acres (fully acquired land) near Tuticorin port.

According to a document shared with WoodNews, SIPCOT and Guidance Tamil Nadu, a state government investment arm, the proposed furniture hub would be equidistant (600 km) from Chennai and Bengaluru.

The hub envisages co-located value chain to drive cost-effective manufacturing. Accordingly, separate areas have been demarcated for panel manufacturing, upholstery and mattress manufacturing, a sawmill cluster, end-to-end testing facilities, ease of furniture designers to interact at the furniture park, a skilling centre to train up to 5,000 people every year, and a business centre equipped with conference rooms and video-conferencing

capabilities.

Tuticorin port is the third-largest in India for wood imports, after Kandla and Mundra. It already has existing capability to import from key global sources such as Myanmar, Papua New Guinea, the African continent, Australia and New Zealand.

It has an export eco-system in place with units exporting to global retailers from Tuticorin, including to IKEA, Walmart, Kohl's, Target and Tesco.

Advantages, incentives

Investors and manufacturers will have access to solar power, in-house waste water treatment plant, and group housing for labour.

Apart from efficient export connectivity to the US and Europe, the port is well connected to domestic markets via air, road and rail. It already has a flourishing industrial eco-system in its vicinity, with multiple well-established industries in the automobile and aerospace sectors.

For the proposed furniture hub, SIPCOT and Guidance Tamil Nadu have set up a single-window approval system for

expediting all major statutory approvals, announced attractive financial incentives to ensure manufacturing cost competitiveness, and offer facilities for quick factory set-up and production.

Three subsidy options for investment promotion are being offered – up to 25% fixed capital subsidy; up to 40% of flexible capital subsidy; or 2% of turnover as subsidy. Besides there will be 100% concession on stamp duty, and full refund of State GST paid on capital goods.

The port hinterland has abundant timber plantations close the furniture hub for sourcing raw materials: private rubber wood plantations in Kanyakumari and Theni districts; eucalyptus plantations across Nilgiris, Tenkasi and Kanyakumari districts; Melia Dubia plantations in Dindugal and Coimbatore; as well as silver oak plantations in Dindugal and Nilgiris districts.

For more information write to Mr. C. Suresh, Thoothukudi Zonal Manager for Guidance Tamil Nadu, at suresh@investtn.in; or email Mr T. Anand, Managing Director of SIPCOT at md@sipcot.in.

Formica to distribute Fenix in India



The Formica Group is part of the Arpa Industriale SpA, which is a leader in the field of material technology. The main focus will be on a coordinated strategy and synergies to offer customers world-class surface materials.

Applying proprietary technologies, the external surface of Fenix is characterised by the use of next-generation acrylic resins, hardened and fixed through an electronic beam curing process and are suitable for both vertical and horizontal applications in the following sectors: kitchens, bathrooms, design furniture, retail and offices. (www.fenixforinteriors.com)

Square Yards launches services site

India-based real estate marketplace Square Yards has launched 'Interior Company', a new, in-house site for home furnishing and interior design services. The company plans to use the site to tap its existing ecosystem of real estate customers, some of the country's top developers and a strong broker network.

The new subsidiary is currently operational in Bengaluru, Delhi-NCR and Mumbai and will soon be available throughout India and the Middle East.

Interior Company will initially focus on new home buyers in the primary market. Concurrently, the company plans to build standardized and modular solutions for near-possession and ready-to-move-in units in some of the top developer projects across major cities. www.aimgroup.com

Sudhanshu Vats joins Pidilite

Pidilite Industries announced that Mr Sudhanshu Vats will join the company as Deputy Managing Director, effective September 2021. He is an alumnus of IIM-Ahmedabad, and has a career of 30 years spanning diverse organisations like Unilever, Castrol, Viacom18 and more recently Essel Propack.



Sudhanshu is a Member CII National Manufacturing Council. He was the Chairman of the National Media and Entertainment Committee of CII, and Director and Vice-President of Indian Broadcasting Foundation.

He started his career with Hindustan Unilever and spent about 20 years in various sales, marketing and general management roles.

Vietnam overtakes China in US

Vietnam has overtaken China as the largest exporter of wooden furniture to the US, according to the US-based Furniture Today website. Despite the trade disruptions the country shipped over US\$ 7.4 billion worth of furniture to the US in 2020, up 31% compared to 2019.

China's exports of wooden furniture were valued at US\$ 7.33 billion in 2020. While the gap is relatively small, Vietnam's position in global markets illustrates how the

industry in Vietnam has grown in importance over the years.

The US Forest Service said that the US market is opening to Vietnamese furniture exporters, adding that the authorities in the US have deployed various tools to ensure exporters comply with legal timber rules and to prevent origin fraud, as the US is a large and strict market in terms of trade fraud and tax evasion.

Biesse revamps police station in Bengaluru

Biesse India, a direct subsidiary of Biesse Group Italy, recently paid tribute to the Karnataka police by constructing a new floor for the Madanayakanahalli police station in Bengaluru as part of its corporate social responsibility initiative. Machinery from Biesse India is exported to more than 60 countries worldwide.

The police force in the state has been fighting a formidable battle in the frontline since the outbreak of the Covid-19 pandemic. The newly constructed floor will not only enable these warriors to work by maintaining adequate social

distance but also help them accommodate more staff.

Mr Sayeed Ahmed, CEO, Biesse India said: "Our police department works 24x7 and 365 days especially during the pandemic. It is our moral and social responsibility to support them when there is an opportunity to show gratitude."



Century Plyboards launches app

Century Plyboards has launched a 'Century Promise' App which will provide customers with the means to determine if they are buying genuine Century products or fake plywood, achieved through an embedded QR code.

The plywood market in the country is worth over Rs 23,000 crore (US\$ 3 million) and around 30% of this is from the 'organised' sector. The other 70% of plywood available is from smaller producers, and where counterfeit plywood is sold to unsuspecting consumers.

Siempelkamp launches digital platform

Siempelkamp, the German technology provider for machinery, has launched an online educational platform (<https://explore.siempelkamp.com>) to bridge the communications gap on account of disruptions caused by the Covid-19 pandemic and cancellation of several major trade fairs.

Customers, partners, industry experts and media representatives can now discover exciting and visionary content on topics of Siempelkamp's sustainability, digitalisation and complete plant competence.

All present and future content will be shown in a diversified multimedia mix of interviews, videos, presentations and expert panel discussions.

Furlenco raises funds for expansion

Furniture rental firm Furlenco has raised Rs 1,000 crore as part of its latest funding round, reports the *Economic Times*. With this, the company will cater to much larger audiences with more tailored solutions and brand new offerings.

Founded in 2015, the company claims to have grown at a compounded annual growth rate of 120% between 2015-2020 and, despite the pandemic, it was able to preserve 95% of its revenue in FY2021.

Furlenco has recently announced its entry into Jaipur, Mysuru and Ahmedabad, and is now looking to launch in more Tier-1 and Tier-2 cities. It already has a presence in 13 cities including Bengaluru, Mumbai, Pune, Delhi, Noida, Gurugram, Ghaziabad, Faridabad, Hyderabad, Chennai, Mysore and Ahmedabad.



Explore.Siempelkamp will be complemented for 3 days from September 27, 2021, by its participation in the digital event, Ligna.Innovation Network, organised by Deutsche Messe and the VDMA Woodworking Machinery Association. The content platform will remain active even after the Ligna event.

Tree DNA used to decide theft

For the first time in a federal court, tree DNA was used to help decide a case when 39-year-old Justin Wilke was put on trial for his role in an illegal logging operation at Washington's Olympic National Forest.

Wilke and his accomplice illegally felled maple trees and sold the lumber to sawmills and eventually ended up burning 3,300 acres of forest that cost around \$4.2 million to contain.

Prosecutors used DNA analysis to determine that the lumber sold matched the remains of three big leaf maples taken from the forest. The DNA analysis was so precise that it found the probability of the match being coincidental was approximately one in one undecillion – 1 followed by 36 zeros!

Hot-melt adhesive market to reach US\$ 14.29 billion

The global hot-melt adhesive market is expected to grow at a CAGR of over 5.57% during 2020-26 says a report by Arizton Advisory & Intelligence. The market is expected to witness an absolute growth of 39% during this period.

The hot-melt adhesives market in Europe has the

Combilift delivers 60,000th truck



Irish manufacturer Combilift recently marked a further milestone when its 60,000th unit came off the production lines at Monaghan and was shipped to Australia. The customer taking delivery of this special forklift is Metroll, a leading Australian manufacturer and supplier of steel building products including roofing, cladding, rainwater, structural and fencing.

The new Combi-CB3000 will be a further addition to the fleet of 13 Combilifts that are operating throughout the Metroll Group, with another 10 already on order. These range from 3-tonne multi-directional units to a highly customised 10-tonne model. (www.combilift.com)

largest market and is expected to witness an absolute growth of 36% during the forecast period, at an incremental growth of US\$ 1,296.70 million.

Key drivers and trends fuelling market growth include booming packaging and non-woven applications; increased demand for polyurethane-based hot-melt adhesives; increased use of hot-melt adhesives in DIY activities; and the use of hot-melt adhesives in the automobile industry.

Egger records 3.08-billion-Euro turnover



Egger experienced a strong increase in demand in almost all markets from the summer of 2020 onwards, which has remained at exceptionally high levels thanks to new production capacities and a special situation in the construction and furniture sector.

To meet this demand, production capacities are being utilised to the maximum at all its plants and record quantities are being produced.

The wood-based materials manufacturer attributes the continued high demand to the cocooning effect associated with the pandemic protective measures and lockdowns, i.e. the massively increased consumer investment in one's own home. www.egger.com/credit-relations.

Dieffenbacher ships factory to US East Coast

US building products manufacturer, GO Lab Inc., is relocating a wood fibre insulation board plant from Berga (Germany) to its production site in Madison, Maine. Once the equipment is up and running in 2022, GO Lab will become the first company to produce wood fibre insulation in North America.

Wood fibre insulation is used as a sustainable, recyclable, low-cost, light-weight, high-performance building material with a negative carbon footprint.

Dieffenbacher originally sold the plant to a German firm and commissioned it; but recommended the re-purchase to GO Lab. Dieffenbacher supported the company in financing the relocation and planning of its re-installation.

The Dieffenbacher line is the largest and most



complex, beginning with the refining of the wood chips and continuing all the way to the production and packaging of the final product. It will also modernize the plant and install new equipment, including a gluing system and dryer.

Silver nanoparticles fight Covid-19

JBS Couros, the Brazilian leader in the leather processing industry, is using a coating treatment called JBS V-Block, which contains silver nanoparticles to inactivate the SARS-CoV-2 virus. The application of this new technology sets a new standard in leather production. It not only inactivates the spread of viruses but assists in the preservation of the material,

making it ideal for use on surfaces such as furniture, seating and vehicle steering wheels, clothing, bags and wallets. In tests conducted in the level-3 bio-safety laboratory of the Institute of Biomedical Sciences of the University of São Paulo (ICB-USP), the material showed 99% inactivation of the SARS-CoV-2 virus in 30 minutes from contact with viral particles. (www.jbscouros.com)

www.woodnews.in

WOODNEWS

Also available as
Flip Magazine



Scan the QR code
to view Flip Magazine

OR

SMS FM WN
to 9986600036

Principal Official Publication of:

INDIA
WOOD

DEHI
WOOD

Mumbai
WOOD

For your print copy please send your details
to subscribe@woodnews.in
or call/SMS Chandru on 9986600036

Now follow us on:



Jai's Optimus 5.5P edge bander



Adequate maintenance is a crucial factor for the long life of the machine (**Optimus 5.5 P Auto** high speed edge bander with pre-milling and round cornering) and for its optimal working. General cleaning ensures long life and is an important safety factor.

All maintenance/ cleaning operations must be done with the power turned off and personnel wearing protective gloves. It has to be carried out by the machine operator/ skilled technician.

Before carrying out maintenance operations, adjustments or to dismantle any machine part, turn main switch to 'off', disconnect the compressed air tube at the filter unit in feed.

Rules for correct machine cleaning (using power dust aspirator)

- Tables and all cavities where there are dust and shavings residues.
- Extractor hood, checking that there are no blockages.
- The inside of the machine, checking for dust or shavings.
- The end cutting, trimming, corner rounding & buffing unit.
- The feed track conveyor unit.

Clean any glue residues along the panel feed path, using a suitable non-hazardous detergent. Clean all moving parts specially the ones exposed to the resin and dust.

Scheduled maintenance is of the utmost importance to obtain the best performance as well as a safe operation of the machine. Hourly clean around end cutting, trimming and corner rounding unit for better performance. Daily clean excess glue at the bottom of glue tank for better gluing performance.

Accurate lubrication ensures the long life as well as the best performance of the machine. Grease the glue spreader roller unit after every 8 hours of operation. Do not use grease to lubricate the guides. Use spray lubricant.

The machine is equipped with safety devices. Every 2 weeks check the controls for emergency stops with a test. Periodically check that the guards are in a good state.

Over time the glue deteriorates and loses its adhesive properties; proceed to completely empty the glue tank and change the glue. Do not clean the glue tank with metal tools as they will damage it. Use a wooden scraper.

Cleaning & Checking Schedule

Scheduled maintenance is of the utmost importance to obtain the best performance as well as a safe operation of the machine.

DESCRIPTION	INSPECTION	FREQUENCY	ACTION
Machine general cleaning	Visual inspection	Daily	Use a vacuum cleaner to remove dust or shavings
Dust collector hoods	Visual inspection	Daily	Use a vacuum cleaner to remove dust or shavings
Tables and all cavities where there may be dust or shavings residues, including the motor cooling zone	Visual inspection	Daily	Use a vacuum cleaner to remove dust or shavings
Inside the electric panel	Visual inspection	Approx. every 1000 hours	Use a vacuum cleaner to remove dust or shavings
Sliding surface	Visual inspection	Daily	Clean any glue residues
Edging feed and presser rollers	Visual inspection	Daily	Clean any glue residues

DESCRIPTION	INSPECTION	FREQUENCY	ACTION
Horizontal and vertical edging guide	Visual inspection	Daily	Clean any glue residues
Glue tank internal cleaning	Visual inspection	Daily	Open the glue tank lid Clean with a wooden scrapper with dry cloth. Close again
Glue roller	Visual inspection and operating test	Daily	Check that the glue roller shaft rotates in an even and regular way. If you find any fault, contact to the company.
Compressed air regulator filter	Check of tank and filter	Weekly	Drain any condensation present in the tank.
Edge cutting ,trimming, corner rounding cutters	Visual inspection and operating test	Weekly	If there are edging cutting defects, contact to the local dealer or to the company.
Emergency and safety devices	Visual inspection and operating test	Every two weeks	Carry out stop test.
Feed conveyor unit	Visual inspection	Weekly	Clean with detergents which do not harm the surface of the conveyor pad.
Glue tank	Visual inspection	Daily	Grease the glue spreading roller unit

END CUTTING, FINE TRIMMING, CORNER ROUNDING UNIT

DESCRIPTION	INSPECTION	FREQUENCY	ACTION
Unit cleaning	Visual inspection	Weekly	Use a vacuum cleaner with suitable shaped opening to remove dust or shavings. Remove glue residues from tools using suitable, non-hazardous detergents.
Cleaning of aligning devices	Visual inspection	Daily	Remove glue residues from tools using suitable, non-hazardous detergents.
Slide ways guides	Visual inspection	Weekly	Clean with a soft cloth.
Cleaning the unit, extractor hoods and motor cooling zone	Visual inspection	Hourly or Daily or when obviously necessary	Use an air gun or vacuum cleaner with suitable shaped opening to remove dust or shavings.

EDGE SCRAPING UNIT

DESCRIPTION	INSPECTION	FREQUENCY	ACTION
Edge Scraping unit	Visual inspection	Daily or when necessary	Use a vacuum cleaner with suitable shaped opening to remove dust or shavings. Then use a dry cloth to clean

BUFFING UNIT

DESCRIPTION	INSPECTION	FREQUENCY	ACTION
Buffing unit	Visual inspection	Daily	Use a vacuum cleaner with suitable shaped opening to remove dust or shavings. Then use a dry cloth



Auto Lubrication

Accurate lubrication ensures the long life as well as the best performance of the machine. The

automatic lubrication system circulates lubrication to the required parts of the machine, ensures efficient operation & increase life of parts.

Changing the Glue

Over time the glue deteriorates and loses its adhesive properties; proceed as follows to completely empty the glue tank and change the glue:

- Bring the glue to the operating temperature and remove glue from roller.
- While glue quantity was very less, close the glue tank handle
- Close the roller heater temperature. Open the wiper & sensor from glue tank.

- Open the lid cover. Insert a piece of wooden scraper with dry cloth in the tank for inside cleaning
- If necessary open the entire glue tank from bottom fixing plate.

Do not clean the glue tank with metal tools, since they will damage it. Use a wooden scraper with dry cloth. Always use gloves in order to prevent burns.

Trouble Shooting

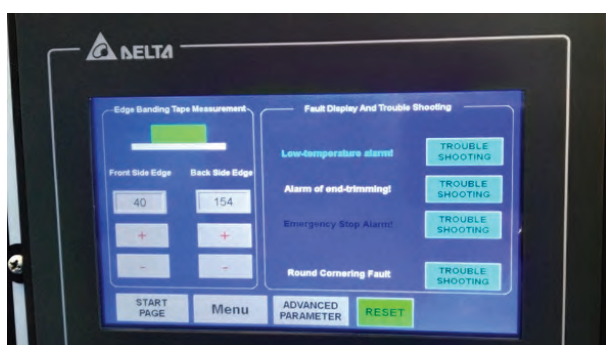
This section indicates how to solve problems which may rise during the machine use.

Carry out interventions after carefully reading all that concerns the problems indicated here.

Problem	Cause	Remedy
The machine does not start	Main switch turned to OFF	Turn it to ON
	No electrical energy on one or more phase of the line.	Check with a tester or multimeter there is a voltage in the three phases R,Y,B.
	Emergency on	Switch off the emergency button by turning it
	Fuses of auxiliary circuit to protect the transformer interrupted or fuse housing open.	1- Close the fuse housing. If the machine does not start: 2- Open the fuse housing. 3- Check the fuses , if necessary replace them
	No compressed air or air insufficient	Connect the pneumatic system or check the compressed air feed line pressure up to 6-7 kg/cm ² .
Panel does not slide	The height of the feed unit presser is not set according to the panel thickness.	Adjust the height of the feed unit presser according to the panel thickness, checking the perfect measurement of panel.
	Glue residues on in feed fence, trimmer fence, presser rollers ,base	Cleaning the glue
	Conveyor switch turned to OFF	Conveyor switch turned to ON
The feed chain does not start	The motors of the units have not yet reached the right speed.	Wait
	Gluing temperature not reached	Wait
No glue on the rear part of the panel	Wrong panel insertion into the machine	Keep the panel in contact with the inlet fence.
	Glue not seen on the panel	Check the glue in the glue tank

Problem	Cause	Remedy
Glue spreading not uniform	Glue temperature setting too low for type of glue	Contact to glue supplier, if necessary modify the working temperature.
	The electric control is not working. The thermic probe does not operate.	Check the operation and if necessary replace.
	Cutting of panel edge not in right angle	Make perfect right angle panel edge.
The glue tank does not reach the set temperature	1 or more resistors burnt.	Make sure that the electric input corresponds to the one applied.
	The electronic control does not operate. The thermic probe does not operate	Check the operation and if necessary replace, temperature control or heater or thermocouple wire.
Glue quantity on the panel not sufficient or excessive	Decrease or increase the glue flow according to requirement.	Adjust the knob according to requirement.
	Temperature value not proper	Check the glue melting temperature.
Imperfect cut	Glue residues on the tools or aligning units	Remove the glue residues and clean the area
	Imperfect tool fixing or excessive wear on the tool	Check the fixing or replace the tool
	Panel not proper activate limit switch	Set the limit switch
Not proper chamfer on panel corner	Finish of chamfering of panel corner	Check the radius cutter & re-grind if required

CONTROL PANEL SHOWN THE ERROR, SETTING & TROUBLE SHOOTING



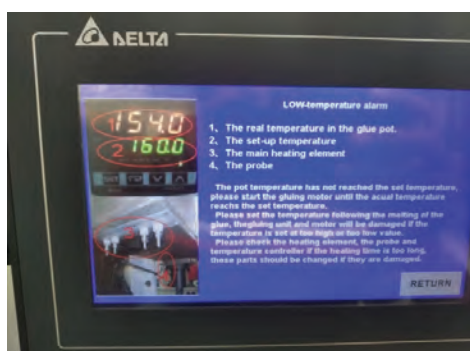
Edge Band tape length setting at front & rear side



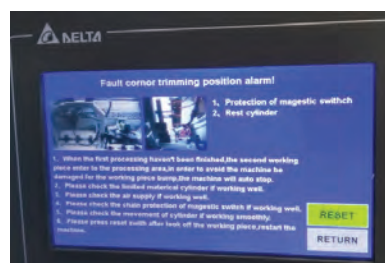
Emergency Stop alarm



Alarm of End-Trimming



Low temperature alarm



Alarm of Round Cornering

ADVERTISE IN
WOODNEWS

marketing@pdatrademedia.com
www.woodnews.in

Company Name	Page Nos.	Page Nos.	Company Name	Page Nos.	Page Nos.
Machinery & Tooling					
Altendorf India		27	Interbuild	96	
Axcent Air Flow Technologies		65	JB Glass	101	79
Barberan SA		15	JBS Couros	110	
Biesse India	108	5	Kapasi		67
Blue Ocean Robotics	70		Kleiberit		17
Caple		57	Lamello AG	42	
Carveteck		77	Mondi Group	97	
Colorjet Printers		43	Pidilite Industries	107	
Combilift	109		Pyramid Timber Associates		116
Dieffenbacher GmbH	28,110		Richwood Putty		75
Durr India	74		Senosan		55
Egger Group	109		Sleekboard(Sauerland Spanplatte)		39
Falguni Enterprises		53	The Fiable Furniture Technologies	95	
Felder GmbH		13,23	Furniture Manufacturers		
Ferro Foundries		61	Eudora Enterprises/ Pink Guppy	24	
Holytek		3	Gebruder Thonet	54	
Homag India	20,80	9	Holz in Form Niedermeier GmbH	42	
Innovator Machinery	96		SmartDesks	40	
Jai Industries	98,111	33,51	Industry Services		
Jovas Tech		59	American Hardwood Export Council	32,62	BC
Kalyan Industries		43	Arizton Advisory & Intelligence	109	
Lipi Marketing Pvt Ltd		71	Canadian Wood/FIL-India	18	OP
Nitshaw		2	China International Furniture		
Marian Services		11	Fair (Cliff)	10	
Siempelkamp	108		Furlenco	108	
SCM Group	102	IFC	Furniture and Fittings Skill		
Spray Technics		37	Council (FFSC)	36	
Technik			Lawrence Berkeley National		
Weining		21	Laboratory	68	
Wen Chih/Tong Fong		41	Ligna 2021	12	
Woodtech Consultant		IBC	Malaysian Timber Council	48	
WoodMaster(India)Machines		73	Sandia National Laboratories	68	
Yow Cherng		29	State Industries Promotion		
Materials, Supplies & Software			Corporation of Tamil Nadu Ltd.	106	
Aryamman Interior Solutions		47	Square Yards	107	
BerryAlloc	105		Swiss Federal Laboratories for		
Blum	72		Materials Science and		
Century Plyboards	108		Technology (EMPA)	66	
Decora Kitchens		7	VTT Institute	69	
Ebco Fittings		81	Wood Finishing		115
Fischer	76		Wood Industry Resource		
Formica Group	107		Collaborative (WIRC)	38	
Häfele	78		Worldwide Fund for Nature (WWF)	52	
Halspan	104		Xylexpo	16	
Hexagon		35	Zow	14	
ICA Group	30				
IPCO		63			

Editorial

Advertisement

Printed by V. Krishnamoorthy, published by Pradeep Devaiah on behalf of PDA Trade Media,
printed at Repromen Offset Printers Pvt. Ltd.,
No 46 & 47, Krishna Reddy Layout, Domlur, Bangalore - 560 071 and
published at 32/2 Spencer Road, Frazer Town, Bangalore, 560 005

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.

VENEERS

Over 1.5 million sq.mts of veneers are available for selection. Our state of the art veneer production facility enables us to explore all the creative and design possibilities that wood has to offer by slicing thin veneer leaves ranging from 0.25 mm to 2 mm thick.



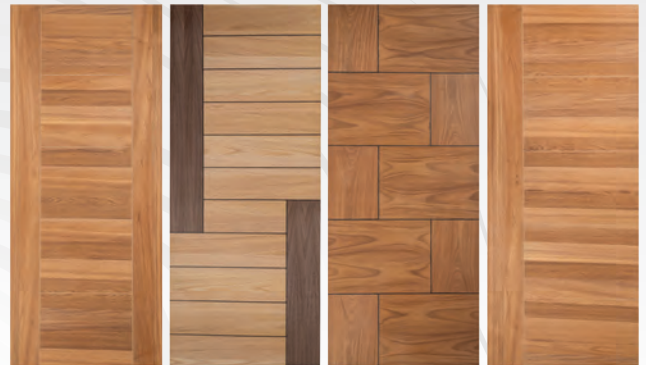
KILN DRIED LUMBER

We are the largest supplier of KD Lumber in the country today, with a installed seasoning capacity of 16000Cft. The fully automated seasoning system ensures that the sawn sizes supplied are of optimum moisture content.



PRE GROOVED VENEERED DOOR SKINS

Pre-grooved veneered door skins consists of a 3mm HDF substrate laminated with different exotic veneers and pre-grooved in a wide range of designs. This makes manufacturing of veneered flush doors extremely convenient.



VENEER ROLLS FOR PROFILE WRAPPING

A wide range of veneer rolls ranging from 25mm to 280mm are available for profile wrapping.



LIVE EDGE TABLE TOPS

We manufacture Kiln dried and pre-sanded, ready to use live edge table tops.



Scan To Watch
Factory Video

FOR ENQUIRIES, PLEASE CONTACT: [INFO@PYRAMIDTIMBER.COM](mailto:info@pyramidtimber.com)

PYRAMID TIMBER ASSOCIATES PVT. LTD. 193/2 & 194, Hunsur Road, Yelwal, Mysore-571130, Karnataka, India.
Ph: +91 6366833684, 6366833685, 6366833682 | **Email:** info@pyramidtimber.com | **Website:** www.pyramidtimber.com

20 years of

TRANSFORMING

THE WOODWORKING INDUSTRY



CARVING THE FUTURE WITH CUTTING EDGE TECHNOLOGY

WOODTECH is an integrated end-to-end solutions provider for the Solid Wood, Panel Wood and specialized Wood products. Our service portfolio includes Consulting, selection and suggestion of the right machinery, preparation of layout plans, installation, testing and Commissioning, providing training to the machine operators, after sales support, repairs and supply of spares and consumables.

WOODTECH has a vision to take the Indian Wood Working Industry to a very high level on par with International Standards. WOODTECH with a young team is committed to the future, to bring all the latest technologies that are available around the world to the Indian Market.


Our Mission is to provide world class features and innovative equipment to the industry to ensure a seamless process. With the help of our team work and dedication, we strive to provide quality oriented service to our clients.





EXPLORE. American Hardwoods.


Architects and designers all over the world have embraced American hardwoods for the range of colours, grains and textures they offer, as well as for their consistency in grade, quality and supply and their sustainable credentials.

For more information visit:

 www.americanhardwood.org

 india@americanhardwood.org

 00971508494841

 AHEC_India