ENGINEEREDWOOD

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ENGINEERED WOOD JOURNAL

VOLUME 27, NO. 2, **AUTUMN 2023**

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ENGINEERED WOOD TECHNOLOGY ASSOCIATION

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TECHNICAL SERVICES DIRECTOR BJ Yeh



APA and EWTA members will gather Oct. 14-17 for the 2023 APA Annual Meeting held at the JW Marriott Desert Springs Resort and Spa, Palm Desert, California.

PHOTO CREDIT: JW MARRIOTT DESERT SPRINGS RESORT AND SPA



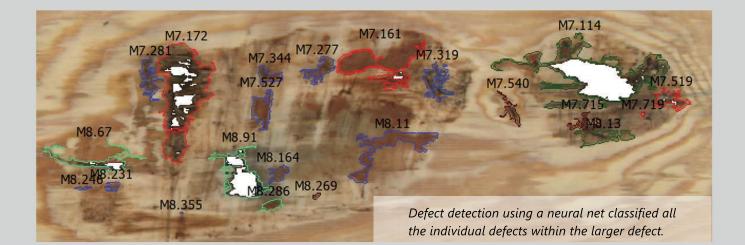
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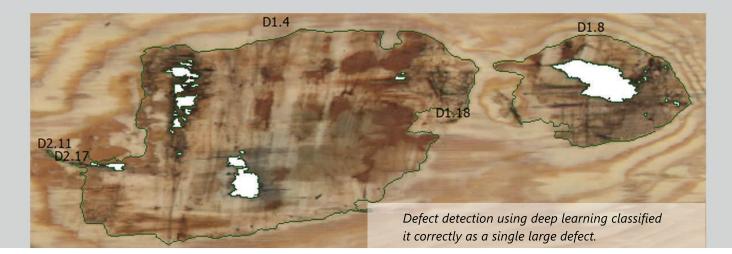
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PRIME LINES

IN THIS ISSUE ...

Fall has arrived and with it, the final preparations for the APA Annual Meeting and EWTA Info Fair are in full swing. APA and EWTA members will once again reconnect this fall for four days of networking, industry meetings and sporting events, all in the beautiful and sunny location of Palm Desert, California. A preview of the planned events starts on page 9, with full details available on the APA and EWTA events website at <u>www.apa-ewta-events.org</u>.

For 15 years, the Safety and Health Advisory Committee (SHAC) has worked to revitalize safety efforts through encouraging and recognizing operational excellence to reduce injury and illness rates. Flip to <u>page 31</u> to learn more about the program and see which 11 facilities, representing seven APA companies earned an award in various categories. Then, continue to <u>page 35</u> to read how one APA member company includes safety as one of their core values.

Speaking of awards, each fall APA members are asked to select the winners for the annual EWTA Supplier of the Year and Innovation of the Year awards. The 2023 Innovation of the Year award will be chosen from eight entries submitted by EWTA members who have provided details on their company's new technology, product, or service. Go to <u>page 39</u> to read more about these innovations. If you are an APA member, please remember to vote!

Looking for contact information for industry suppliers? Peruse the updated EWTA member directory that starts on <u>page 45</u> for company details and contact information for all the EWTA members and highlights the sponsors for the upcoming Info Fair.

What is the projection for housing starts in 2024? Turn to <u>page 25</u> to read an update on how home builders are reacting to the challenge of affordability.

That's just a preview of what you'll find on the following pages. Keep reading for additional industry, association, and member news.

I look forward to connecting with APA and EWTA members in Palm Desert, California. If you're not able to attend, don't hesitate to reach out to me via email, phone, virtual meeting, or social media. Let's keep maintaining and building those connections.

Stay safe and take care.

a Danna Dellon

LaDauna Wilson EWTA Program Manager ladauna.wilson@apawood.org ewta@engineeredwood.org

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INDUSTRY CONNECTIONS

HUD PUBLISHES RESILIENCE GUIDES FOR BUILDERS AND DEVELOPERS

The U.S. Department of Housing and Urban Development (HUD) recently published a series of Resilience Guides for builders and developers, authored by Home Innovation Research Labs with technical assistance from the National Association of Home Builders (NAHB), the Insurance Institute for Business and Home Safety (IBHS), APA, and other industry stakeholders. Volume 1 addresses wind resilience and includes the recommendation that walls be fully sheathed with plywood or OSB.

Four different APA publications are referenced throughout HUD's wind resilience guide, including 9 details from APA's *Building for High-Wind Resilience in Light-Frame Wood Construction* guide, Form M310. This APA guide was developed from field observations of structural failures associated with high-wind events and provides builders with practical, economic recommendations for resilient construction, including the use of fully sheathed wood walls.

Forest Products Society Hosts 2023 PTF BPI Conference

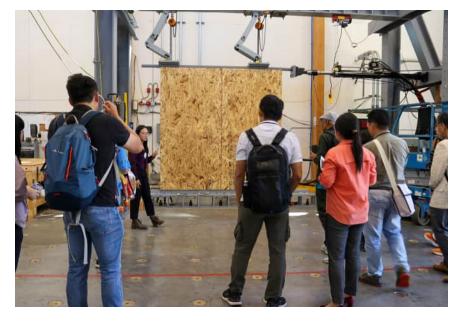
The 7th biennial international conference **Processing Technologies for the Forest and Bio-Based Products Industries** (PTF BPI 2023) again will be hosted by the Forest Products Society (FPS) from October 30 to November 30, 2023 at the King and Prince Beachside Resort at St. Simons Island, GA. The unique conference includes industrial innovators and academic researchers sharing the latest innovations and research in forest and bio-based materials. Leaders from industry and academia will highlight advancements in adhesives, new material development,

Continued on next page

processing technologies and data science. This conference provides a forum and sessions for technical managers, plant managers, production managers, product development engineers, process engineers, scientists, academicians, and students in the forest and biobased products industries.

Please contact Tim Young at <u>tmyoungl@utk.edu</u> or 865-356-1151 if you have any questions or require additional information.

GET DETAILS 🕨



APA Hosts the Asia-Pacific Economic Cooperation

APA had the pleasure of hosting a group of 26 visitors from the Expert Group on Illegal Logging and Associated Trade (EGILAT) of The Asia-Pacific Economic Cooperation (APEC) for a tour of the 42,000-square-foot Research Center in Tacoma, WA. The event was coordinated in conjunction with the U.S. Forest Service and U.S. Fish and Wildlife Service. Visitors witnessed performance tests of wood structural panels; a full-scale cyclic shear wall test; and a destructive test of a 30-foot-long, high-strength glulam beam. The National Fish and Wildlife Forensic Laboratory from the U.S. Fish and Wildlife Service also provided a mobile laboratory at the APA campus, demonstrating the state-of-the-art equipment and software used for wood species identification.

EPA Proposed Regulation on Plywood and Composite Wood Products

On May 18, 2023, the U.S. **Environmental Protection** Agency (EPA) published a proposed rule on the National Emission Standards for Hazardous Air Pollutants (NESHAP) for plywood and composite wood products (PCWP). AWC is coordinating a unified industry response. APA participated in virtual meetings on May 23 and June 6 to discuss the tasks, data collection and research needed to support the industry comments. Faceto-face meetings were held June 15 in Washington, DC and July 12-13 in Boise, ID to finalize comments, which AWC submitted to the EPA on July 18, 2023.

APA ON SOCIAL MEDIA

Follow APA to stay up to date on the latest research, publications, webinars and more at <u>www.apawood.org</u>



INDUSTRY CONNECTIONS

The Office of Management and Budget Issues Revised BABA Guidance

The Office of Management and Budget (OMB) issued revised guidance on implementing the Build America, Buy America Act (BABA). These regulations expand preferences to U.S. manufactured construction materials and manufactured products for infrastructure projects funded through federal financial assistance programs. Infrastructure includes buildings and real property, including housing programs financed by HUD and USDA.

The revised guidance reflects comments APA and AWC submitted in response to a Notice for Comment. APA and AWC were concerned the regulation would affect U.S. manufacturers incorporating non-US-

In Memoriam

Jon Howard

Jon A. Howard passed away July 5 at the age of 79. Jon served as chair of the APA Glulam Technical Advisory Committee for 25 years (1991 – 2016). He also served on the Technical Review Board for ANSI A190.1, Product Standard for Structural Glued Laminated Timber, for over ten years. He had a long career at Rosboro and was a well-respected technical leader in the glued laminated timber industry. Jon is survived by his wife Julie; brothers Jay and Jim Howard; children Cindy, John and Lea; seven grandchildren, three great grandchildren, two nieces and one nephew. manufactured components into their products, such as veneer, OSB, overlays, and even adhesives. OMB added a new category under construction materials for engineered wood. It defined an engineered wood product as "All manufacturing processes from the initial combination of constitute materials until the wood product is in its final form occurred in the United States."

It is believed that this definition will ease compliance for U.S. manufacturers. In addition, the regulation provides for waivers of U.S. preference, which may be necessary for many projects incorporating engineered wood products.

APA Welcomes Barry Bjork as Chief Technology Director

Barry Bjork has joined APA – The Engineered Wood Association as Chief Technology Director. In this role, Barry will lead the technology team, spearhead new IT initiatives and ensure the seamless integration of



Barry Bjork

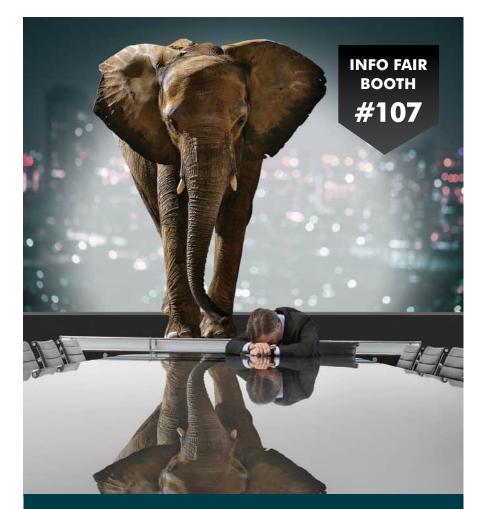
solutions across all aspects of APA operations. He brings a wealth of experience in system administration, data analysis, change and incident management, process improvement, training, strategy, and leadership in working with public safety agencies and BYU-Idaho. Barry earned a bachelor's degree in information systems from BYU-Hawaii. He moved to Tacoma from eastern Idaho with his wife and four children.

STAY CONNECTED

Sign up for the EWTA Connections e-newletter or access any issue anytime on our website.

Distributed every other month, the EWTA Connections newsletter highlights news from EWTA members, the association, and the industry as a whole.

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SEE YOU IN PALM DESERT APA Annual Meeting and EWTA Info Fair Preview

Oct. 14-17, 2023 JW Marriott Desert Springs Resort and Spa Palm Desert, California

This year's APA Annual Meeting is scheduled to take place Oct. 14-17 at the JW Marriott Desert Springs Resort & Spa in Palm Desert, California. APA's Annual Meeting coincides with EWTA's annual Info Fair supplier exhibition, where members of the engineered wood industry gather for four days of business meetings, sporting events and networking.

Several advisory, marketing and subcommittee meetings, including a meeting of the EWTA Advisory Committee, will initiate the event on Saturday. The day concludes with an EWTA-hosted welcome reception for APA and EWTA members and meeting attendees.

Sunday is full of recreation and networking opportunities. The annual Mike St. John Memorial Golf Tournament will be held at JW Marriott's Palm Course. True to Red Robinson's signature style, the Palm Course is complemented by sprawling water features and rolling greens. The Ole Sorensen Memorial Tennis Tournament will be an informal tournament held at the Desert Springs Tennis Club, a state-of-the-art facility featuring 20 tennis courts (3 clay, 15 hard, and 2 grass). Info Fair opens that evening, accompanied by an APA and EWTA hosted reception.

Monday's General Session features a keynote address on "Home Construction in a High Interest Rate World" from John Burns, CEO of John Burns Research and Consulting. The session includes "State of the Industry" and "State of the Association" addresses by APA Board of Trustees Chair Ashlee Cribb, Vice Chair Doug Asano and APA President Mark Tibbetts, and the presentation of the Bronson J. Lewis Award.

Continued on next page







John Burns

Ashlee Cribb

Doug Asano



The second day of the Info Fair supplier exhibition will open at noon on Monday, followed by a reception which will kick off the evening's dinner and APA Safety Awards recognition. APA members who have

Mark Tibbetts

made significant advancements in mill safety will be honored, along with winners of EWTA's Supplier of the Year and Innovation Award program.

See the schedule of events at right for the complete meeting agenda.

We are excited to see you in person!

2024 APA ANNUAL MEETING AND EWTA INFO FAIR Save the Date!

September 28 – October 2, 2024 JW Marriott San Antonio Hill Country Resort and Spa, San Antonio, Texas

Following the General Session, a Safety & Health Workshop includes a keynote address by Eddie Lemoine, who will share his expertise on the subjects of attraction and retention, changing demographics and performance development. Additional safety and best practices presentations will be provided by APA and EWTA industry leaders.

The afternoon Marketing Advisory Committee meeting will feature guest speaker Craig Plazure, Vice President at Beekeeper Group, an award-winning boutique public affairs agency specializing in communications, advocacy, and digital marketing. The balance of the meeting includes APA's Market Research Director Joe Elling's presentation of his latest market forecast and marketing program highlights from the market coordinators.

AGENDA

Saturday, October 14

8:30 am – 4 pm	Registration Desk Open	
9 – 10 am	EWTA Adhesives and Technology Subcommittee	
10:30 – 11:30 am	International Market Subcommittee (APA Members Only)	
10:30 – 11:30 am	EWTA Advisory Committee	
12:30 – 2:30 pm	Glulam/CLT Management Committee (APA Members Only)	
3 – 5 pm	I-Joist/SCL Management Committee (APA Members Only)	
4 – 5:30 pm	Industrial Market Subcommittee (APA Members Only)	
5:30 – 7 pm	Welcome Reception	

Sunday, October 15

8 am – 1 pm	Mike St. John Memorial Golf Tournament, Palm Course
9 am – 1 pm	Ole Sorensen Memorial Tennis Tournament, Desert Springs Tennis Club
11 am – 5 pm	Registration Desk Open
3:30 – 5 pm	Nonresidential Market Subcommittee (APA Members Only)
5 – 7:30 pm	Info Fair Welcome and Reception

Monday, October 16

7 – 8:30 am	Buffet Breakfast		
8 am – 4 pm	Registration Desk Open		
8:30 – 10:15 am	General Session		
10:30 – 11:30 am	Roundtable Discussion		
10:30 am – Noon	Residential Market Subcommittee (APA Members Only)		
10:30 am – 4 pm	Safety & Health Workshop		
Noon – 1:30 pm	Info Fair and Lunch		
1:30 – 4:00 pm	Marketing Advisory Committee		
5:30 – 7 pm	Info Fair and Reception		
7 – 9 pm	Chairman's Dinner & Safety Awards Recognition		
	TIAL		

Tuesday, October 17

6:30 - 7:30 am	Board of Trustees Breakfast (APA Trustees Only)
7:30 – 11 am	APA Board of Trustees (APA Trustees Only)

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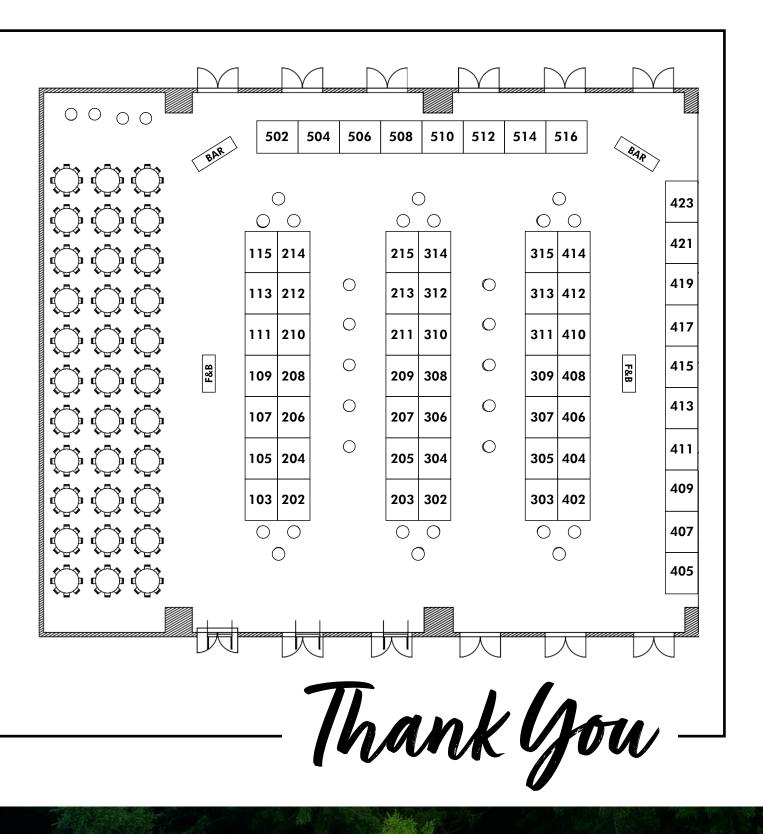
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214	Sweed Machinery, Inc.		
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MARKET OUTLOOK Home Builders Reacting to Affordability Challenge

By Joe K. Elling

Through the first half of 2023, the existing and new home markets have followed much different paths. Existing home sales in the first half of 2023 averaged a seasonally adjusted rate of 4.3 million, down 25% from the first half of 2022. No doubt, the steady climb in the rate on a 30-year fixed-rate mortgage to 7% has dampened sales. Yet, existing home prices have held up better than expected because the supply of existing homes has run at historically low levels, as existing homeowners are reluctant to move because of the large increase they would face in trading up because of the extremely large increase in the monthly mortgage payment. It is estimated that 60% of existing homeowners with a mortgage carry a rate of 4% or less. Within the housing industry, this is referred to as "the golden handcuff."

In contrast, new home sales in the first half of 2023 averaged a seasonally adjusted annual rate of 664,000 units, down just 4% from the first half of 2022 and up 13% from the second half of 2022. The relative strength in new home sales reflects the efforts made by builders to generate sales. Home builders have been downsizing their product offerings in terms of amenities and using mortgage buydowns to ease the payment burden of prospective new home buyers.

HOUSING AFFORDABILITY AT RECORD LOW LEVEL

To depict the rapid deterioration in affordability, the data in Figure 1 show the percentage of married couples between the ages of 25 and 39 that could afford the median priced existing home sold from 1994 to 2023. The affordability measure is based on that

Continued on next page



Figure 1. Percentage of Married Couples That Can Afford Homeownership, By Age of Householder

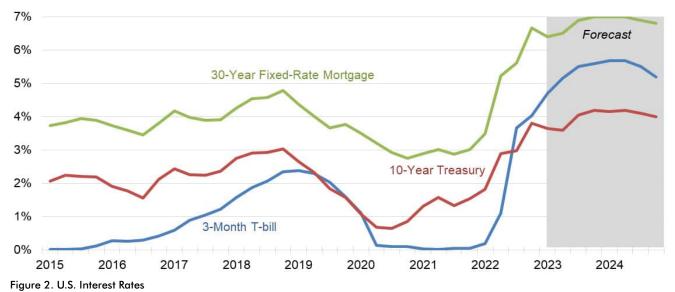
used by the National Association of Realtors, where the monthly mortgage payment equals 25% of household income and assumes a 20% down payment.

Married couples from the ages of 25 to 39 are used in Figure 1 because they make up the largest share of first-time home buyers and typically purchase an existing home. In all cases, the percentage of married couples that could afford to qualify for a mortgage to purchase the median priced home sold in the prior decade was historically high. This was a function of depressed home prices following the bursting of the bubble in the first decade of this century and historically low mortgage rates.

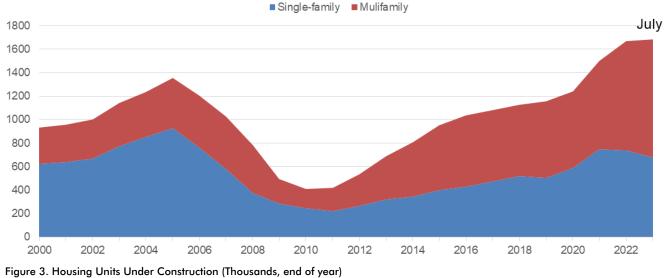
FEDERAL RESERVE TO STAY THE COURSE

It is true that inflation in the U.S. has slowed, but at 3-4%, it remains above the 2% target. Therefore, we should expect policy makers at the Federal Reserve to stay the course and leave the federal funds rate at the current rate or

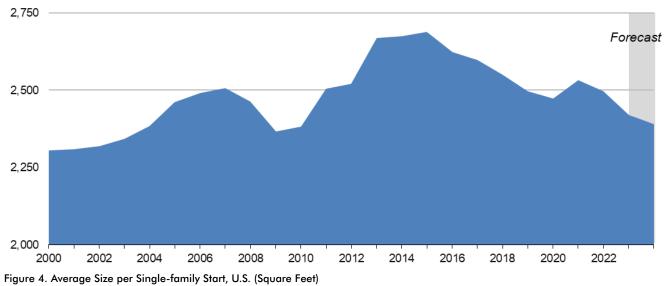
raise through the next 3-6 months. In addition, and this is not well publicized, the Federal Reserve will continue to reduce its holdings of U.S. Treasury securities and mortgage-backed securities through 2024. Since July 2022, the Federal Reserve has reduced its holdings of Treasury securities mortgage-backed securities by \$760 billion and \$220 billion, respectively. The stated path is to reduce its total holding of Treasuries and mortgage-backed securities by \$95 billion per month through 2024. The federal government budget deficit for next year is expected to be near \$1.7 billion. Hence, in net, there is going to be \$2.2 Treasuries to be absorbed by investors in 2024. The Federal Reserve is also in effect going to be a seller of mortgage-backed securities, which will continue to support the spread between the rate on a 30-year fixed-rate mortgage and 10year Treasury in the range of 300 basis points. The forces at work point to interest rates in 2024 remaining at current levels, with the risks on the upside. (See Figure 2.)







Source: Census Bureau



Source: Census Bureau. APA Forecast.

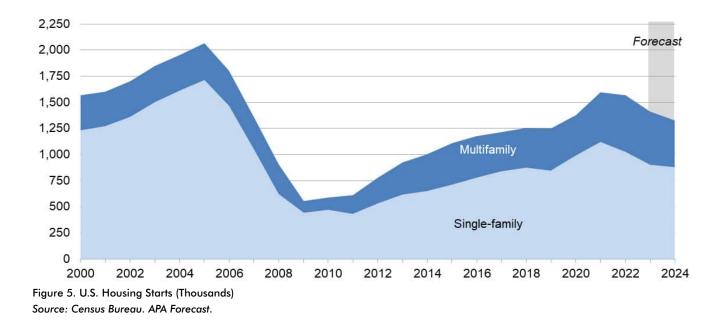
SINGLE-FAMILY STARTS FLAT, MULTIFAMILY DOWN

After two years where single-family starts exceeded 1 million units, they will be down by roughly 120,000 units compared to 2022. As mentioned earlier, single-family demand has held up very well due to the actions taken by builders to drive sales. The decline in singlefamily starts while sales have held up has led to a 60,000 reduction in the number of single-family units under construction since December 2022. (See Figure 3.) Assuming home builders continue their aggressive efforts to drive sales, single-family starts are projected to be flat relative to 2023.

Consistent with the assumption of builders doing what they can to drive sales, the average size of new homes started is forecast to fall another 20 square feet in 2024, after decline by almost 80 square feet this year. (See Figure 4.) At 2,390 square feet in 2024, this puts the average size of new homes built back to where it was in 2010. As shown in Figure 3, the number of multifamily units under construction totaled 1 million, up by 70,000 from December 2002. This record number of units under construction combined with higher interest rates, tightening of lending standards and declining property values in many markets point to a decline in multifamily starts from roughly 500,000 units in 2023 to 450,000 units in 2024.

In total then, housing starts in 2024 are projected to total 1.35 million units. (See Figure 4.) This is 10% below the trend demand for new housing units based on household growth and other factors that drive the demand for new housing units. This level of starts also means that no progress will be made in chipping away at the shortage of housing units estimated to be 1.5-4 million units by housing industry analysts.

Joe K. Elling is Director of Market Research for APA – The Engineered Wood Association.



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2022 APA SAFETY AND HEALTH AWARD WINNERS ANNOUNCED

Program Honors Manufacturers' Dedication to Workplace Safety and Operational Excellence

APA – The Engineered Wood Association recently announced the winners of its 2022 Safety and Health Awards. The APA Safety and Health Awards Program is the premier safety award program for the engineered wood products industry in North America. It encourages and recognizes operational excellence with the goal of reducing injury and illness rates.

Seventy-two APA-member structural wood panel and engineered wood product facilities participated in the 2022 program. A total of 11 facilities representing seven APA member companies earned awards in various competition categories. Some mills were multiple award winners. While the program awards are limited to APA members, data is collected from member and non-member mills to provide a broad-based industry performance benchmark.

Structurlam Mass Timber Corporation and LP won Safest Company Awards in their respective categories, while the coveted Innovation in Safety Award went to two winners: Tolko Industries' Plywood Division in Armstrong, British Columbia, as recipient of the Equipment-Based Innovation Award, and Boise Cascade Wood Products, LLC of Lena, Louisiana, as recipient of the Jeff Wagner Process-Based Innovation Award.

"We are proud of our members' commitment to establishing processes that improve worker's safety," said APA President Mark Tibbetts. "It is important that we as an industry continue to implement best practices so we can continue to make our workplaces as safe as possible." Besides the Safest Company and Innovation in Safety awards, other competition categories include the Annual Safety and Health Award, Safety Improvement Award (2020-2022) and 3-Year Safety Award (2020-2022). The annual award, safety improvement and three-year average categories divide into three divisions based on the type of product manufactured at the mill (plywood; OSB; and glulam, CLT, I-joist, LVL and SCL).

2022 is the 15th year of the program and led by a revitalized safety effort spearheaded by the APA Safety and Health Advisory Committee comprised of several APA member company safety professionals. Under the committee's guidance, three main goals were established: make the APA program the premier safety awards program in the industry, encourage the sharing of best practices to improve the industry's safety culture and programs and, most importantly, improve the industry's overall safety performance.

APA is proud of industry progress to develop and implement systems and processes that continue to decrease incidents and improve worker safety. Excellence in safety, it has been said, is not a destination, but an ongoing journey requiring vigilance, focus and demonstrated commitment throughout the company.

More information on the APA Safety and Health Awards Program can be found on the Association's website at <u>www.apawood.org</u>.



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APA SHAC MEMBERS

Steve McKenney, Chair Roseburg Forest Products Company

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Dave McGowin Louisiana-Pacific Corporation

Derek Bauchman Mercer Mass Timber

Brent Way Murphy Company

Stanza Donald PotlatchDeltic Corporation

John Myers (alternate) Roseburg Forest Products Company

Terry Secrest RoyOMartin

Natalie Monroe (alternate) RoyOMartin

Fred Chinn Tolko Industries Ltd.

Johnny Sauls West Fraser Timber Co. Ltd.

Shauna Dunn, CSP Weyerhaeuser

Charles Hartke APA – The Engineered Wood Assn.

INNOVATION IN SAFETY AWARD

Equipment-Based Innovation Winner

Jeff Wagner Process-Based Innovation Winner

Boise Cascade Wood Products, LLC

Alexandria EWP

Tolko Industries Ltd.

Armstrong Plywood Division Armstrong, British Columbia, Canada

"Veneer Load Marking Robot"

Lena, Louisiana "New Hire Mentorship Program"

SAFEST COMPANY AWARD

Three or fewer member mills

Structurlam Mass Timber Corporation

Four or more member mills

LP

ANNUAL SAFETY & HEALTH AWARD

Division I – Plywood

1ST PLACE

RoyOMartin Chopin, Louisiana

2ND PLACE

Tolko Industries Ltd Armstrong, British Columbia, Canada

Division II – OSB

1ST PLACE

LP Ponta Grossa, Brazil

2ND PLACE

West Fraser Nacogdoches, Texas

Division III – Glulam, CLT, I-Joist, LVL and SCL

1ST PLACE

Structurlam Mass Timber Corporation Penticton, BC, Canada

2ND PLACE

Boise Cascade Wood Products, LLC St. Jacques, New Brunswick, Canada

SAFETY IMPROVEMENT AWARD (2019 – 2022)

Division I – Plywood

Boise Cascade Wood Products, LLC Floren, Louisiana

55.1% Improvement

Division II – OSB

West Fraser Jefferson, Texas

100% Improvement

Division III – Glulam, CLT, I-Joist, LVL and SCL

Boise Cascade Company White City, Idaho

82.8% Improvement

3-YEAR SAFETY AWARD (2019 – 2022)

Division I – Plywood

RoyOMartin Chopin, Louisiana

Division II – OSB

LP Brasil Ponta Grossa, Brazil

Division III - Glulam, CLT, I-Joist, LVL and SCL

Resolute Engineered Wood Limited Partnership Larouche, Quebec, Canada

Company/Location	Company/Location
Anthony Forest Product Company, LLC	Resolute Engineered Wood Limited Partnership
El Dorado, Arkansas	St. Prime, Quebec, Canada
Anthony Forest Product Company, LLC	Resolute Engineered Wood Limited Partnership
Washington, Georgia	St. Prime, Quebec, Canada
Boise Cascade Wood Products, LLC	Structurlam Mass Timber Corporation
St. Jacques, New Brunswick, Canada	Penticton, BC, Canada
LP	West Frase
Dawson Creek, British Columbia, Canada	Bemidji, Minnesota
LP	West Fraser
Ponta Grossa, Brazil	Jefferson, Texas
LP	West Fraser
Tomahawk, Wisconsin	Nacogdoches, Texas







SAFE TO THE CORE Engaged Team Members Take Workplace Safety to Heart

By Steve McKenney

At Roseburg Forest Products safety or "Safe to the Core", is one of the company's core values. It is our experience that when team members feel engaged and invested in their work, they are more likely to also take workplace safety seriously and feel a sense of pride in what they do. Engaged team members understand that their well-being and the well-being of their colleagues depend on maintaining a safe working environment. In this article, we will explore the importance of engaged team members in promoting workplace safety and how organizations can foster a culture of caring through team member engagement.

THE LINK BETWEEN ENGAGEMENT AND WORKPLACE SAFETY

Engaged team members are those who are committed to their work, are highly motivated, and actively involved in their job roles. They genuinely care about the success of the company and take ownership of their responsibilities. This level of engagement can be leveraged to enhance workplace safety for several reasons:

- **1. Increased Awareness:** Engaged team members are more likely to be aware of potential safety hazards in their work environment and are more apt to intervene if they observe colleagues engaged in at-risk behaviors. They pay keen attention to their surroundings, actively identify risks, and take proactive measures to reduce the potential of loss. Whether it's reporting a faulty piece of equipment, highlighting an unsafe work practice, or suggesting improvements, engaged team members see safety as everyone's responsibility.
- **2. Improved Compliance:** Team members who feel engaged and connected to their work are far more likely to follow safe work practices and comply with regulatory requirements. They understand that these are in place to protect them and their colleagues from harm. Engaged team members take workplace

Continued on next page

safety seriously and are less likely to take shortcuts or engage in risky behaviors that could compromise safety.

3. Timely Reporting: Engaged team members are not afraid to speak up when they notice a safety concern. They understand the importance of reporting near misses, incidents, or potential hazards promptly. By promptly reporting safety issues, engaged team members help prevent incidents and enable the Company to take appropriate corrective actions.

FOSTERING TEAM MEMBER ENGAGEMENT FOR WORKPLACE SAFETY

Organizations must focus on methods to engage team members if they want to create a culture of caring. Here are some strategies to foster team member engagement and promote safety:

- **1. Effective Communication:** Transparent and open communication is essential in engaging team members. Regularly share information regarding safety incidents, procedures, and updates. Encourage team members to provide feedback and suggestions on safety matters.
- **2. Training and Education:** Invest in comprehensive safety training programs to ensure team members are equipped with the necessary knowledge and skills to identify hazards and respond effectively. Offer ongoing education and refresher training to keep safety top of mind.
- **3. Recognition and Rewards:** Acknowledge and reward team members who actively contribute to maintaining a safe workplace. Recognize their efforts in safety meetings, newsletters, or company-wide announcements. Implement incentive programs that encourage



safe behaviors and actively involve team members in safety initiatives.

- **4. Empowerment and Collaboration:** Involve team members in safety committees or teams to foster a sense of ownership and responsibility for workplace safety. Encourage them to actively participate in safety audits, inspections, and risk assessments. Engage team members in finding solutions to safety challenges and empower them to make suggestions for improvement.
- **5. Lead by Example:** Managers and supervisors play a crucial role in setting the tone for safety. Lead by example, demonstrating a commitment to safety practices. Encourage open dialogue, address safety concerns promptly, and provide the necessary resources to maintain a safe working environment.

Engaged team members who prioritize workplace safety create a positive feedback loop. As team members see the organization's commitment to their well-being, they become more engaged, leading to increased safety awareness and compliance.

In conclusion, engaged team members play a vital role in promoting workplace safety. By fostering team member engagement through effective communication, training, recognition, empowerment, and leadership, organizations can create a culture of safety where team members are committed to maintaining a secure and healthy work environment. Remember, safety is everyone's responsibility, and engaged team members take this responsibility to heart.

Steve McKenney is the Western Regional Safety Manager at Roseburg Forest Products Company and the current Chair of the APA Safety and Health Advisory Committee (SHAC).



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2023 SUPPLIER AWARDS

Annual Recognition for 2023 Innovation and Excellence to be Announced in October

EWTA members are recognized every year for innovative practices and excellence in service by APA members who are invited to select the award winners via an electronic ballot. Votes for the Supplier of the Year Awards are cast based on quality, service and delivery. The Supplier Awards, which includes three Supplier of the Year awards and one Innovation of the Year award, will be presented Oct. 16 during the APA Annual Meeting Awards dinner in Palm Desert, California. The winners will also be published in the Spring 2024 issue of the Engineered Wood Journal.

Following are eight Innovation of the Year entries and a list of the Supplier of the Year candidates sorted by category. Additional information about the awards program is available on EWTA's Supplier Awards webpage at <u>www.engineeredwood.org/awards</u>.

2022 SUPPLIER AWARD WINNERS

Supplier Of The Year:

Equipment and Tooling: USNR

Materials and Supplies: Bostik

Consulting and Service: **BMI Contractors, Inc.**

Innovation Of The Year: Flamex, Inc. – MXOne High Performance Fire Protection Turbine

Click below for more information on last year's winners.

VIEW WINNERS 🕨

Innovation of the Year Entries

The Innovation of the Year Award recognizes a company providing a new technology, product or service that has demonstrably reduced production costs, increased productivity, improved product quality or in some other way provided a bottom-line benefit to APA members.

The information for each entry is as claimed by the applicant. EWTA and APA make no claims as to the veracity of the information, nor do they endorse any particular entry.

INNOVATION OF THE YEAR ENTRY A

Con-Vey Connect

Entered By: Con-Vey Date of First Use: March 2023



Benefit 1: Real-time data and trend analysis – Increased visibility in the plant operations: compare performances and identify deficiencies.

Benefit 2: Fully automated AI – Does not require any manual input or manipulation of data.

Results: 1. In a recent commissioning, Con-Vey Connect facilitated a 400% increase in daily production within three weeks, dispelling equipment-related productivity concerns by providing accurate data and enabling programmers to focus their efforts on resolving issues that would bring the line up to optimal operational efficiency in the shortest amount of time. 2. A newly commissioned equipment was causing downtime and throughput problems for a customer. Upon reviewing the data in Con-Vey Connect, we identified and resolved a combination of mechanical, electrical, and PLC program issues. Immediate improvements were observed, and for the next few months, post-repair, there was an average throughput improvement of 6 panels per minute (+38%) and a downtime reduction of 8 hours per day (-114%).

Description: Con-Vey Connect is a customizable data collection and analytics platform that offers enhanced visibility into plant operations (Industry 4.0). By interfacing with any PLC brand, it monitors tag values, performs calculations, and integrates with databases for long-term trending and reporting. This highly flexible solution empowers corporate teams and plant management through real-time data access, 24/7 performance monitoring and comparisons, and identifying operational deficiencies.

INNOVATION OF THE YEAR ENTRY B

SmartPress Autonomous Manewfacturing[™] Module

Entered By: SMARTECH Manewfacturing[™] Technologies Date of First Use: Summer 2021



Benefit 1: Increased panel throughput, production stability and raw material efficiency while maintaining product quality.

Benefit 2: Support operator training and decision-making (taking the pressure off and freeing up their time to focus on other critical processes). **Results:** An OSB mill observed around 10% increase in productivity.

Description: SmartPress AI-based Software is a first-of-its-kind tool that can drive the wood panel press autonomously in real-time while optimizing three critical production parameters: cost, productivity, and quality. It aggregates machine, line and operator data, and pushes setpoints directly to the press. It can work in two modes: decision support and autonomous.

INNOVATION OF THE YEAR ENTRY C

Part X PW "Next Generation" Wet Electrostatic Precipitator (WESP) Design

Entered By: Dürr Systems, Inc. Date of First Use: November 2022



Benefit 1: High collection efficiency: The next generation WESP design places emphasis on high efficiency particulate removal through innovative emitting electrode, collection tube, and gas flow distribution system designs. These enhancements support higher operating voltages requiring less surface collecting area as well as uniform gas flow distribution for optimized collection efficiency.

Benefit 2: Low maintenance: The next generation WESP design also features a patent-pending high-intensity offline automatic cleaning system, which significantly reduces maintenance requirements, eliminates water carryover during flushing, and provides better operational performance during the flushing cycle.

Results: The Part.X PW WESP can remove up to 98% of particulate matter in a single stage, and depending on gas stream characteristics, up to 99.9% removal is possible with alternative configurations.

Description: Dürr's "next generation" wet electrostatic precipitator (WESP) is an advanced air pollution control system used to effectively clean industrial gases of fine particulate matter, acid mists, and aerosols. Featuring reduced maintenance, improved efficiency, and standardized modular design, it ensures compliance with environmental regulations while offering quick installation and reliable operation.

INNOVATION OF THE YEAR ENTRY D

Deep Learning AI Veneer Scanning Technology

Entered By: USNR Date of First Use: October 2022



Benefit 1: Greatly improved defect recognition, defect sizing, and grading accuracy.

Benefit 2: Less tuning required to achieve desired grade outcome.

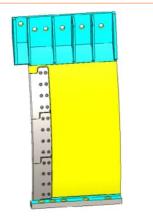
Results: Improved overall grade accuracy on Poplar from high-80% to 97%, Douglas Fir as high as 98%.

Description: USNR has successfully applied Deep Learning AI, developed through years of research in solid wood applications, to veneer scanning systems. Adding Deep Learning AI to USNR's Ventek NV4g and GS2000 scanners has resulted in significant improvements to defect recognition and classification. To date a number of USNR/Ventek customers have upgraded their systems to take full advantage of Deep Learning AI and the results have been nothing short of phenomenal.

INNOVATION OF THE YEAR ENTRY E

Disc Strander Follower Plate Replaceable Leading Edge with Inserts

Entered By: Kadant Carmanah Date of First Use: April 20, 2021



Benefit 1: Improved Safety – Changing the Disc Follower Plate (DFP) required an entire mill maintance day, minimum 3 people and a crane. The Replaceable Inserts allow changing the worn part of the DFP by 1 person in less than an hour.

Benefit 2: Reduced customer costs. The DFP required replacement approximately every 24 months due to localized wear on the leading edge. With the Replaceable Inserts DFP, the mill can now replace the part of the DFP which experiences localized wear, extending the life of the DFP.

Results: 85% of Disc strander operators have recognized the benefits and converted to the new DFP.

Description: The Disc Follower Plate (DFP) is an integral component to allow safe operation of the SmartDISC Strander. The key function of the DFP is to ensure the logs remain in a fixed location after being cut.

The new DFP design with replaceable inserts allows customers to replace the high wear zone area safer and in less time.

INNOVATION OF THE YEAR ENTRY F

Panel Repair Station R5

Entered By: Raute Date of First Use: February 2022



Benefit 1: Reduced Manpower: Only one operator required for up to two stations.

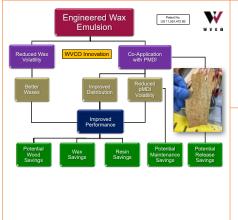
Benefit 2: Space: Fits into the same space as a traditional manual repair cell. **Results:** Uses 20% less repairing materials than traditional repairing methods.

Description: The Patented Raute Panel Repair Station R5 allows you to easily increase panel repairing capacity due to its design minimizing floor space and not requiring foundation work. Our cutting-edge analyzer technology automates and optimizes the repair process increasing accuracy while reducing labour and repair material usage. The Raute Panel Repair Station R5 brings flexibility, with the capacity to repair trimmed and un-trimmed panels, and the ability to work with repair materials of your choice.

INNOVATION OF THE YEAR ENTRY G

Engineered Wax Emulsion for Wood Composites

Entered By: The Willamette Valley Company Date of First Use: 2/24/2022 (Field Use); 3/3/2023 (Commercialized)



Benefit 1: pMDI reduction while maintaining panel properties; pMDI volatility suppression.

Benefit 2: Wax volatility suppression; thereby reducing condensible wax deposits around hot press and in ventilation – Reduced Fire hazards. **Results:** ≥10% reduction in pMDI while maintaining panel performance; About 50 °F reduction in wax volatility.

Description: The WVCO Engineered Wax Emulsion enhances two key industry interests: Safety and Cost. The Engineered Wax combines biopolymer and wax chemistries in a patented process to achieve novel wax properties. This emulsion is designed to be inline mixed, and co-applied with pMDI during wood composite production, allowing significant pMDI reduction (>10%). Furthermore, wax volatility is suppressed (i.e., flash point increased ~50°F), thereby reducing wax deposition outside press, reducing fire hazards.

INNOVATION OF THE YEAR ENTRY H

Intelligent Extinguishing Module (IEM)

Entered By: Fagus GreCon Inc. Date of First Use: May 2023 in USA, Late 2022 in Europe



Benefit 1: Detects clogging of the nozzles and measures the flow pressure and signals wear of nozzles and valves at an early stage. Clogged nozzles or insufficient flow pressure are detected and reported directly so that targeted and efficient maintenance can be carried out.

Benefit 2: When temperatures approach freezing point, the extinguishing system activates its integrated heating, thereby ensuring the smooth operation of the system even in winter.

Results: Proactive notification of the upcoming replacement of wear parts enables the plant operator to plan maintenance in an organised manner. The advantage: greater productivity through improved plant availability thanks to sustainable maintenance processes based on objective wear data, time and cost savings due to systematically plannable maintenance interventions and avoiding unnecessary maintenance.

Description: The innovative GreCon Intelligent Extinguishing Module (IEM), raises the level of reliability of Fagus-GreCon's existing spark extinguishing systems.

This system brings with it a number of advantages:

- High-precision monitoring throughout the extinguishing process
- Identification of blockages
 - Measurement of flow pressure
- Early detection of wear on nozzles and valves
- Automatic leak detection and notification

Supplier of the Year Award Candidates

In addition to the Innovation of the Year awards, each fall, APA members are asked to choose Supplier of the Year winners in three categories (Consulting and Services, Equipment and Tooling and Materials and Supplies) based on quality, service and delivery. Below is a list of candidates, which includes all eligible EWTA members.

To recognize the outstanding service of so many members, the EWTA Advisory Committee implemented a new rule in 2019 that no member is eligible to win two consecutive years. The 2022 Supplier of the Year winners are noted below and will not be included on the 2023 ballot.

CONSULTING AND SERVICES

BMI Contractors, Inc.

CMA engineering Inc. Evergreen Engineering, Inc. Hansen-Rice, Inc. Hunt, Guillot & Associates LLC KTC Industrial Engineering Ltd. Mid-South Engineering Panel World Magazine / Hatton-Brown Publishers, Inc. Union Pacific Railroad

University of Tennessee, Center for Renewable Carbon

EQUIPMENT AND TOOLING

A-Lert Construction Services Altec Integrated Solutions Ltd. Argos Solutions LLC **Baumer Inspection GmbH** BETE Fog Nozzle, Inc. **BID Group** Biele USA LLC Biomass Engineering & Equipment - Veneer Services, LLC **Brunette Machinery** Company Inc. Captis Aire LLC **CECO** Environmental: Adwest Technologies, Fisher-Klosterman, HEE-Duall Clarke's Industries, Inc.

Coil Manufacturing, Ltd.

*2022 Supplier of the Year Winners

Combilift Connexus Industries Inc. Con-Vey COSTA Sanders LLC Dieffenbacher Customer Support, LLC DO2 Industriel Dürr Systems, Inc. Electronic Wood Systems, N.A. Fagus GreCon, Inc. Flamex, Inc. **FROMM Packaging Systems** Globe Machine Manufacturing Company Grenzebach Corporation Guardian Chemicals Inc. HASHIMOTO DENKI Co., Ltd HAWE Hydraulik H.B. Fuller HexArmor Hexion Inc. IBC, International Bar Coding Systems & Consulting Inc. IMA Schelling Group IMAL-PAL Group IMEAS Inc. **Itipack Systems** (A & H Custom Machine) Kadant Carmanah Design Kimwood Machinery, Inc. **Knight Material Technologies** LIMAB North America LDX Solutions (Dustex \ Lundberg) LEDINEK

Matthews Marking Systems Meinan Machinery Works, Inc. Mereen-Johnson LLC Mill Machinery LLC MINDA North America, LLC NESTEC, Inc. Nextwire Nicholson Manufacturing Ltd. **Radian Robotics** Raute REA JET Samuel Packaging Systems Group Siempelkamp LP Signode Packaging Systems SMARTECH (TIP) SonicAire **SparTek Industries** Spraying Systems Co. Stiles Machinery, Inc. Sweed Machinery, Inc. Taihei Machinery Works Ltd. TSI (Teal Sales Inc.) *USNR* Venango Machine Company, Inc. Westmill Industries USA Corp.

MATERIALS AND SUPPLIES

Albany International Arclin - Performance Applied Arxada (Lonza Wood Protection) ATCO Wood Products Ltd. Axalta Coating Systems **Bakelite Synthetics** BASF - We create chemistry Bates and Company, Inc *Bostik* Chem-Trend LP Clarke Veneers and Plywood **Dominion Chemical** Company, Inc. Evertree North America Inc. Franklin Adhesives & Polymers Fusoni Henkel Huntsman Polyurethanes Intertape Polymer Group IPCO Münzing Northwest Adhesives, Inc **OCI** Melamine Americas Owens Corning - InterWrap Paneltech Sansin Corporation (The) SASCO - Polymer Solutions Group, LLC Siemer Milling Stratachem Solutions Group LP Walker Emulsions Wanhua Chemical (America) Co., Ltd. Willamette Valley Company

2023 EWTA MEMBERS

The Engineered Wood Technology Association (EWTA), the related nonprofit supplier organization of APA – The Engineered Wood Association, serves as a networking and information facilitator between North America's engineered wood product manufacturers and their product, equipment and service providers.

EWTA membership falls under four categories:

- Consulting and Services
- Equipment and Tooling
- Materials and Supplies
- APA Member Manufactures (all members of APA are automatically members of EWTA)

The following directory provides a list of 2023 EWTA members organized by category and includes company descriptions and contact information. Visit <u>www.engineeredwood.org/</u> <u>member-directory-contacts</u> for the online directory and additional filter options. It's just one of many tools designed to help members connect with each other and the industry.

For more information about the benefits of membership or for a membership application, visit <u>www.engineeredwood.org/-about</u> or contact LaDauna Wilson at <u>ladauna.wilson@apawood.org</u>.



2023 INFO FAIR SPONSORS

DIAMOND

Use these designations icons to find the members who are sponsoring in this year's APA Annual Meeting & EWTA Info Fair. There's still time to sign up and join us this year. See you there!

GOLD

PLATINUM

CONSULTING AND SERVICES

EWTA members in the Consulting and Services category provide support in one or more of the following subcategories: Energy Management; Engineering Services; Industrial Construction and Installation; Industry Communication/Research; Maintenance/Inspection; On-Time Performance Systems; Plant Design and Construction; Project Management; Recruiting and Staffing; Software/Computing/IT; Specialty Services; Value-Added Services/ Treating/Embossing. <u>Go to the online Consulting and Services directory</u>

AFRY Management Consulting

AFRY Management Consulting is a leading advisor for the transitions of the energy and bioindustry sectors. Providing solutions for generations to come. The Management Consulting Division is part of the overall AFRY Group. AFRY provides engineering, design, digital and advisory services to accelerate the transition towards a sustainable society. We are 19,000 devoted experts in industry, energy and infrastructure sectors, creating impact for generations to come. AFRY has Nordic roots with a global reach, net sales of >2 BEuro and is listed on Nasdaq Stockholm.

Contact:

Guillermo Velarde - Principle Phone: 646-715-3928 Email: guillermo.velarde@afry.com 295 Madison Ave., Suite 300, New York, NY 10017 www.afry.com

GOLD BMI Contractors, Inc.

BMI Contractors Inc, is a machinery installation contractor specializing in the wood products industry for nearly 40 years. We operate across North America and have installed complete plywood, OSB, LVL and I-Joist facilities. We have replaced, rebuilt or modernized individual machinery lines including over 100 veneer dryers and a significant number of plywood presses,

BMI Contractors, Inc. continued:

LVL presses and OSB presses. We pride ourselves in innovation and are responsible for completing three veneer dryers that were rolled into place after their construction. Our crews are ready to assist you in achieving your goals for timely, efficient, safe and costeffective plant improvement projects.

SILVER

Contact:

David Brown - President Phone: 503-375-2222 Email: dbrown@bmicontractors.com 4375 Turner Rd. SE, Salem, OR 97317 www.bmicontractors.com

Carponentry, LLC

Carponentry, LLC provides clients a research and development portal focused on the commercialization of new or novel engineered wood materials solutions and wood-to-wood connection systems. The array of services include ideation, prototype development, certified testing by partnering labs, and developing pathways to commercialization using NSF I-CORPS tools.

Contact:

Patrick Donahue - CEO Phone: 218-390-4780 Email: patrickkellydonahue@gmail.com 324 West Buffalo Street, Duluth, MN 55811

CMA engineering Inc.

Since 1986, CMA engineering Inc. has accomplished a number of projects in the manufacturing end of the forest products industry, including the conceptual design, budget preparation, process engineering, detail engineering (mechanical, electrical, civil and structural), equipment procurement, project management, construction management, PLC/HMI programming and start-up of board plants (OSB, particleboard and MDF), plywood and veneer mills, bioenergy plants, engineered wood product plants and sawmills

Contact:

Claude Malette - P. Eng. Phone: 705-360-5525 Email: cma@cmaeng.com 60 Wilson Avenue, Suite 101 Timmins, ON P4N 2S7 Canada www.cmaeng.com

Evergreen Engineering, Inc.

Evergreen is a multi-discipline (mechanical, electrical, civil/structural and environmental) engineering firm. From project planning and feasibility studies through detailed engineering, construction management, maintenance and process consulting, to start-up and commissioning support, Evergreen can handle any project in your mill. Our wood products experience includes OSB, LVL, I-Joist, Particleboard, MDF, Hardboard, WPC, Pulp & Paper, Lumber, Plywood, Chemical and Resin plants. "Our mission is to provide customized support to move our client's vision to reality by delivering practical engineering solutions, displaying project leadership and contributing technical expertise."

Contact:

Aaron Edewards - Director, Industrial Business Development Phone: 541-484-4771 Email: aedewards@eeeug.com 1740 Willow Creek Circle, Eugene, OR 97402-9152 www.evergreenengineering.com



Hansen-Rice, Inc.

Start with the end in mind. Total facility design to enhance operational efficiency. Ensure that your site, equipment, process, and building envelope seamlessly function as a complete system to optimize employee welfare and maximize throughput. Hansen-Rice, Inc. (HRI) leads in high-performance solutions that optimize operational efficiency and positively impact the Owner's IRR and ROI. HRI's approach is rooted in lean manufacturing and lean construction principles. Our subject matter experts leverage extensive mill operations, process engineering, project planning, and fast-track construction experience to plan and deliver solutions in context with the entire system and your business goals.

Contact:

Terry Kerwood - Marketing Director Phone: 208-442-4208 Email: tkerwood@hansen-rice.com 1717 E. Chisholm Drive, Nampa, ID 83687 www.hansen-rice.com

Hunt, Guillot & Associates LLC

Hunt, Guillot & Associates, LLC (HGA) is a multidisciplined project management and engineering design firm. HGA has been serving the forest products industry since the firm's founding in 1997. HGA continues to provide expertise to the Engineered Wood Products, LVL, I-Joist, OSB, Plywood, Particleboard, Glue Lam and Lumber industries. Services provided include project management, feasibility studies, preliminary engineering, detailed design engineering and on-site technical support services.

Contact:

Sam Costanza - Vice President Phone: 318-255-6825 Email: scostanza@hga-llc.com 603 Reynolds Drive (PO Box 580), Ruston, LA 71270 www.hga-llc.com

KTC Industrial Engineering Ltd.

"Great projects start here." Expertise, experience, and proven track record second to none. Our staff has designed 24 greenfield plants and completed over 600 projects in the engineered wood industry over the past 30 years. KTC utilizes proven methodology to design machinery and processes while supporting the project management team with accurate budgets and schedules. We are now taking the risks out of projects with Dynamic Process Modeling and Advanced Project Tracking technology.

Contact:

Jan Karnik - President Phone: 604-592-3123 Ext. 305 Email: jan.karnik@ktceng.ca #218-12877 76th Avenue, Surrey, BC V3W 1E6 Canada www.panelboard.net



Mid-South Engineering

Mid-South Engineering is a full service, consulting engineering firm that provides a broad range of professional engineering services. Our multidisciplined staff has served industrial, government, and commercial clients since 1969 with a particular expertise within the forest products industry. With offices in Arkansas, North Carolina, Maine, and British Columbia, Mid-South can serve clients across all North America. Our services include Engineering, Project Development, Project Management, and Construction Support. We welcome projects from small troubleshooting efforts to large greenfield plant installations, as Owner's Engineer or as part of a turn-key project.

Contact:

Mike Solano, PE - Group Lead - Panel Products Phone: 919-481-1084 Email: mike.solano@mseco.com 200 Mackenan Drive, Cary, NC 27511 www.mseco.com

SILVER

Panel World Magazine / Hatton-Brown Publishers, Inc.

Panel World publishes six issues per year for domestic and international readership with emphasis on mill project startup articles. Product coverage includes structural and non-structural wood products. Panel World also hosts the biennial Panel & Engineered Lumber International Conference & Expo (PELICE).

Contact:

Rich Donnell - Editor Phone: 334-834-1170 Email: rich@hattonbrown.com 225 Hanrick Street (PO Box 2268) Montgomery, AL 36104 www.panelworldmag.com

Union Pacific Railroad

Union Pacific Railroad delivers the goods families and businesses use every day with safe, reliable and efficient service. Operating in 23 western states, the company connects its customers and communities to the global economy. Trains are the most environmentally responsible way to move freight, helping Union Pacific protect future generations. More information about Union Pacific is available at <u>www.up.com</u>.

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Carey Wilcox - Manager, Marketing | Industrial Phone: 402-544-4635; 402-212-2271 Email: cawilcox@up.com 1400 Douglas St. Stop 1210, Omaha, NE 68179 www.up.com

University of Tennessee, Center for Renewable Carbon

The Center for Renewable Carbon is a state-ofart research facility at The University of Tennessee. The CRC has nine faculty conducting research on forest products, sustainable biomaterials and bioenergy, http://renewablecarbon.tennessee.edu/. The laboratories include wood composite laboratory steam-injected presses, destructive testing lab, conditioning chambers, dry kiln laboratory and new laboratory capabilities for sustainable biomaterials preprocessing, pretreatment research, thermochemical and biochemical conversion, and product analysis. Also, unique analytical capabilities for nanotechnology sustainable biomaterials are available. The CRC has M.S. and Ph.D. concentrations in Sustainable Biomaterials and Wood Science Technology. The CRC provides world-class industry training programs in SPC/Lean, DOE, and data mining.

Contact:

Timothy Young - Ph.D. - Professor Phone: 865-946-1119 Email: tmyoung1@utk.edu 2506 Jacob Drive, Knoxville, TN 37996-4570 www.spc4lean.com

Go to the online Consulting and Services directory for additional details.

EQUIPMENT AND TOOLING

EWTA members in the Equipment and Tooling category provide products and support in one or more of the following subcategories: Accessory Tools/Equipment; Controls/Electronics/ Optimization/Automation; Custom Equipment/Tooling; Dryer Systems; Environmental; Fastening/Fasteners/Hardware; Finishing Line Systems; Grading/Scanning; Hydraulics/ Hydraulic Systems; Labeling/Marking/Bar Coding; LVL, Laminate & Other EWP Equipment; Material Handling Equipment; Panel Handling Equipment; Panel Production Equipment; Panel Repair/Patching; Presses and Press Lines; Primary Processing Equipment; Quality Control Equipment and Systems; Resin Application Equipment/Spray Lines; Safety Equipment and Supplies; Sanding and Finishing Equipment; Stranders/Debarkers/Logging; Support Equipment; Veneer Processing and Drying; Wax/Material Application Systems; Wrapping, Strapping and Packaging. <u>Go to the online Equipment and Tooling directory.</u>

A-Lert Construction Services

A-Lert Construction Services was established in 1979 and specializes in design, manufacturing and installation of equipment in the wood and grain industries. We offer everything from single and triple-pass rotary dryer drums, flash tube and steam tube dryers with the ability to process both organic and inorganic materials across a wide variety of manufacturing industries. We also offer the process piping, trommel screening, conveying and Cleanaire systems often needed with these systems as well. A-Lert serves as a specialty fabricator and replacement parts supplier for all existing M-E-C systems.

Contact:

Jordan Stewart - Sales Manager Phone: 620-607-4035 Email: jstewart@centurionind.com 120 West Madison, Fredonia, KS 66736 www.alertconstructionservices.com

PLATINUM Altec Integrated Solutions

Altec works closely with plywood and veneer operations to improve all sections of the green end to increase production, quality, uptime, and recovery. After gaining a thorough understanding of each customer application, an improvement solution, drawn from decades of experience and smart use of technology, is proposed. Improvement solutions are provided which include items such as heavy-duty precision equipment

Altec Integrated Solutions continued:

(including complete lathes, back up rolls, chargers, scanners, diverters, stackers, robotics) and enhanced control systems for all sections. Services include full CNC machine shop, testing, engineering, and field service. Locations in Texas and British Columbia allow Altec to supply, service, and support customers across North America and around the world.

Contact:

Paul Lupton - Sales Manager, Manufacturing Phone: 604-529-1991 Email: plupton@alteconline.com # 120 - 185 Golden Drive Coquitlam, BC V3K 6T1 Canada www.alteconline.com

PLATINUM Argos Solutions LLC

Argos offers a full range of optical inspection and process control systems that replaces manual grading and patching of wood products. With more than 25 years of experience and installations in more than 30 countries, Argos provides the latest technology of vision-based scanning systems for the plywood, composite and furniture industry. Argos is a single source supplier for inspection and grading after the press, sander, cut-to-size, including edge inspection systems, and automatic patching systems for plywood and parquet panels.

Argos Solutions LLC continued:

Contact:

Richard Lepine - General Manager Phone: 919-428-1262 Email: richard.lepine@argossolutions.no 2013 Castleburg Drive, Apex, NC 27523 www.argossolutions.no

Baumer Inspection GmbH

Baumer Inspection GmbH specializes in optical surface inspection systems. In over 35 years of quality service, we have installed more than 750 systems world-wide and are a leader in scanners for fully automatic inspection and process control. Baumer Inspection offers inspection systems for particle boards, wood fiber boards (MDF, HDF), paper, film and foils, flooring and surfaces of furniture panels as well as edge inspection systems. Our highly skilled and motivated team always pushes the limit of what is possible to bring you the newest innovation in vision technology for the wood working industry.

Contact:

Stefan Eisenkohl - Head of Sales & Engineering Phone: +49 7531 9943-31 Email: seisenkohl@baumer.com Lohnerhofstrasse 6, Konstanz, 78467, Germany www.baumerinspection.com

BETE Fog Nozzle, Inc.

BETE's FlexFlow[®] Spray Systems and Electric HydroPulse[®] Automatic Spray Nozzles provide solution confidence for precise applications of resin, wax, water, and release agents during engineered wood production. Addresses problems involving overspray or under-spray to ensure production efficiency for chips, mats, cauls, or belts.

BETE Fog Nozzle, Inc. continued:

Contact:

David Adams - National Sales Manager Phone: 413-834-4302 Email: dadams@BETE.com 50 Greenfield St., Greenfield, MA 01301 www.bete.com

BID Group

The privately-owned BID Group has over 35 years of experience in providing industry-leading solutions for its highly valued customers in the wood processing industry. As one of the largest integrated suppliers to the wood processing industry and the North American leader in the field, BID Group is your one-stop source for comprehensive and innovative solutions that exceed our customer expectations. The ability to provide a complete, smart connected, turnkey manufacturing facilities that includes engineering, project management, installation, startup, and after sales service furthers the BID Group companies' strategic value to its customers.

Contact:

Steven Hofer - EVP of Business Development and Strategy Phone: 843-563-7070 Email: steven.hofer@bidgroup.ca 5154 Highway 78, St. George, SC 29477 www.bidgroup.ca

Biele Group

Since 1973 Biele Group is a global manufacturer of customized equipment and turnkey solutions for plywood, particle board, OSB and solid wood applications. The solutions developed by Biele include veneer handling up to the final packaging lines, going through automatic lay-up systems, press lines and finishing processes, including fully automatic solutions for Hardwood Veneer Press lines. Biele's expertise includes advanced data management and complete plant development from concept and design to installation and commissioning. Headquartered in

Biele Group continued:

Spain with local sales & technical support facilities in Atlanta, Georgia, USA, Biele provides full service for projects developed in America.

Contact:

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<u>US Sales Contact:</u> Juan Flores Phone: 706-537-2336 Biele USA LLC, 2030 Powers Ferry Road, Suite 228, Atlanta, GA 30339 www.biele.com

Biomass Engineering & Equipment

We build profitable machine solutions based upon better engineering. We take pride in the fact that our machines run reliably with minimum operating costs - yielding you the greatest efficiency and profits. Every prototype machine ever built is running today. We were the first and still the only company to build a voice activated veneer bundle grading line. We developed the most accurate debarker/planer system ever built and then we built a fully automated butt flare reducer to go with it. Our veneer chipper is proven to use less energy and produce better chips. Our veneer machine rebuilds have allowed our customers to improve profits while saving them as much as 50% over the price of a new machine.

Contact:

Dane Floyd - President and CEO Phone: 317-346-0711 Email: dane@veneerservices.com 5851 S. Harding Street, Indianapolis, IN 46217 www.veneerservices.com

PLATINUM

Brunette Machinery Company Inc.

Specializing in wood processing machinery and material handling systems for the Forestry and Biomass industries: CBI Grizzly Mill, BioSizer®, Chippers for Pulp-chips or Micro-Chips, Electric Log Sweeps, Log Decks, Log Singulators, Rotary Debarkers, Vibrating Conveyors. Custom engineered solutions to take control of your fiber supply and get more from your mill.

Contact:

Kristy Hammond Phone: 604-522-3977 Email: kristy@brunettemc.com 8717 132nd St., Unit 21 - 4444 Eastgate Parkway, Surrey, BC V3W 4P1, Canada www.brunettemc.com

Captis Aire LLC

Captis Aire LLC provides an industrial air pollution control technology that has been commercialized in many applications including automotive, furniture, and electronics manufacturing. It is an emerging clean technology in wood processing that could enable operators to 1) reduce operating expenses primarily by reducing energy usage – especially natural gas, 2) generate revenue by selling valuable organics, i.e. turpentine (terpenes) from pine wood, and carbon offsets, 3) improve sustainability by reducing greenhouse gas emissions. The Fluidized Bed Concentrator technology works by adsorbing (capturing) pollutants on specialized Bead Activated Carbon. We have special expertise in wood processing.

Contact:

Kim (Ms.) Tutin - Founder and CEO Phone: 404-580-2795 Email: kim@captisaire.com 1612 W. Cleveland Ave., Suite 001, East Point, GA 30344 www.captisaire.com

CECO Environmental: Adwest Technologies, Fisher-Klosterman, HEE-Duall

Adwest Technologies provides high efficiency Regenerative Thermal and Catalytic Oxidizers (RTOs and RCOs) for engineered wood, OSB, MDF, laminating, veneer drying, and resin VOC abatement. Adwest can provide compact 2 chamber RETOX RTOs as well as multi chamber RTOs up to 400,000 SCFM flow rates. Our Fisher-Klosterman, Inc (FKI) division provides ultra-high efficiency cyclones and venturi scrubbers for boiler and wood manufacturing applications, while HEE-Duall provides Bioreaction biofilter and scrubber systems for VOC abatement. We also service, rebuild and relocate RTOs, RCOs, Biofilters and scrubbers for the wood products markets including Smith, Pro-Environmental and all other brands.

Contact:

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Clarke's Industries, Inc.

Clarke's provides a broad range of products for the Panel Board Industry. The products include Material Storage and Metering Bins, PyroGuard Spark Detection and Extinguishment System, Hi Speed Abort Gates, Back draft Dampers and Explosion Venting, Waste Wood Processors, Rotary Screens and Classifiers, Rotary Airlocks/Feeders, Fans, Dust Collection and Pneumatic Conveying Systems.

Contact:

Andy Clarke - President Phone: 541-343-3395 Email: andyc@clarkes-ind.com 660 Conger Street (PO Box 2428), Eugene, OR 97402 www.clarkes-ind.com

GOLD Coil Manufacturing Ltd.

Coil Manufacturing is the leading manufacturer of rotary drum blenders and spinning disc atomizers for resin application in the engineered wood industry.

Contact:

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Combilift USA

Combilift is the largest global manufacturer of multidirectional forklifts and an acknowledged leader in long load handling solutions. Innovation, Flexibility and Service is the ethos on which Combilift's success is built and has seen us become the world's fastestgrowing forklift manufacturer, exporting to more than 85 countries and with more than 60,000 trucks in use worldwide. No other manufacturer in the world can deliver the same level of customisation and adaptability, or cater so effectively to the diverse needs of every individual customer, whether their enterprise is large or small.

Contact:

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Connexus Industries Inc.

Connexus Industries Inc. manufactures and distributes specialized chain, attachments and sprockets for OSB manufacturing plants. We also are manufacturers of Laharco Laser Diodes and Rens-Metal Shark Metal Detectors. Locations in Atlanta, Quebec, Portland and Vancouver. Formerly Viking Chains, I'ANCO Products and Lacey Harmer Inc.

Connexus Industries Inc. continued:

Contact:

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SILVER Con-Vey

Con-Vey is a leading manufacturer of material handling equipment and a proven, high-quality supplier offering innovative solutions to customers in nearly 20 countries. Con-Vey designs and manufactures complete systems for automated material handling, wood panel processing, packaging, and laminating, including feeders, stackers, and conveyors. Con-Vey also specializes in beam presses, robotics, and PLC control systems. For more information on Con-Vey's innovative solutions, visit CON-VEY.COM or contact Product Manager for Panel Products, Brent Hensley, at <u>brent.hensley@con-vey.com</u>.

Contact:

Brent Hensley - Product Manager, Panel Products Phone: 541-672-5506 Email: brent.hensley@con-vey.com 526 NE Chestnut Ave, Roseburg, OR 97470 www.con-vey.com

DIAMOND COSTA Sanders LLC

Building on 60+ years of experience manufacturing industrial calibrating, sanding and polishing equipment, Costa's large panel series machines continue a tradition of rugged world-class machinery that made Costa an industry leader in the field of industrial sanding-calibrating equipment. These "super duty" solutions are engineered and manufactured to the highest quality standards, in modular frames, with the right combination of

COSTA Sanders LLC continued:

working units, motors, and feed speeds that best fits the industrial process of today and tomorrow. Costa Sanders offers machine solutions engineered expressly to fit each client's own manufacturing environment and production needs - whether particleboard, fiberboard, plywood, OSB, or CLT. Our sanding systems are capable of processing up to 145-inch-wide panels with thicknesses up to 13 inches.

Contact:

Eric Johnston - Sales Director, Panel Division Phone: 336-434-6644 Email: eric.johnston@costasanders.com 107 Seminole Drive, Archdale, NC 27263 www.costasanders.com

SILVER

Dieffenbacher Customer Support, LLC

Dieffenbacher is an international group of companies specializing in the manufacturer of press systems and complete production systems for the wood, automobile and supplier industries. As an independent fifth generation family company, we have stood for continuity, tradition and reliability for over 140 years. Our Wood business unit plans and implements complete solutions for the manufacture of wood-based panels, such as particleboard, MDF, OSB and LVL plants.

Contact:

Cole Martin - Sales Manager, Capital Sales and Modernizations Phone: 678-325-5782 Email: cole.martin@dieffenbacher.com 1345 Ridgeland Parkway, Suite 100, Alpharetta, GA 30004 www.dieffenbacher.com

SILVER DO2 Industriel

The DO2 Rapid Wrapper Automatic Panel packaging system offers outstanding performance. The wrapping machine's electrical, mechanical and pneumatic components, its design, the programming structure and tactile interface have all been designed for easy use and no-hassle operations. All of the wrapper's components are robust and maintenance-free. Built with durability and efficiency in mind, the wrapper will optimize your plant's production on a daily basis.

Contact:

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DÜRR

GOLD Dürr Systems, Inc.

Dürr Systems, Inc. offers multi-pollutant clean-air solutions to the engineered wood products industry that meet stringent emissions regulations: wet scrubbers and wet electrostatic precipitators for high-efficiency particulate, blue haze and condensed salts removal for dryers and press vents; ultra-highefficiency RTO/RCO systems for VOC abatement, and SNCR systems for NOx control. The Dürr Systems aftermarket group also provides upgrades, parts, and service for every make of air pollution control equipment for the engineered wood products industry.

Contact:

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Electronic Wood Systems, N.A.

EWS North America was founded in 1993. We are a leading supplier of quality control measuring systems for the wood composite panel board industry, including: Thickness Gauges, Blow Detection, Press Protection Devices, Spark Detection & Extinguishment Systems, Mass (WPUA) Measuring, non-contact Weigh Scales and Density Profile Measuring Systems.

Contact:

Steven Mays - Partner Phone: 503-643-6305 Email: steve@ews-usa.com 3720 SW 141st Ave #206, Beaverton, OR 97005-2349 www.ews-usa.com

PLATINUM Fagus GreCon, Inc.

Since 1911, Innovation is Our Tradition. MEASURING SYSTEMS: Improves your bottom line. Check out the full range of in-line measuring systems: thickness gauges, blow & delamination detector, moisture meters, raw density profile. Weight per unit area across the whole production width at the mat former and after the press. Detect surface defects on décor panels and flooring. SPARK DETECTION & EXTINGUISHING SYSTEMS: Provides safety for your production. Detect sparks and extinguish them before the filter. Detect heat buildup in silos, bag houses and storage bins. Outlined in NFPA 69, 654 and 664 standards. Factory Mutual Approved.

Contact:

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FLAMEX[®]INC.

GOLD Flamex, Inc.

Flamex Inc. is a leading supplier of customized industrial process fire prevention and protection equipment. We specialize in the protection of facilities that handle combustible dusts that utilize pneumatic dust collection and air filtration systems. To address the process fire hazard inherent in various industrial applications, our company pioneered the utilization of a new technology in North America by introducing the FLAMEX Spark Detection and Extinguishing System in 1977 and the MINIFOG PressProtect System in 1997 for the protection of Industrial Presses. The flexibility of these systems allows their use in other hazardous areas such as Thermal and Hydraulic oil rooms where AFFF Foam Fire Fighting systems can be utilized for further protection.

Contact:

Ed Pridgen - Vice President Phone: 336-299-2933 Email: epridgen@sparkdetection.com 4365 Federal Drive, Greensboro, NC 27410-8116 www.sparkdetection.com

SILVER FROMM Packaging Systems

FROMM Packaging Systems for the lumber Industry consists of heavy-duty machinery. Our equipment covers all packaging solutions for the forestry industry (timber, plywood, MDF, HDF, chipboard etc) with strapping machines, wrapping and waterproof machines. We develop and produce a wide variety of systems for unitizing and palletizing goods for transport: strapping machines and systems, pallet stretch wrapping machines, together with all necessary consumables. Established in 1947, the Swiss company pursues a policy of logical vertical integration while upholding traditional values such as proximity to customers, quality consciousness, continuity, independence and environmental awareness, which are the reasons for decades of success.

FROMM Packaging Systems continued:

Contact:

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Globe Machine Manufacturing Company

Globe Machine offers single machine centers along with complete systems to the following industries: OSB, MDF, particleboard, plywood, strawboard, moulded door skins, membrane presses, siding, LVL, laminate flooring and sheet plastics. Globe Machine is the leader in the supply of automated I-joist assembly systems and has achieved a leadership role in the cement fiberboard industry and moulded door skin lines. For 100 years Globe Machine has served the forest products industry.

Contact:

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Grenzebach Corporation

Grenzebach is a leading global manufacturer and supplier of drying systems for the veneer and building materials industries with over 400 dryer installations worldwide. Our veneer product line includes jet and longitudinal dryers, infeed and outfeed systems, and veneer grading and stacking systems. Grenzebach has completed extensive rebuilds and upgrades on all makes and models of veneer, allboard, and ceiling tile dryers. Grenzebach Service supplies complete parts and service (on-site and remote) for all building materials drying systems.

Grenzebach Corporation continued:

Contact:

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Guardian Chemicals Inc.

Providing solutions, results and meaningful service has earned Guardian Chemicals Inc. the enviable industry reputation as the "go to" people for chemical technology and services. Our extensive research and development group, in house ISO 14001 certified manufacturing and products like our revolutionary patented RESSGUARD series release agent technology for MDI resins in continuous and multi-opening presses, keep us at the forefront of the engineered wood industry. From W.E.S.P. and Scrubber treatment technology, process chemicals and defoamers to maintenance chemicals, odor control and corrosion prevention, Guardian's wood group provides our partner clients with a complete package along with the flexibility to adapt products to the specific needs of each individual application and customer.

Contact:

Greg Pecharsky - Vice President of Sales (Canada) Phone: 780-998-3771; 800-661-6544, Ext. 211 Email: gpecharsky@guardianchem.ca 155 - 55202 SH 825 Surgeon Industrial Park, Sturgeon County, AB T8L 5C1, Canada www.guardianchem.com

HASHIMOTO DENKI Co., Ltd.

Hashimoto Denki Company, Ltd was established in 1946 in Nagoya, Japan, the Japanese woodworking machinery capital. Our company specializes in manufacturing machinery for high-efficient and value-added plywood and veneer production, ranging from veneer lathe lines to panel sizing lines. We offer machinery for total plant operation of veneer, plywood and LVL, serving the worldwide marketplace. Hashimoto Denki Co., Ltd. continued:

Contact:

George Mori - General Manager Phone: +81-566-53-6902 Email: mori-j@hdk-co.com 5-1-17 Shinden-cho, Takahama-City, Aichi Pref. 44-1301, JAPAN www.hdk-co.com/english

HAWE Hydraulik

HAWE Hydraulik is a well-respected, worldwide, German based company with offices in over 20 countries. HAWE's primary business is providing high quality hydraulic components through modular design and energy efficient solutions. HAWE offers a full range of products from high pressure valving to custom hydraulic units and manifolds to complete hydraulic systems including motion controls. We are a complete solutions provider.

Contact:

Steve Kathan - Industrial Group Manager Phone: 503-222-3295 Email: s.kathan@hawe.com 12990 SE Highway 212, Clackamas, OR 97015 www.hawe.com

H.B. Fuller

Our fast setting, strong bonding tapes and glues deliver near zero waste veneers. Zero waste = more profit. Our patented rotary applicators are designed to increase production uptime and eliminates costly and ineffective chillers. Our wood team has over 50+ years of market experience to ensure the right solution for hardwood and softwood veneer in the plywood, parquet and LVL markets. Our industry first Dry & Green Welding tapes are a next generation solution for eliminating laps and gaps while further maximizing drier efficiency. Our goal is simple – help you make more money and build better wood products.

H.B. Fuller continued:

Contact:

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HexArmor

HexArmor is a global PPE (personal protective equipment) manufacturer that uses innovative technologies to build high performing hand protection, arm/body protection and eyewear. At HexArmor, we understand the daily challenges faced by safety teams in the wood products industry. Working to meet growth and operational expectations while keeping employees safe on the job can be a tough balancing act. Injuries are costly. Down time and lost productivity damage company reputations and slow growth. Let HexArmor help you build a PPE program that keeps you operationally efficient while giving your employees the best opportunity to go home safely to their families.

Contact:

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GOLD

Hexion Inc.

Hexion Inc. is a leading global source for adhesives, resins, formaldehyde, melamine and derivatives serving a broad range of markets including the forest products, foundry, automotive, construction, composites, electronics and oilfield industries, operating 34 manufacturing plants in North America, Latin America, Europe and Asia/Pacific. The Forest Products division of Hexion Inc. is the global leader in supplying resins, adhesives, wax emulsions and ancillary products to the forest products industry. Customers use our materials to manufacture a wide range of composite and engineered wood products including plywood,

Hexion Inc. continued:

particleboard, oriented strandboard, medium density fiberboard, structural beams, cross laminated timber, furniture, mouldings and millwork.

Contact:

Steve Banick - Senior Director NA Forest Products, Resins Phone: 541-741-6650 Email: steve.banick@hexion.com 180 East Broad Street, Columbus, OH 43215 www.hexion.com

IBC, International Bar Coding Systems & Consulting Inc.

IBC, International Bar Coding Systems & Consulting Inc. - An integrated manufacturer of individual piece wood product specific printer applicators. Complete solutions for finished or in-process packs we offer Automated Package labelers (AutoLabeler) for Veneer, OSB, MDF, Plywood, Lumber and EWP. We manufacture tags and labels for any labeling system and are a single source provider for turnkey solutions. We offer Vendor Managed Inventory of consumables and integrated data collection systems across North America. We provide full design, build, onsite service, preventative maintenance, training and consulting on a system wide or mill by mill basis.

Contact:

Chris Pedersen - President Phone: 250-493-3201 Email: cpedersen@ibcworld.net 160 Satikw Crossing, Penticton, BC V2A 6J7 Canada www.ibcworld.net



IMA SCHELLING

GROU

SILVER IMA Schelling Group

IMA Schelling Group is a single-source provider of sales, service and support of IMA and Schelling machinery and software. We offer customers and business partners the benefit of working with one source for customized industrial engineering, manufacturing and machinery sales under a single roof in Raleigh, North Carolina. IMA Schelling Group works collaboratively with North American businesses. Our customers range from mid-size operations to major corporations.

Contact:

Christina Griggs - Sales & Product Marketing Phone: 919-544-0430 Email: marketing.us@imaschelling.com 301 Kitty Hawk Drive, Morrisville, NC 27560 www.imaschelling.us

IMAL-PAL Group

Established in the 1970's, the Group is a world leader in the manufacture and supply of equipment and systems. It's extensive production program is able to supply complete turnkey plants for the treatment and processing of fresh and recycled wood, in both the wet and dry areas, for production and processing of particleboard, MDF, OSB, Plywood, Pellets, Pallet Blocks and pressed wood-based products in general. IMAL is a leading manufacturer of glue dosing and blending systems and supplies the most innovative on-line and laboratory quality control devices that are found in virtually all the production plants around the world.

Contact:

Andrew Jowett - President Phone: 509-855-3411 Email: andrew.jowett@imalpal.com PO Box 870949, Stone Mountain, GA 30087 www.imalpal.com

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GOLD
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IMEAS Inc.

IMEAS is a world leader in surface finishing solutions, with over 3,000 machines operating worldwide. 2021 marked IMEAS's 55th Anniversary of Innovation and Service to the Wood Products Industry. IMEAS sanding and grinding machines are used to achieve precise surface finish and thickness on a wide variety of products such as plywood, LVL, CLT, Glulam, composite wood panels, decorative laminates, flooring and other solid surface products. IMEAS specializes in extra wide 12 ft (3.6 m) machines, with a portfolio that includes cross-belt and four-sided sanding systems.

Contact:

Bryan Wolowiecki - President Phone: 678-364-1900 Email: b.wolowiecki@imeas.net 1125 Commerce Drive, Suite 200 Peachtree City, GA 30269 www.imeasinc.com



Itipack Systems

Itipack Systems is a world leader in integrated automated strapping solutions since 1970. Each one of our systems shares in our firm commitment towards high value, optimum performance, and long-lasting results We provide custom solutions to industries with specific and unique manufacturing requirements.

Contact:

Kyle Jager - Sales Manager Phone: 905-220-0551 Email: kjager@itipacksystems.com 919 Zelco Drive, Burlington, ON L7L 4Y2, Canada www.itipacksystems.com

KĀDANT

Carmanah

SILVER Kadant Carmanah Design

Kadant Carmanah provides leading edge technology and equipment to optimize fibre utilization for the production of wood-based panels. Kadant Carmanah's products include SmartRING Stranders, SmartDISC Stranders, Rotary Debarkers, and Conveying/Feeding equipment for the OSB market – all backed by our best-in-class engineering, manufacturing, installation, service, and parts support teams. Recognized as the global leader in stranding technology, Kadant Carmanah holds an impressive 80% of this market share.

Contact:

Carlos Vieira - Director, Engineered Wood Sales Phone: 604-268-1698 Email: carlos.vieira@kadant.com Unit #8 – 15050 – 54A Avenue, Surrey, BC V3S 5X7, Canada www.kadantcarmanah.com

Kimwood Machinery, Inc.

World's leading producer of new equipment and OEM parts for Kimwood Sanders, Hogs and Handling Equipment, Stetson-Ross Planers and Moulders, Ferrari Resaws and Tri-State Equipment.

Contact:

Scott Carle - Forestry Operations Manager Phone: 604-835-1045 Email: scarle@mlpmachine.com 77684 Highway 99 South, Cottage Grove, OR 97424 www.kimwood.com

Knight Material Technologies

A domestic manufacturer and global leader of ceramic media for Regenerative Thermal Oxidizers (RTO). Our media is designed to work in normal to your most challenging application environments. A mixed bed of our FLEXERAMIC[®] structured media and LPD[®] random media offers optimal heat transfer and full bed utilization while our GR (Glazed Resistant Alumina) material is produced for OSB Dryer and other applications for the wood products industry. We manufacture our ceramic media domestically and stock over 100,000 cubic feet at our East Canton, OH.

Contact:

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LIMAB North America

LIMAB is the world leader in non-contact laser measuring systems for composite panels and engineered wood products.

Contact:

Tony Godair Phone: 704-321-0760 Email: tony.godair@limab.com 3122 Fincher Farm Rd., Suite 722 Matthews, NC 28105 www.limab.com

LDX Solutions

LDX Solutions is a global supplier of air pollution control systems to process industries including the engineered wood products industry. State-of-the-art systems that include the Geoenergy E-Tube Wet ESP, GeoTherm RTO and GeoCat RCO Oxidizers and Geoenergy Wet Scrubbers. Geoenergy systems have provided environmental compliance to the engineered wood products industry on wood dryers, press vents and boilers since 1984.

LDX Solutions continued:

Contact:

Robert Cox - Sales Manager Phone: 770-429-5575 Email: rcox@ldxsolutions.com 60 Chastain Center Blvd NW, Suite 60, Kennesaw, GA 30144 www.lundbergllc.com



LEDINEK

LEDINEK is global leader in Cross Laminated Timber (CLT), Glulam Timber (GLT) and finger jointed Solid Timber technology. Knowledge of mechanical engineering and practical experience in mass timber solutions gained over decades combined with our SOTA equipment, allows us to equip you with individually optimized complete solutions in engineered wood production. From concept and design, to installation, training and commissioning, we provide the leading finger jointing and panel & beam press technology, state of the art planing, moulding, sawing and splitting solutions, material handling equipment, data flow management and excellent aftersales support for you. We cherish our partnerships - Count on us!

Contact:

Andrej Holc - Sales Engineer Phone: 00386 2 613 00 51 Email: andrej.holc@ledinek.com Slivniška cesta 18, HOČE, 2311, Slovenia (EU) www.ledinek.com

DIAMOND

Matthews Marking Systems

Matthews Marking Systems, established in 1850, is a leading supplier of marking and coding equipment for the engineered wood and building products industries. Matthews supplies ink jet printing solutions for applications including grade marking, nail patterns, traceability and large format logo printing. We also offer a variety of inks, specific to the wood industry, including water based, fast dry and VOC free.

Contact:

Bill Ashley - Key Account Manager Phone: 704-467-9682 Email: bashley@matw.com 3159 Unionville Rd, Suite 500, Cranberry Township, PA 16066 www.matthewsmarking.com

DIAMOND

Meinan Machinery Works, Inc.

Established in 1953 in Japan, Meinan develops and manufactures innovative machinery for veneer and plywood production, and holds hundreds of worldwide patents. Meinan's revolutionary "spindleless" lathe drives logs on their circumference with spiked discs instead of spindles, resulting in better veneer quality, higher recovery, and extremely close thickness tolerance. The lathe is part of an automatic veneer peeling line featuring automatic knife changing, automatic stacking, and green composing of random width veneer to save labor costs and increase dryer utilization. Meinan also manufactures scarf composers, grading systems, automatic layup lines, and sanders. Represented in USA by Merritt Machinery, LLC in Lockport, NY.

Contact:

Jimmy Nakaya - Sales Director Phone: 716-434-5558 Email: t.nakaya@meinan.co.jp

U.S. Representative:

Anna McCann - President Email: amccann@merrittmachinery.com 10 Simonds Street, Lockport, NY 14094 www.merrittmachinery.com

Mereen-Johnson LLC

Mereen-Johnson has been setting the standard for the woodworking and engineered materials industries since 1905 and offers a complete line of Gang Rip Saws, Profiling Machines, Cross Cutting Equipment, Sizing Systems, I-Joist equipment, and related material handling designed for reliable, high speed production with minimal maintenance. Mereen-Johnson also offers a complete line of solid wood processing equipment such as fixed arbor and shifting blade straight line multiple Rip Saws, Rough Mill Optimizing and Material Handling, Moulders, Single and Double End Tenoners, CNC controlled Dovetailers, and Box Clamps.

Contact:

Dave Olson - Corporate Sales Manager Phone: 612-529-7791 Email: info@mereen-johnson.com 5201 East River Road - Suite 301, Minneapolis, MN 55421 www.mereen-johnson.com

SILVER Mill Machinery LLC

Mill Machinery is a provider of new and reconditioned machinery to the veneer and panel industries. Mill Machinery's inventory of production machinery includes veneer lathes, veneer stackers, dryers, plywood presses, sawlines, grade bins, panel feeders, sanders, hogs and related support equipment. Mill Machinery's Magnum line of new machinery includes press loading/unloading systems, press platens, hydraulic units, flying saws, panel feeders, panel stackers and conveyors.

Contact:

Tim Peterson - President Phone: 503-720-0540 Email: tim@millmachinery.net 31678 South Highway 213, Molalla, OR 97038 www.millmachinery.net

MINDA North America, LLC

MINDA has been meeting customer needs in the engineered wood industry for more than 40 years, providing leading technology for laminated timber processes. Whether the application requires custom press technology, material handling, data flow management, or overall plant development, MINDA provides specific solutions from concept and design to installation and commissioning. MINDA is a global supplier of flexible, high speed presses for Cross Laminated Timber (CLT), Glulam Beam, and LVL Beam applications. Headquartered in Minden, Germany, with our latest expansion of a full-service manufacturing facility located in Granite Falls, North Carolina, USA.

Contact:

Charles Martin - President & CEO Phone: 828-313-0092 Email: c.martin@minda.com 10 N. Summit Ave., Granite Falls, NC 28630 www.minda.com

NESTEC, Inc.

Founded in 1999, NESTEC is a global leader in VOC and HAP emissions control. NESTEC provides innovative pollution management and abatement technologies for a range of industries, including specialty chemicals, wood products, ethanol, and building products. NESTEC's solutions control carbon monoxide, wood dust particulate, condensable organic aerosols, alkali metal containing ash, and water-saturated air streams. NESTEC engineers have treated emissions for over 25 years in plywood, particleboard, oriented strand board (OSB), and wood pellet plants.

Contact:

James L. Nester - President Phone: 610-323-7670 Email: jnester@nestecinc.com 222 East Main Street, Pen Argyl, PA 18072 www.nestecinc.com

Nextwire

Nextwire is a North American company with over 50 years of manufacturing and engineering experience in woven fabrics for the Engineered Wood Industry. Nextwire CleanSheen II caul and press screens have greatly impacted the industry with extended life resulting in lower cost per board foot. Nextwire can provide these screens with attached tow bars which are manufactured from stainless or plain steel. All caul screens, press screens, and tow bars are manufactured to individual mill site specifications Nextwire also manufactures preheater, intermediate and tray belts as well as a variety of products in stainless steel and synthetic material.

Contact:

Charlie Brown - VP of Sales Phone: 870-628-6378 Email: cbrown@next-wire.com 701 E. Arkansas Ave. (PO Box 159), Star City, AR 71667 www.next-wire.com

Nicholson Manufacturing Ltd.

Industry Leader in ring debarking technology since 1948.

Contact:

Ron Hait - Director of Business Development Phone: 250-655 7533 Email: ron.hait@nicholsonmfg.com PO Box 2128, Sidney, BC V8L 3S6, Canada www.debarking.com

SILVER Radian Robotics

Radian Robotics provides the newest and most advanced robotics and technology for marking, labeling, barcoding, cardboard application, material handling, and other custom solutions in the wood products industry. Radian uses robotics for stenciling sidewall identification as well as end striping and coding. One system for both applications with availability to use multiple colors. Radian's innovative cardboard application system places and staples cardboard on all sides of a package, ensuring your products are well protected. Robots present high reliability and minimal maintenance. Our systems come with a guarantee to perform at over 99% reliability. Let your product stand out from the competition!

Contact:

Jon Vanspronsen - Corporate Account Manager Phone: 905-639-7370 Email: jvanspronsen@radianrobotics.com 70 Lancing Drive, Hamilton, ON L8W 3A1, Canada www.radianrobotics.com

GOLD Raute

At Raute, we have global expertise in wood products manufacturing and we are technology and innovation leaders. Raute invests in advancing the production process of plywood, LVL, and engineered wood products. Raute provides profitable solutions for large mill-wide projects, individual process lines, equipment upgrades, spare parts and service. Raute is your partner in production performance.

Contact:

Trevor Wendt - Vice President Sales, NAM Phone: 604-619-0029 Email: trevor.wendt@raute.com 1633 Cliveden Avenue, Delta, BC V3M 6V5 Canada www.raute.com

SILVER REA JET

REA JET has been a global leader of coding and marking solutions for the engineered wood industry for over 30 years. Whether you're looking to print APA grade stamps, large logos & graphics, 2D scannable barcodes or nail grid patters, REA JET has flexible and reliable systems designed to run at high speeds and hold up in the harshest environments. Contact REA JET today to learn more about our products and capabilities for all of your traceability needs.

Contact:

Nicole Richie - Marketing Manager Phone: 678-205-5962 Email: sales@reajetus.com 7307 Young Drive, Walton Hills, OH 44146 www.reajetus.com

Samuel Packaging Systems Group

With over 50 years serving the lumber and forest products industry, Samuel Packaging Systems Group, offers their customers in the Engineered Wood industry a single source supply for all of their strapping, ink jet printing, labeling, and packaging requirements. Samuel's product line includes steel and plastic strapping, pneumatic and manual hand tools, seals, edge protection, fully automated strapping systems. Our industry leading VK-30 strapping head has been used in both new and retrofit applications to convert our customers from steel to polyester strapping. Samuel is a leader in strapping for engineered wood products and had the first AAR approved polyester strapping. The Product Identification Division provides fully automated systems for ink jet printing for grade and marketing requirements, as well as piece and package labeling for identification, tracking and shipping.

Contact:

Bob Hadden - North American Forestry Manager Phone: 800-667-1264 Email: bob.hadden@samuel.com 2278 - 192nd Street, Unit 109, Surrey, BC V3Z 0N2, Canada www.samuelpsg.com

Siempelkamp LP

Siempelkamp is a systems supplier of complete process equipment for the wood-based-panel industry. In addition to the ContiRoll generation 9 Continuous press, Multi-opening presses, as well as sanding, cut to size and stacking lines for the panel board industry, Siempelkamp provides the full range of process machinery. With its subsidiaries Sicoplan, the engineering company for complete plant engineering; Pallmann for debarking lines, chippers, stranders, and other size reduction machinery; Buettner for energy systems, dust and multi-fuel burners and dryer systems, the complete process machinery portfolio is covered. Siempelkamp LP provides the service support, modernizations and spare parts for North America.

Contact:

Dirk Koltze - President Phone: 704-424-4141 Email: d.koltze@siempelkamp-usa.com 200 N. Cobb Pkwy., Suite 302, Marietta, GA 30062 www.siempelkamp-usa.com

Signode Packaging Systems

Signode is a global manufacturer of steel and plastic strapping and the application equipment and accessory products for each. Our protective packaging systems for the Lumber and Panel Industries are centered around the material that ultimately secures loads for handling, shipping and storage, plastic or steel strapping. We offer a full range of application tools, equipment and accessories to complete your strapping system. Our Forest Products Industry sales, equipment service, customer service and engineering departments can help you design the optimum protective packaging system for your application.

Contact:

Mark Smanda Phone: 704-907-0533 Email: msmanda@signode.com 3624 West Lake Avenue, Glenview, IL 60024 www.signode.com

SMARTECH

SMARTECH is a hi-tech company that develops software solutions and production equipment to propel wood-based panel manufacturers to new heights. Our Autonomous Manewfacturing[™] Albased software and Smart Manewfacturing[™] Systems (patented technology) help manufacturers to dramatically improve critical processes and reduce significantly the use of raw material.

With the use of Artificial Intelligence, SMARTECH connects people, plants and processes and brings autonomy to critical production processes to maximize output, quality and efficiency in the plant while saving costs.

SMARTECH is recognized as a trusted partner for the world's leading manufacturers in the engineered wood industry.

Contact:

Hanoch Magid - CEO Phone: 972-4-6377757 Email: hanoch.magid@smartech.com 7 Chalamish St., Caesarea, 30889, Israel www.smartech.com

SonicAire

SonicAire is a progressive air-engineering firm that eliminates the problems with combustible dust through its line of SonicAire[®] fans. SonicAire Systems apply our proprietary and innovative BarrierAire[™] technology, which delivers enterprise-wide continuous clean through robotic engineering design. Products create high velocity and high mass airflow to create an overhead barrier preventing combustible particles from accumulating on steel structures, pipes, ducts and process equipment. Solutions include an engineered and customized plan for every application since factories AND fugitive particles vary by the materials processed. Contact SonicAire Sales support at 336-712-2437.

SonicAire continued:

Contact:

Chuck Morrison - Vice President of Sales Phone: 336-712-2437 Email: cmorrison@sonicaire.com 3831 Kimwell Drive, Winston-Salem, NC 27103 www.sonicaire.com

GOLD SparTek Industries

SparTek Industries manufactures high quality machinery with the latest cutting edge technology for many industries including Plywood, LVL, Rubber and others. Today's high volume Plywood production Lay-Up Lines place an emphasis on efficiency. SparTek's lay-up lines, Hot and Cold Presses, Loading and Unloading equipment, Glue Application systems and other equipment are designed to meet these demands. Helping customers meet and exceed their production and operating goals is a driving force at SparTek. We are here to help you meet your goals and to do so requires innovative technology and machines designed to work at the highest operating speeds.

Contact:

Mike Cook - CEO Phone: 503-283-4749 Email: mike.cook@spartek.com 2221 North Argyle, Portland, OR 97217 www.spartek.com

Spraying Systems Co.

Spraying Systems Co. is the world's leading manufacturer of spray technology equipment. Our offering includes a family of PanelSpray[®] systems for applying release agents, moisture, resin, wax or other various chemistries to wood substrate, mats, cauls or belts. These systems ensure the precise volume of fluid is applied even when operating conditions like wood throughput or line speed change. Our line also includes a PanelSpray System for precise nail marking on oriented strand board and the industry's largest selection of spray products for use in humidifying, marking, cleaning and coating operations. We serve our customers around the world from our 12 manufacturing facilities and 90 sales offices.

Spraying Systems Co. continued:

Contact:

Brian Valley - Director - Industrial Solutions Phone: 630-517-1283 Email: brian.valley@spray.com 100 W. Lake Dr., Glendale Heights, IL 60139 www.spray.com

Stela Drying Technology Corp.

Companies looking to optimize their drying processes have turned to Stela for over 4,000 successful installations worldwide. Our 100-year-old company is the most forward-looking, innovative belt dryer manufacturer in the world. Precision, dependability and knowledge is what you get when belt dryers is all you make. If your North American project needs an energy efficient, low emission, and low maintenance belt dryer for biomass drying in an OSB, particle board, wood pellet, or any other plant, let us tailor a successful solution for you.

Contact:

Wedig Graf Grote - VP Sales North America Phone: 470-574-4711 Email: wedig.grote@stela.de 271 17th St. NW, Suite 1750, Atlanta, GA 30363 www.stela.de

Stiles Machinery

With world-class machinery backed by the nation's largest team of service and support specialists, an extensive inventory of ready-to-ship parts, and the industry's only nationally accredited workforce training program, Stiles is your solution for any challenge and your partner in every success. Headquartered in Grand Rapids, Michigan, Stiles and has regional offices across North America including High Point, North Carolina; Bristol, Pennsylvania; Coppell, Texas; Rancho Cucamonga, California; and Queretaro, QRO Mexico. Stiles is a proud member of the HOMAG Group, the world's leading provider of integrated solutions for production in the woodworking industry and woodworking shops.

Stiles Machinery continued:

Contact:

Ron Schmidt - Vertical Market Manager, Composite Panels Industry Phone: 616-698-7500 Email: rschmidt@stilesmachinery.com 3965 44th Street SE, Grand Rapids, MI 49512 www.stilesmachinery.com



PLATINUM Sweed Machinery, Inc.

SWEED is known in the industry as the superior choice for providing full veneer dryer infeed and outfeed systems, dry, green, and random veneer stackers, veneer saws, turners, and hoists. SWEED also specializes in all replacement parts for Raimann and Skoog patchers and manufactures, sharpens, and repairs patcher dies. SWEED provides the latest technology and exceptional craftsmanship, helping processors achieve higher production goals with less downtime. SWEED is based in Oregon, USA, and has served the industry for over 65 years; SWEED continues its legacy in offering unmatched quality, customer service, engineering, and technical support.

Contact:

Kevin Gordon - Sales Director Phone: 541-855-1512 Ext. 5926 Email: kgordon@sweed.com 653 2nd Avenue (PO Box 228), Gold Hill, OR 97525 www.sweed.com



Taihei Machinery Works Ltd.

Taihei is a specialized manufacturer of veneer and plywood machinery, fully committed to the development and production of equipment that meets customer needs. We are driven by the goal of providing proprietary machinery that is second to none to our customers around the world. Taihei is the leading manufacturer of automatic knife grinding and honing machines. Other Taihei products include horizontal hot presses up to 140 openings, veneer jet dryers, veneer stackers, glue spreaders, reeling systems, and finger jointing equipment.

Contact:

Sam Matsuoka - Sales Department, Export Phone: +81-568-73-6421 Email: h_matsuoka@taihei-ss.co.jp 955-8 Miyamae, Komaki, Aichi 4850084, Japan www.taihei-ss.co.jp

GOLD TSI (Teal Sales Inc.)

TSI designs and manufactures complete panel finishing lines for OSB, particleboard and MDF. This includes saws with such features as automatic position change and adjustable blade exposure. High-speed sorting and stacking of panels is easily achievable with TSI's "primary stacker" solution. TSI also supplies Heat Energy and Drying and Pollution Control Systems for OSB and Particleboard based on Single Pass Recycle technology. The Dryers are proven to increase productivity and reduce emissions compared to other systems. Heat Energy includes Step Grate Furnaces in conjunction with Sigma Thermal and Pollution Control solutions include Wet ESP and RTO systems developed by TSI to work at optimum efficiency with TSI Dryers.

Contact:

Andrew Johnson - Vice President Phone: 425-771-1190 Ext. 128 Email: ajohnson@tsi-inc.net 20818 44th Avenue West, Lynnwood, WA 98036-7709 www.tsi-inc.net



DIAMOND USNR

With the addition of Ventek's veneer scanning, grading, and handling solutions to USNR's lathe, dryer, and downstream product portfolio, USNR now offers tightly integrated mechanical and optimization solutions for the plywood industry. USNR products are known to increase recovery, value, and yield, improving mill profitability. USNR also manufactures machinery for beam lamination, finger-jointing, and presses for the composite board industry. Committed to superior customer service, USNR offers OEM parts, training, and 24/7 support around the globe. 800-BUY-USNR.

Contact:

Chris Van Ackeren - Sales Manager, Veneer Systems Phone: 541-284-5465 Email: chris.vanackeren@usnr.com

Sam Pope - North American Sales Manager, Chop & Rip, and Mass Timber Systems Phone: 360-225-8267 Email: sam.pope@usnr.com 1981 Schurman Way (PO Box 310) Woodland, WA 98674 www.usnr.com

Venango Machine Company, Inc.

Venango Machine and our sister company, Custom Engineering, are complete platen services providers to the forest products industry. We provide new platens for every make of press in the industry for manufacturing of all board products. Our product line includes small specialty platens for lab applications, intermediate sized platens for particle board, OSB, and LVL in both multiple platen and continuous processes. We also provide complete platenrefurbishing programs that include flow and pressure testing, weld repair and re-machining to original specifications. Our technicians also provide assistance in platen change outs and in-press weld repair. Please contact us for all your platen requirements.

Venango Machine Company, Inc. continued:

Contact:

Nyla Vogel - Sales Manager Phone: 814-739-2211 Email: nvogel@venangomachine.com PO Box 239, Wattsburg, PA 16442-0239 www.venangomachine.com

DIAMOND

Westmill Industries USA Corp.

For 47 years, WESTMILL® has remained laser-focused on advancing Veneer Dryer design through continuous innovation. After years of effort and determination, WESTMILL® has emerged as the industry leader in this field. Whether you urgently require a custom component for your dryer's infeed or outfeed, or you need us to provide an entire installed 'turn-key' dryer and stacker line, WESTMILL® will respond immediately with your best interest in mind. Always. WESTMILL® has the necessary consulting and engineering services to help solve any problem. To minimize customers' inventory requirements while keeping your dryer operating in tip-top condition, WESTMILL® has replacement parts available for every make and model of board-dryer with inventory at dedicated warehouses in Oregon, Georgia, and Vancouver, B.C. (WESTMILL® is the largest stocking supplier of replacement dryer parts in the world.) Don't put up with slow service, high pricing, and long deliveries. Instead, call the small company focused on delivering competitive value Dryer Technology. When we say "we've got your back" we mean it. Try us out.

Contact:

Mike Crondahl - President, Owner Phone: 604-607-7010 Email: crondahl@westmill.com 30640 Marshall Road Abbotsford, BC V2T 6J7 Canada www.westmill.com

Go to the online Equipment and Tooling directory for additional details.

MATERIALS AND SUPPLIES

The following EWTA members provide support in one or more of the following subcategories: Adhesives/Resins; Binders/Extenders/Fillers; Chemicals/Additives/Coatings; Lamstock/Lumber; Replacement Parts and Supplies; Specialty Supplies; Strapping and Packaging Supplies; Veneer/Overlays; Wax/Release Agents/Lubricants/Emulsions. <u>Go to the online Materials and</u> <u>Supplies directory.</u>

Albany International

Albany International is a global advanced textiles and materials processing company founded in 1895. We are headquartered in Rochester, New Hampshire and employ approximately 5,000 people worldwide. Our 26 manufacturing operations are strategically located in 13 countries to serve our global customers. Albany International's core business is production of customdesigned engineered fabrics and process belts, used to manufacture all grades of paper from lightweight technical paper to heavyweight container board. In its family of emerging businesses, Albany belting technologies process unique materials for engineered wood products particularly for wood forming in OSB, PB and MDF/HDF manufacturing. Visit us @Albint.com.

Contact:

Tom Israel - Product Manager-Americas Phone: 920-521-4618 Email: tom.israel@albint.com 3601 Electric City Blvd., Kaukauna, WI 54130 www.albint.com

GOLD

Arclin - Performance Applied

Based in Roswell, Georgia, Arclin is a leading producer of innovative bonding and surfacing solutions for the building and construction, industrial materials and natural resource markets. Arclin provides bonding solutions for a number of applications including structural wood panels, engineered wood, composite wood panels, nonwovens and paper saturation. As a world leader in paper overlays technology, Arclin provides high value surfacing solutions for construction and building products, decorative panels and industrial specialty applications for North American and export markets. For more information please visit <u>www.arclin.com</u>.

Arclin - Performance Applied continued:

Contact: James Dantzler - Director of Plywood and OSB chemicals Phone: 678-781-2980 Email: james.dantzler@arclin.com 1000 Holcomb Woods, Parkway, Suite 342, Roswell, GA 30076 www.arclin.com

SILVER Arxada

Arxada is a global leader in the development and supply of innovative technologies to improve the performance of wood products, making them resistant to termites, fungi, fire (flamespread and smoke development), mold and moisture. Arxada offers formulations specifically designed for the treatment of engineered wood, including Permatek® glueline treatments designed to work in harmony with resins as well as water repellents and mold prevention treatments to keep EWPs bright. Additional Lonza Arxada products include Wolman® residential preservatives, SillBor® borate treatments, Wolmanac® CCA and Chemonite[®] ACZA industrial preservatives, Dricon[®] fire retardants, FrameGuard[®] mold inhibition, and AntiBlu[®] anti-sapstain line. With global operations and an unparalleled offering of services and expertise, Lonza Arxada is dedicated to the success of its customers.

Contact:

Brian Delbrueck - Head of Business Development, Wood Specialties Phone: 425-229-3757 Email: brian.delbrueck@arxada.com 4501 Somerset Drive SE, Bellevue, WA 98006 www.wolmanizedwood.com

ATCO Wood Products Ltd.

Located in British Columbia, ATCO Wood Products is a forest management company and a producer of softwood veneer. ATCO specializes in producing custom softwood veneer for plywood and engineered wood products customers in both Canada and the United States.

Contact:

Mark Semeniuk - Chief Operating Officer Phone: 250-367-9441 Email: marks@atcowood.com 2073 Hepburn Drive (PO Box 460) Fruitvale, BC V0G1L0, Canada www.atcowoodproducts.com

Axalta Coating Systems

With a wide range of products and technologies, Axalta Coating Systems is the leader in the Wood Coatings Industry for the Building Products market.

Contact:

Craig Lyerly - Director, Sales Phone: 336-802-4746 Email: craig.lyerly@axaltacs.com 1717 English Rd., High Point, NC 27104 www.axaltacoatingsystems.com

GOLD Bakelite Synthetics

Bakelite Synthetics offers a portfolio of thermosetting resins for plywood, OSB and LVL applications as well as custom-formulated solutions to meet our customers' specific needs. Our innovative new RESI-BOOST® Gen2 adhesive technology, when used with Bakelite resins, has demonstrated significant advantages in increased throughput, lower applications rates and energy savings while maintaining performance, potentially saving or generating millions of dollars per plant. In addition, our Customer Inventory and Prediction Service offers our customers a means of maximizing operational efficiency by optimizing resin order profiles. The Dynamic Microchamber performs formaldehyde emission testing on panels in plants around the world.

Bakelite Synthetics continued:

Contact:

Anna Stamey Email: anna.stamey@bakelite.com Phone: 404-652-4322 1040 Crown Pointe Parkway, Atlanta, GA 30338 www.bakelite.com

BASF - We create chemistry

BASF - We create chemistry -- Global supplier of MDI to the wood industry with extensive experience in MDI conversions.

Contact:

Gregory Lonc - Business Manager, Rigid Urethane Chemicals North America Phone: 732-324-6837 Email: gregory.lonc@basf.com 1609 Biddle Avenue, Wyandotte, MI 48192-3736 www.basf.us

Bates and Company, Inc.

Bates & Co. is an industry leader in providing various support products to the forest product industry. Extenders and fillers comprise the majority of sales, especially those customers extending phenol formaldehyde adhesives for use in plywood, LVL, and hardwood. Bates has also expanded its scope and reach by forming a joint venture, Bates-Willamette, LLC, with a strategic partner in the industry.

Contact:

Jim Gilliam - President Phone: 409-883-0384 Email: jgilliam@cdbates.com 707 West Front Ave (PO Box 1328) Orange, TX 77631

GOLD BOSTIK

ISOSET[™] adhesives from Bostik have been specially formulated for engineered wood product applications. ISOSET adhesives applied in I-joist, glulam beams and structural finger jointing wood applications provide manufacturers with high-strength, structural bonds. They cure fast, clean up easy and dry in a neutral wood color offering an alternative to traditional phenol-resorcinol-formaldehyde (PRF) type adhesives. ISOSET adhesives provide excellent resistance to moisture, elevated temperature and creep making them an ideal choice for engineered wood products. Bostik is a part of the Arkema Group, a Global leader in the chemical industry.

Contact:

Tom Stewart - Sr. Director, Performance Adhesives Business Unit Phone: 614-531-1077 Email: Thomas.stewart@bostik.com 11320 W. Watertown Plank Road, Wauwatosa, WI 53226 www.bostik.com

Chem-Trend LP

Chem-Trend has long been known as a global leader in the development of release agent technology to the world's industries. Our sealers, release agents and lubricants are rapidly gaining acceptance in the wood composites industry, offering significant productivity improvements including increased through-put, improved output quality and definition, cleaner conditions/environment, greater productivity, less downtime and increased costs savings.

Contact:

Gerard Przekop - Director, North American Sales Phone: 517-545-7844 Email: gprzekop@chemtrend.com 1445 West McPherson Park Drive (PO Box 860) Howell, MI 48844-0861 www.chemtrend.com

Clarke Veneers and Plywood

Clarke Veneers and Plywood is an international trading company of wood products, specializing in imports, exports and domestically traded veneers - including hardwood and softwood species for structural panels, in MDO, HDO and other applications requiring clear, sound faces.

Contact:

Stuart Clarke - President Phone: 601-366-0331 Email: info@clarkeveneers.com 3000 Old Canton Road, Suite 335 (PO Box 4876) Jackson, MS 39216 www.clarkeveneers.com

Dominion Chemical Company, Inc.

Wax products are our expertise. With over 60 years of experience in the wax business, Dominion Chemical offers rare and valuable working knowledge as well as trust and proven abilities to bring solutions, support and alternatives to provide the exact product you want. With locations in Virginia and Georgia, Dominion Chemical's capacity to blend, package and create specialty wax formulations will meet your unique needs. We offer an exceptional emulsification process, state of the art blending, compounding, packaging and experienced personnel as well as a full service wax lab dedicated to your needs for R&D, QC, and general product evaluation.

Contact:

Maclin Ferrell - President Phone: 804-733-7628 Email: maclinferrell@dominionchemical.com Dan Spurlock - Sales Manager Phone: 804-586-2022 Email: dans@dominionchemical.com 2050 Puddledock Road (PO Box 1069) Petersburg, VA 23803 www.dominionchemical.com

Evertree North America Inc.

Evertree North America Inc. is revolutionizing plant – based adhesive solutions for a better and more sustainable way of life. We are the designer, manufacturer and supplier of a family of bio based and renewable adhesive solutions (both unique bio-based adhesive compositions plus innovative application dispensing technology) used in the manufacture of composite wood panels. Green Boost® is a bio-based adhesive additive that enhances the overall performance, processability and economics of the current traditional petrochemical-based resins used today. Green Ultimate® is a unique bio-based adhesive solution that is free of petrochemical derived formaldehyde and isocyanate. Green Ultimate® provides a significant improvement in environmental footprint, via reductions in VOC's & emissions of hazardous materials during the manufacture and use of the composite wood product, all while maintaining similar wood composite panel properties.

Contact:

Joe Lynch - General Manager, North America Phone: 856-650-3660 Email: joe.lynch@evertree-technologies.com 727 Norristown Road, Building 3, Suite 105, Ambler, PA 19002 www.evertree-technologies.com

Franklin Adhesives & Polymers

Franklin Adhesives & Polymers, a division of Franklin International, manufactures adhesives for the domestic and global wood furniture, millwork and engineered-lamination markets. We have led the way in the innovation of wood adhesives and various types of wood bonds and have developed adhesive solutions for many applications in the wood product manufacturing plant. Under the trusted brand names Titebond, Multibond, ReacTITE and Advantage, our products provide superior performance in wood assembly, solid edge and face gluing, engineered product lamination and finger jointing.

Franklin Adhesives & Polymers continued:

Contact:

Joshua Bartlett - Business Development Manager Phone: 800-877-4583 Email: joshbartlett@franklininternational.com 2020 Bruck Street, Columbus, OH 43207 www.franklinadhesivesandpolymers.com



Fusoni

Fusoni develops and manufactures release agents and additives for panel board manufacturing, and also for paper impregnation processes. Our chemicals expertise extends to other industries, such as release applications in bakery, polyurethane systems, and other applications. For almost 40 years we have been serving clients in Europe, Asia, Africa, Australia and the Americas. We add value through chemistry, and work closely with our customers, helping them improve the properties of their products and reducing production cost through excellent release and additive performance. We look forward to working with you to make your products better and your business more profitable.

Contact:

Adrian Yovanovich - President Phone: 210-712-7803 Email: ayovanovich@fusoni.us 422 Mesa Loop, San Antonio, TX 78258 www.fusoni.net

MEMBERSHIP DIRECTORY

Henkel

Henkel is the world's largest Adhesive company. LOCTITE® PURBOND is a world leading brand in Polyurethane and Polyurethane Hybrid adhesives for engineered wood bonding, offering ductile bond lines, zero Formaldehyde, zero solvents with a wide range of open and set times for Glulam, CLT, Finger jointing, and innovative applications, both cold setting and RF/ hot pressing. LOC-TITE HB Xxx2 Purbond is the ONLY 1 component, high roduction adhesive certified to North American Glulam, CLT, Finger Jointing and I-Joist requirements. With a strong North American sales and technical team and a fully equipped wood lab, we can provide the solutions, support and technology to meet the demanding requirements of engineered wood bonding and innovations of the future.

Contact:

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Huntsman Polyurethanes

For more than 30 years, Huntsman has been a global leader in the production of MDI-based resin binders for particleboard, medium-density fiberboard and oriented strand board. Our dedicated Composite Wood Products teams are committed to helping our customers reach their goals in all market conditions. There is no added formaldehyde (NAF) with Huntsman's RUBINATE[®] resins, and can be qualified as exempt under CARB Standards and EPA TSCA Title VI.

Contact:

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Intertape Polymer Group

Intertape Polymer Group[®] (IPG[®]) is the market leader in protective fabrics with over 25 years of experience in the wood industry. IPG is an integrated supplier and manufacturer of woven coated lumber wrap. IPG's wrap offers the ability to advertise your corporate logo in up to four colors and increase brand awareness throughout the transportation process. Available in various weave strengths and colors to fit your needs.

Contact:

Scott Maw - Director of Sales Woven Packaging, IPG Phone: 780-224-6569 Email: smaw@itape.com 50 Abbey Avenue, Truro, Nova Scotia B2N6W4 Canada www.itape.com

PLATINUM IPCO

IPCO is the largest manufacturer of continuous solid stainless steel press belts in the world. Our steel belts are custom made to specific tolerances for each continuous double belt press. We also offer a full complement of repair tools and world class service to keep your press up and running quality product.

Contact:

Craig Bartsch - Global Sales Manager Phone: 201-723-0297 Email: craig.bartsch@ipco.com 10A Bloomfield Avenue, Suite 8, Pine Brook, NJ 07058 www.ipco.com



MÜNZING

MÜNZING FENTAK[®] specialty additives are designed for use in the wood processing industry. The products are used in a number of applications, including decorative and industrial laminates, wood panels and engineered wood. All products are specifically designed to either help enhance the properties or appearance of the final product or improve the

MÜNZING FENTAK continued:

production process. Standard products include release agents, wetting agents, resin catalysts and dyes as well as more specialized products such as plasticizers and surface modifiers.

Contact:

Daron Alcorn - West Coast Sales Representative Phone: 503-475-4616 Email: d.alcorn@munzing.com 1455 Broad St., Bloomfield, NJ, 07003 www.munzing.com

Northwest Adhesives, Inc.

Northwest Adhesives, Inc. offers high performing, cost efficient, "pre-coated" tapes for composing wood veneers, parquet flooring or LVL veneer into durable, continuous full sized sheets. When used with Northwest "spot glues" our PS-tapes provide a continuous, more durable wood assembly and improves lay-up efficiency and reduces cost. Some customers also invest in "Re-Coat" where they use both Spot glue and PS-tape together for best holding power. In the late 1990's Northwest Adhesives, Inc. started manufacturing pre-coated strings and tapes to supply to the plywood industry for veneer composing. Since our beginning we have grown to become a global leader in manufacture, sale and technical service for pre-coated hot melt strings and narrow tapes for veneer composing on Raute, Durand-Raute, Hashimoto, Kuper and PES composers.

Contact:

Bryan Asbury - General Manager Phone: 360-260-1227 Email: bryan@northwestadhesives.com 4325 S. Lincoln Street, Washougal, WA 98671 www.northwestadhesives.com

OCI Melamine Americas

OCI Melamine is a supplier of melamine. Melamine is used in the manufacture of formaldehyde-based resins commonly found in decorative surfaces, OSB, plywood, MDF boards and others.

Contact:

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Owens Corning® - WeatherPro®

Owens Corning[®] is the largest supplier of coated woven wrap to the Engineered Wood Industry. It's custom-printed WeatherPro® packaging products are designed to maintain product integrity throughout transportation, inspection and storage of sawn lumber, plywood, OSB, all types of beams, I-Joists and composite wood products. Owens Corning[®] is a vertically integrated, global manufacturer of innovative coated woven products serving a wide variety of markets. Consistent product quality is achieved by using state-of-the-art equipment along with a strong commitment to partnership with our customers, employees, and suppliers. Owens Corning's global supply chain efficiency is achieved by our strategic manufacturing and distribution centers located throughout North America, Asia & Europe.

Contact:

Steve Sahaydak - Sales Leader Phone: 604-992-3700 Email: steve.sahaydak@owenscorning.com 2650 Fassitt Road, Bldg. #200 North Charleston, SC 29406 www.weatherpro-wraps.com

MEMBERSHIP DIRECTORY

SILVER Paneltech

Paneltech is a young and growing, forwardthinking company comprised of people who have common values and share a common goal... providing environmentally responsible leadership in manufacturing the best performing products for industry. Our panel overlays are designed for high performance end uses and superior processability. They are designed to increase the value of the wood products they cover by increasing their durability, enhancing their appearance, and creating uniform surfaces to enhance the product's end use.

Contact:

David Wentworth - General Manager Phone: 360-538-1480 Email: dwentworth@paneltechintl.com 2999 John Stevens Way, Hoquiam, WA 98550 www.paneltechintl.com

Sansin Corporation (The)

Backed by over 35 years of proven performance with large commercial, residential and mass timber wood buildings and structures, Sansin is the global leader in developing high-performance factory finishes that deliver the color, durability and performance that architects, engineers and builders can count on. From undercoats, treatments and preservatives to finishes and fire retardant coatings, Sansin's Precision Coat products provide wood protection for a variety of substrates and engineered wood products, including cross-laminated timber, siding, OSB, glulam, millwork and timbers - delivering unparalleled beauty and durability in environmentally friendly formulas. New locations in Europe and the United States.

Contact:

Ann Van Dyk Phone: 519-245-2001 Email: ann@sansin.com 111 MacNab Ave, Strathroy, ON N7G 4J6 Canada www.sansinfactoryfinish.com

SASCO Chemical, A PSG Company

Polymer Solutions Group is an innovative manufacturer of proprietary and custom polymer additives, dispersions, and performance chemicals for the rubber, wood, consumer, construction, and medical industries. SASCO's TechKote® Release Agents, Additives, and Platen Conditioners are chemically formulated for all composite and structural panel applications. Together we strive to deliver customer-centric solutions that improve our customers' products, processes and performance.

Contact:

Clancy Redmond - Director of Sales and Business Development Phone: 229-435-8394 Email: credmond@polymersolutionsgroup.com 827 Pine Avenue, Albany, GA 31701 www.polymersolutionsgroup.com

Siemer Milling

Siemer Millings produces and markets Glu-X. Glu-X is an All-Natural Chemical Free special glue extender milled from wheat and used expressly as the proteinstarch adhesive for the wood panel (plywood) industry. This proprietary product was developed from the trade secret processes with the contributions of plywood manufacturers, master millers, adhesive scientists and cereal chemists.

Contact:

Jay Wallace - Vice President of Customer Service Phone: 271-857-2240 Email: jwallace@siemermilling.com 111 W. Main Street, Teutopolis, IL 62467 www.siemermilling.com

Stratachem Solutions Group LP

Stratachem Solutions Group LP provides chemical solutions specifically for the wood products industry. With over 50 years of technical wood products experience, and a world class research and development group, we are prepared to take on tough process issues. We specialize in release agents for continuous and multi-opening presses, as well as environmental equipment chemical solutions. WESP water treatment chemistry, to keep WESPs and RTOs running up to design capacities. We are dedicated to customer satisfaction and understand the importance maintaining the highest levels of process efficiency while decreasing the cost of manufacturing.

Contact:

Mike Larke - General Manager Phone: 866-489-9377 Email: mlarke@stratachemsolutions.com #155 513 Memorial Blvd., Springfield, TN 37219 www.stratachemsolutions.com

SILVER Walker Emulsions

Walker Emulsions is a supplier of high quality, highly effective emulsions for the wood composite industry. We have a selection of emulsions that will fit the needs of high to low temperature pressing and we can make products specifically to match your process.

Contact:

Charles Stout - Eastern North America Phone: 803-747-0045 Email: cstout@walkerind.com

Gregg Hale - Western North America Phone: 541-953-5783 Email: ghale@walkerind.com

Corporate Office: 2800 Thorold Townline Road, Niagara Falls, ON L2E 6S4, Canada www.walkerind.com

Go to the online Materials and Supplies directory for additional details.

DIAMOND

Wanhua Chemical (America) Co., Ltd.

Wanhua Chemical is the largest MDI producer globally with best-in-class technology and worldleading state-of-the-art manufacturing sites producing WANNATE® PMDI binder solutions. Wanhua Chemical is renowned for its high quality WANNATE products and dependable supply chain that Composite Wood Panel producers depend on. Wanhua Chemical has worldwide operations with a local commitment to customers, including ongoing investments in technical resources and infrastructure in North America.

Contact:

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The Willamette Valley Company

The Willamette Valley Company manufactures epoxies, putties, and urethanes for upgrading all wood substrates and also makes a wide range of water-based coatings, primers, and sealers. WVCO also makes many adhesive fillers and extenders for the wood products Industry. PRE-TEC, the company's equipment solutions division, specializes in the design and manufacture of advanced fluid systems and the integration of robotic application systems.

Contact:

Robert Pitts - Business Manager, NA Wood Products Phone: 800-333-9826 Email: robert.pitts@wilvaco.com 990 Owen Loop North, Eugene, OR 97402 www.wilvaco.com



A PIECE OF APA HISTORY REBORN

Thunderbird #1 Cruises Puget Sound Once Again

By Dennis Hardman

In 1957, when marine grade plywood was still a relatively new product, Tom Sias, publicity manager for the Douglas Fir Plywood Association (later APA), came up with the idea for a competition to design a plywood sailboat.

A keen sailor himself, Sias developed a challenging set of criteria: Build a boat made of plywood and make it easy enough for a reasonably skilled amateur to construct. It must be able to sleep four; be capable of racing and cruising; have an outboard engine; and be so fast on the water it would outperform other sailboats in its class.

The challenge was sent to marine architects on both coasts. The winner was Seattle naval architect Ben Seaborn in collaboration with Ed Hoppen, a boat builder in neighboring Gig Harbor. Sketching on napkins in Hoppen's home adjacent to his Eddon Boat Yard, the Thunderbird was born.

The original Thunderbird, Hull # 1, was launched from Hoppen's boatyard in 1958. Many in the boating world considered the design revolutionary.

After years of sailing and racing, Thunderbird Hull #1 was eventually donated to the Gig Harbor History Museum where she was lovingly restored to be permanently displayed as an icon of local boat building's legacy.

Once restored, however, it was determined that she needed one more dip in Puget Sound. On August 26, 2023, to the cheers of several hundred onlookers, the original Thunderbird was again launched from the same boatyard of her birth.



Thunderbirds on commencement Bay, c. late 1960s. Photo by APA, Harbor History Museum Collection.

Number One was available for demonstration cruises around Gig Harbor and Tacoma for a couple weeks, then sailed some 70-miles to participate in the Port Townsend Wooden Boat Festival. Once back home in Gig Harbor she returned to her dry berth at the Harbor History Museum's newly enclosed Maritime Gallery.



Stepping the mast of Thunderbird #1 at Eddon boatyard, November 1958. Photo by APA, Harbor History Museum Collection.

Today, more than a thousand Thunderbirds are on the water worldwide, recognized for their speed and handling.

Dennis Hardman, retired APA president, has served on the Board of Directors of the Harbor History Museum, including 3 years as Chairman.



Thunderbird #1, relaunched August 26, 2023 Photo by Mark Anderson, Gig Harbor, WA.

MEMBER CONNECTIONS

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BUSINESS



The Engineered Wood Journal welcomes news from its members. News suitable for publication in upcoming issues includes press releases about new hires, new products, company news or awards won. Please send your information or direct questions to LaDauna Wilson.

New Department of Labor Apprenticeship Program Established at BID Group Fabrication Shop in St. George, South Carolina

In a significant development for the local community, BID Group has collaborated with the Department of Labor and Apprenticeship Carolina to launch a groundbreaking apprenticeship program in its Fabrication Shop. The program provides valuable opportunities for aspiring professionals in the manufacturing sector.

BID Group has committed to nurturing talent and strengthening the workforce by offering comprehensive hands-on training and mentorship to apprentices. The selected welding apprentices will have the opportunity to work alongside experienced professionals at the BID Group Fabrication Shop, enabling participants to develop technical skills and a solid foundation in the manufacturing sector. This partnership with the Department of Labor ensures the program's adherence to essential and professional standards.

To support this initiative, the Department of Labor and Apprenticeship Carolina will provide resources, oversight and guidance throughout the apprenticeship program. This collaboration highlights the government's and state's commitment to fostering skill development and promoting sustainable economic growth in St. George and the surrounding areas.

Continued on next column

The initiative offers an alternative pathway for individuals seeking rewarding careers in manufacturing while addressing the industry's need for skilled workers. BID Group welcomed its first students in August 2023.

Face Laminate Your Raw Materials



Brisco Manufacturing's 15,000 sq. ft. manufacturing facility located in Brisco, BC, offers the following:

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- Glued beams and panels can be planed to customer specs in sizes up to 12" thick, 48" wide and 60' long



2866 Brisco Road, Brisco, BC VOA 1B0 www.briscoman.com

Contact: Kevin Olson, kolson@briscowood.com 250-346-3315 |cell: 250-341-5495

Mike Mercker Promoted to Mechanical Engineering Manager at Con-Vey

Con-Vey is pleased to announce the promotion of Mike Mercker to the position of Mechanical Engineering Manager. This promotion recognizes Mike's dedication, expertise, and contributions to Con-Vey's growth.



Mike Mercker

Mercker joined Con-Vey as a mechanical engineer directly after graduating in 2017 and transitioned to the Sales department in 2020 as a Sales Engineer. In November 2022, he was appointed as the Mechanical Engineering Director. Mike joins Con-Vey's management team, who are responsible for guiding and directing the company's engineering efforts and ensuring the continued delivery of cutting-edge automation solutions to clients worldwide.

Biele Group Celebrates its 50th Anniversary

The year 2023 marks an extraordinary milestone for Biele Group as they celebrate their 50th anniversary. The reason for celebration is not limited solely to the anniversary, but also includes the start of construction of new facilities, approximately 4,000 square meters, in Urrestilla, Gipuzkoa, Spain, the group's main headquarters. This milestone demonstrates customers' confidence in the quality of Biele's products and services, and the relentless innovative spirit and dedication that have fueled the company's continued success.

Congratulations!

MEMBER CONNECTIONS

EWTA WELCOMES NEW MEMBERS



AFRY MANAGEMENT CONSULTING

AFRY Management Consulting, part of the overall AFRY Group, is a leading advisor for the transitions of the energy and bio-industry sectors. AFRY provides solutions for generations to come with engineering, design, digital and advisory services to accelerate the transition towards a sustainable society.

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CARPONENTRY, LLC

Carponentry, LLC provides clients a research and development portal focused on the commercialization of new or novel engineered wood materials solutions and wood-to-wood connection systems. The array of services include ideation, prototype development, certified testing by partnering labs, and developing pathways to commercialization using NSF I-CORPS tools.

Contact:

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IPCO

IPCO is the largest manufacturer of continuous solid stainless steel press belts in the world. Our steel belts are custom-made to specific tolerances for each continuous double belt press. We also offer a full complement of repair tools and world class service to keep your press up and running quality product.

Contact:

Craig Bartsch - Global Sales Manager Phone: 201-723-0297 Email: <u>craig.bartsch@ipco.com</u> Additional details are available at <u>www.ipco.com</u>.

STELA DRYING TECHNOLOGY CORP.

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Contact:

Wedig Graf Grote - VP Sales North America Phone: 470-574-4711 Email: <u>wedig.grote@stela.de</u> Additional details are available at <u>www.stela.de</u>.







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With the addition of Ventek's veneer scanning, grading, and handling solutions to USNR's lathe, dryer, and downstream product portfolio, USNR now offers tightly integrated mechanical and optimization solutions for the plywood industry. USNR products are known to increase recovery, value, and yield, improving mill profitability. USNR also manufactures machinery for beam lamination, finger-jointing, and presses for the composite board industry. Committed to superior customer service, USNR offers OEM parts, training, and 24/7 support around the globe. 800-BUY-USNR.

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EWTA and Engineered Wood Journal Contact Information

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