

# ENGINEEREDWOOD

SPRING 2017

## Journal



### **WORKFORCE REMEDIES**

Industry Survey Highlights  
Ways to Deal with Workforce  
and Talent Shortage

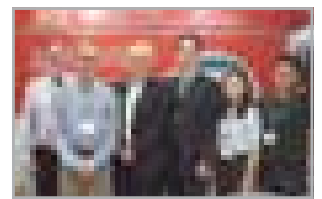
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### **BUSINESS OUTLOOK SURVEY**

Annual Member Survey  
Indicates Improvement  
for 2017

PAGE 18



### **INTERNATIONAL UPDATE**

APA's Activities Abroad

PAGE 22



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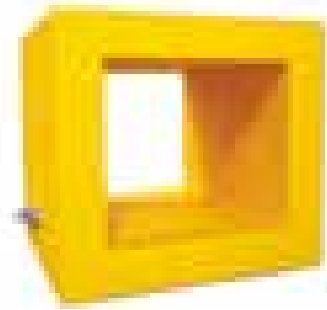
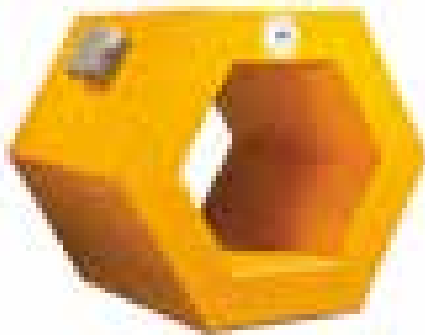
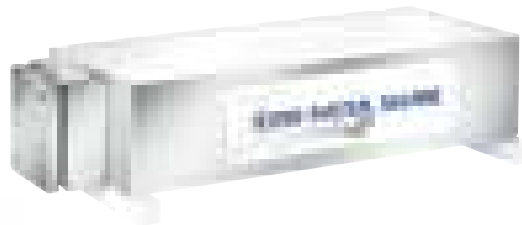
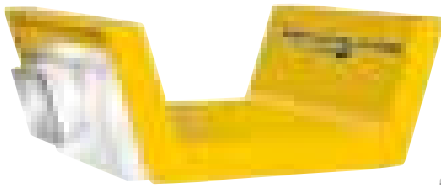
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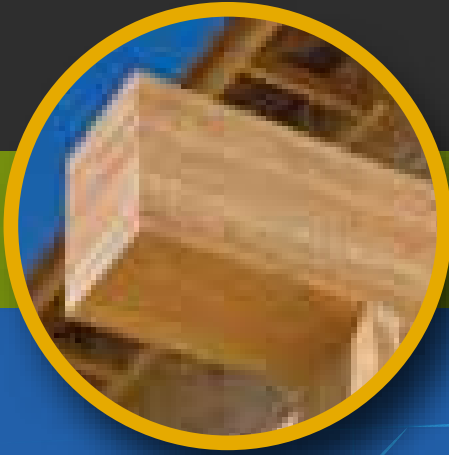
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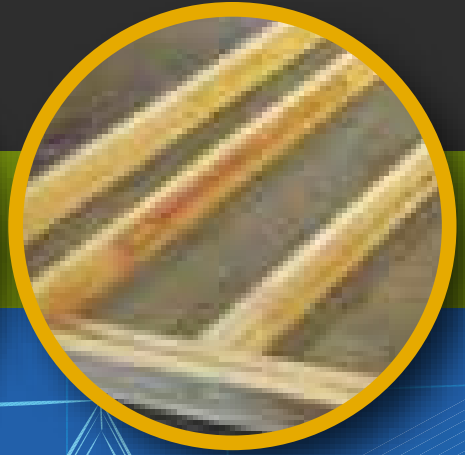
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# ENGINEEREDWOOD *Journal*

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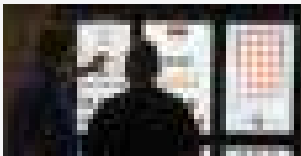


Photo by David Bohrer/  
National Association of  
Manufacturers

**About the Cover:**  
A recent survey of APA and other wood product association members by The Manufacturing Institute highlighted workforce shortages and other issues facing the wood products industry – and suggested ways to help. Story on page 10.



**STRENGTH THROUGH  
CONNECTIONS**

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## PRIME *lines*

### In this issue...

The numbers are sobering: the U.S. is anticipating the need for nearly 3.5 million manufacturing jobs over the next decade, with 2 million of these jobs going unfulfilled. People are retiring, not enough young people are showing an interest in manufacturing jobs, and technology's requirements are outpacing skill levels.

The engineered wood manufacturing industry is not exempt. An industry-sponsored survey recently conducted by The Manufacturing Institute (an affiliate of the National Association of Manufacturers) asked 101 human resources workers, recruitment personnel and operations managers at wood manufacturing facilities across the U.S. and Canada for their thoughts on the state of their workforce. Their responses underscored the seriousness of the situation:

- Turnover is high, with 70 percent saying new employees leave after less than three years
- Sixty percent of respondents say a considerable percentage of their workforce (between 6 and 20 percent) will have to be replaced by 2021 due to retirements
- Eighty percent say that a lack of technical skills presents a hiring difficulty for their company

The *Journal* explores the workforce shortage and skills gap facing the engineered wood industry in a feature starting on page 10. While the issues are immediate and real, there's much that can be done. APA – *The Engineered Wood Association* – along with the Composite Panel Association and the Hardwood Plywood and Veneer Association – are using the results of the survey to help craft a plan of action for their members. In the works: regional workshops for members to discuss and share workforce and training ideas, as well as a web-based portal for sharing market-tested outreach material to help in recruiting and training efforts.

Some mills have gotten a head start addressing the workforce issues facing the industry. Plywood and OSB manufacturer RoyOMartin has created its own training and apprenticeship program, which has helped the company attract and retain electricians and millwrights, as well as mill operators. Their efforts are detailed in a sidebar story on page 14.

### Industry Outlook

While we're on the subject of employment and workforce issues, check out the results of our annual Business Outlook Survey. EWTA members weighed in on several business related questions – including employment. The feature starts on page 18.

Also check out the fun photos of Info Fair 2016 in Bonita Springs, Fla. (starting on page 48) – and mark Oct. 28-30 on your calendar for Info Fair 2017!



Sheila Cain

Editor, *The Engineered Wood Journal*  
scain@engineeredwood.org

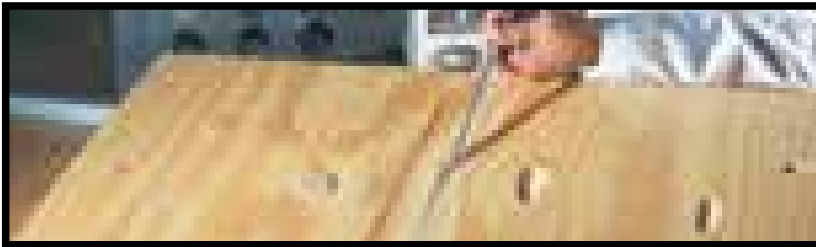
## CFEC Announces Wins in Energy Code Balloting

Four years of work and a concerted industry effort paid off for the Coalition for Fair Energy (CFEC) codes with the final vote on the 2018 International Energy Conservation Code (IECC) this past fall. Overall, CFEC was successful on 13 of 20 International Energy Conservation Code proposal positions during the recent ICC

code development process that ended November 27, 2016. Three notable wins were proposals that were successfully supported by the coalition that provide builders with flexibility to continue use of wood wall sheathing in all U.S. climate zones. In addition to these successes, all proposals identified by CFEC as further

restricting market access for wood wall sheathing and wood products were defeated.

The 2018 IECC is expected to be published this fall, whereby it can be adopted by states and local jurisdictions. In the meantime, CFEC continues to assist states in their adoptions and amendments of the 2015 IECC. Most recent state successes include amendments to the adoption of the 2015 IECC by North Dakota which eliminated the foam sheathing prescriptive wall sheathing mandate and one by Oklahoma that adjusted the wall insulation level for climate zone 3 to one that is economically justified and provides a reasonable return on investment for consumers.



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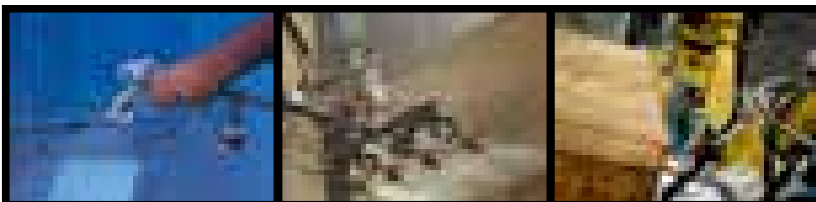
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### Final Rule Published On Formaldehyde Standards

The U.S. Environmental Protection Agency late last year issued its final rule on formaldehyde standards for composite wood products. The *Formaldehyde Emission Standards for Composite Wood Products* was published in the Federal Register. Modeled after California's regulations, the standards become effective nationwide in December 2017. The publication formalizes the law passed in 2010, which established emissions standards for formaldehyde from composite wood products and directed EPA to finalize a rule on implementing and enforcing a number of provisions covering nonstructural composite wood products.

### APA Board of Trustees Approves Three Memberships

The APA Board of Trustees has approved applications for membership from three manufacturers: Freres Lumber Co. in Lyons, Ore.; Southern Veneer Products in Fitzgerald, Ga.; and Boise Cascade's plywood mill in Chester, S.C.

Freres Lumber Co. was approved for plywood and structural composite lumber, as well as a new cross-laminated



mass plywood product. Southern Veneer is a producer of southern pine plywood and veneer and has a stated goal of achieving continuous improvement of manufacturing practice of veneer and sheathing products. Boise Cascade's Chester mill manufactures a variety of 4x8 sheathing and industrial/specialty panels.

## New Weyerhaeuser HQs Opens in Pioneer Square

Weyerhaeuser's new 160,000-sq-ft headquarters building opened Oct. 10, 2016, in downtown Seattle's Pioneer Square neighborhood. The company had been headquartered in Federal Way on a 430-

acre, parklike campus for the previous 45 years. About 100 employees will remain at the tech center building the company is now leasing on the Federal Way campus.

## In Memoriam

### James Edward Bruggeman Jr.

James Edward "Spike" Bruggeman Jr., 61, of Umpqua, Ore., died in a boating accident near Swisshome, Ore., on Nov. 21, 2016. Mr. Bruggeman was the operations manager at Southcoast Lumber in Brookings, Ore., and was previously general manager for Pacific Wood Laminates, also in Brookings.

### Paul F. Ehinger

Paul Ehinger, 93, of Eugene, Ore., died Feb. 27. Mr. Ehinger served as APA president and chairman of the board of trustees from 1971-72. He spent many years at Edward Hines Lumber Company in Westfir, Ore., serving as forest engineer and senior vice-president. During his career in the industry, Mr. Ehinger also served as regional vice-president of Washington, D.C.-based National Forest Products Association, president of the Oregon Logging Conference and past president of the Industrial Forest Association. Mr. Ehinger is survived by his sons David (Susan) and Paul (Marina), daughter Suzanne Gove, his brothers Robert and Nelson, his close friend Janet McCracken, and many grandchildren and great-grandchildren. Mr. Ehinger's wife, MaryEllen, daughter Diane and brother George preceded him in death.



Paul F. Ehinger

### Harry Angelo Merlo

Harry Merlo, 91, of Portland, Ore., died at his home Oct. 24, 2016. Mr. Merlo enjoyed a long career at Louisiana-Pacific. In 1972 he became president and chief operating officer of the company, later becoming chairman of its board of directors. Mr. Merlo was known for his instrumental role in LP's development of OSB. He left the company in 1995. He is survived by his wife, Flo Newton Merlo, son Harry Merlo, Jr., daughter-in-law Billie Merlo, two grandsons and two step-children from a previous marriage. He is also survived by two brothers and many nieces and nephews.

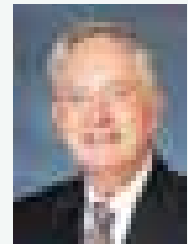
### Thomas Rockwood

Tom Rockwood, 68, former executive vice president of operations for Coastal Forest Resources Company, died Nov. 26 at his home in Tallahassee. Mr. Rockwood retired from

Coastal in 2008 after 20 years with the Havana, Fla.-based company. He is survived by his wife, Elisabeth (Becky) Rockwood; children Carolyn (Carrie) Lampman and Mark Rockwood; and five grandchildren.

### Dr. Terry Sellers Jr.

Dr. Terry Sellers Jr., 77, died peacefully at his home in Oneonta, Ala., on June 9, 2016. Mr. Sellers worked as a researcher and educator at Mississippi State University for 24 years before retiring in 2004. He studied natural and synthetic adhesives and engineered wood products, including particleboard, plywood and laminated beams and arches. He was also a long-time member of EWTA (then the Plywood Research Foundation). During his tenure at MSU, Mr. Sellers received a patent on his work with kenaf, a fibrous plant similar to bamboo. He authored a book, once again in print through the publisher Copy Cow, called *Plywood and Adhesive Technology*. Mr. Sellers was a past president of the Forest Products Society and has been honored by the U.S. Department of Commerce for international standards work. Mr. Sellers is survived by wife Esther Joan Estill Sellers; children Kathryn Jill Sellers and Lee Anna Makhloufi (Abel); grandchildren Lea Joan Makhloufi, Annie Perrin Grisham, and Alexander Terry Makhloufi; sister Elizabeth Ann Sellers Felton (Gene Felton, deceased) and numerous siblings-in-law, nieces, nephews and cousins.



Dr. Terry Sellers Jr.

### Tracy Lynn Trogden

Tracy Lynn Trogden, 52, died unexpectedly Dec. 12, 2016 of suspected heart issues. She worked for more than 30 years for APA member company Hardel Mutual Plywood, where she was the sales manager. Born in Bremerhaven, Germany, Ms. Trogden grew up in both Germany and Washington State. She graduated in 1982 from North Thurston High School in Lacey, Wash. Ms. Trogden is survived by her daughter, Stephani Hemness, her mother Joan Trogden, her brothers Will and James Trogden, and her sisters Gerry Trogden and Kelly Srsen.



Tracy Lynn Trogden

# WORKFORCE REMEDIES

*Industry Survey Highlights Ways to Deal with Workforce and Talent Shortage*

*by Sheila Cain*

According to The Manufacturing Institute (an affiliate of the National Association of Manufacturers), more than 80 percent of manufacturers – which includes wood products – report shortages of skilled workers, an aging workforce, and an increasing demand for skills due to automation and other technological advances. Wood products manufacturers face unique challenges: the largely rural nature of mill operations puts a strain on available technical, managerial and engineering talent. The wood products industry also reports high rates of turnover and an overall transient workforce. And to make matters worse, there is an ongoing lack of awareness among the general public of careers in the modern wood products industry.

According to two parallel reports issued in 2015 from The Manufacturing Institute and consulting firm Deloitte, the United States faces a need for nearly 3.5 million manufacturing jobs over the next decade, with 2 million of those jobs going unfulfilled due to the skills gap. The gap is largely fueled by baby boomer retirement and too few young people who see the manufacturing industry as a career destination, according to the study.

In response to the ongoing skills gap crisis, APA – The Engineered Wood Association, along with the Composite Panel Association and the Hardwood Plywood and Veneer Association, commissioned their own needs assessment through The Manufacturing Institute last fall. The goal of the associations was to pinpoint the major workforce priorities in the wood products sector, understand services that members see as important for their associations to provide, and make recommendations for the associations in 2017 and beyond.

The results of the survey were presented at a roundtable presentation at the APA Annual Meeting in Bonita Springs, Fla., in November.

## **“Not your grandfather’s job”**

“Not enough people are going into manufacturing careers,” according to Brent Weil, senior vice president of The Manufacturing Institute, who presented the study’s findings in Florida. “There’s an image problem in manufacturing. People are not recognizing that manufacturing is not your grandfather’s job. They’re not recognizing the opportunities that are there.”

Those opportunities include technical, knowledge-oriented jobs that have resulted from the automation of the machinery in mills in recent years. Other jobs include sales positions, front office jobs, and other positions that require a background in science and technology. Many people hold on to antiquated perceptions that manufacturing work is dangerous, dirty and low-paying, says Weil. Other studies conducted by The Manufacturing Institute have shown that most young people have never been to a factory, and schools are teaching subjects such as carpentry, woodworking and machining less and less. All this contributes to a less-than-favorable view of manufacturing as a stable, interesting and well-paying career.

The joint survey showed that the engineered wood manufacturing industry is facing considerable turnover. More than 70 percent of those surveyed said new employees stay with their companies less than three years before moving on. Dealing with constant turnover is time consuming and costly, says Weil. (see Figure 1)

“Filling vacancies takes time,” says Weil; an average of one month to replace an hourly worker, and two months to replace a salaried worker. “If you’re waiting until there’s a vacancy before looking to fill it, that’s going to be a problem.”

Looming retirements also play a role. The survey showed that nearly 60 percent of those responding said their companies will need to fill between six and 20 percent of their positions due to retirement between now and 2021. (see Figure 2)

The biggest reason why hiring the right people proves difficult, says Weil, is that employers have trouble finding people with the right skills. Eighty percent of respondents said finding people with the right technical abilities is a big challenge. The most difficult occupations to fill, according to the survey, are electricians, plant managers/superintendents, IT support, millwrights and supervisors, according to the survey.

Figure 1

### **What is the longevity of a new hire?**

■ Average Longevity

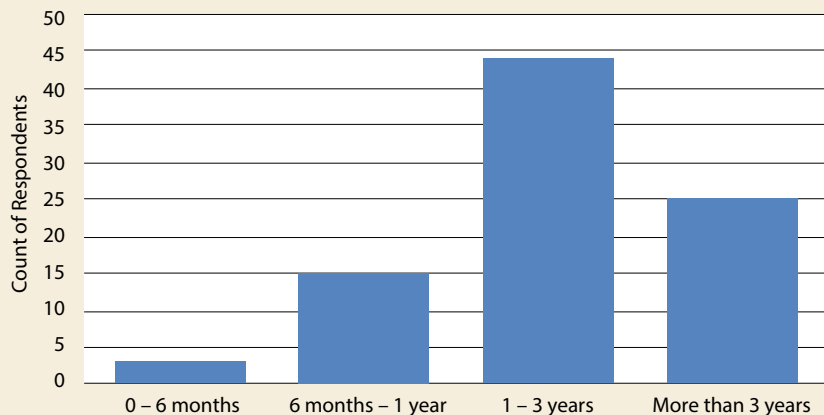
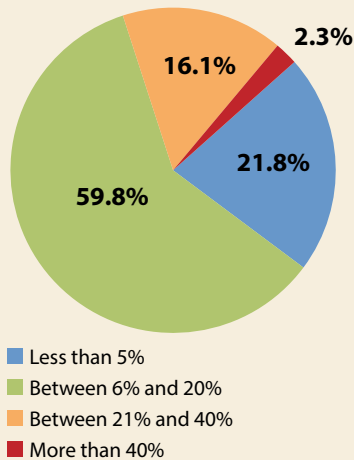


Figure 2

**How many positions do you expect to have to fill by 2021 as the result of retirements?**



**How to help**

The survey went beyond spelling out the crisis facing the engineered wood manufacturing industry. It also asked companies what they thought could help the situation, how The Manufacturing Institute and member associations such as APA might assist, and activities they thought could help draw qualified people.

Respondents felt that internet postings and social networking were the most effective ways of recruiting new hires, with the focus placed mostly on attracting young people, millennials, women, and veterans. Many also found success with finding workers through commu-

nity or technical colleges, job fairs and high schools.

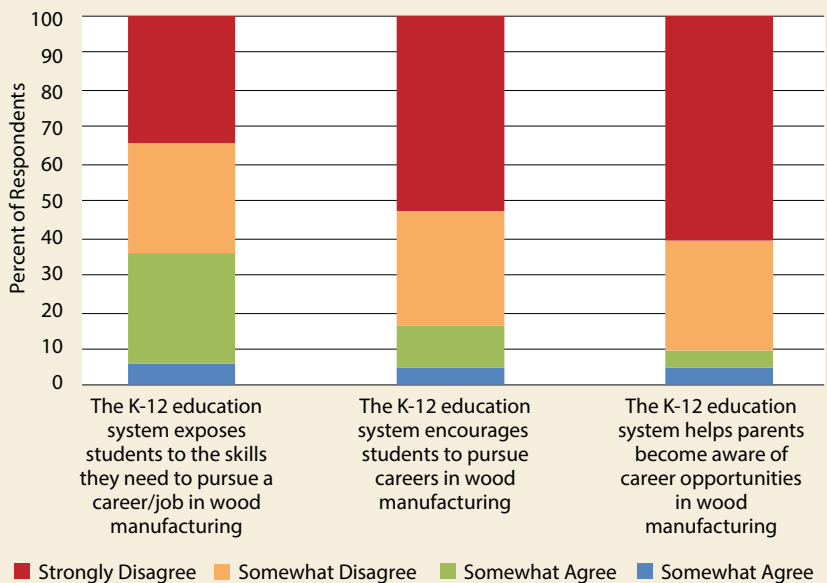
Nearly all that responded felt that on-the-job training was either a “highly effective” or “effective” way to meet the training and development needs of their workforce. Nearly three-quarters felt this way about apprenticeships, internships and structured career development and advancement plans.

When it came to how survey takers felt about awareness of the wood manufacturing industry, few felt the education

systems was doing a good job promoting the trade. Only 35 percent agreed – either strongly or somewhat – that the K-12 system exposes students to the skills they need to pursue a career or job in wood manufacturing. Even fewer – 15 percent – agreed to some extent that the education system encourages students to pursue such jobs. And hardly anyone – just 10 percent – agreed that the system helped parents become aware of career opportunities in wood manufacturing. (see Figure 3)

Figure 3

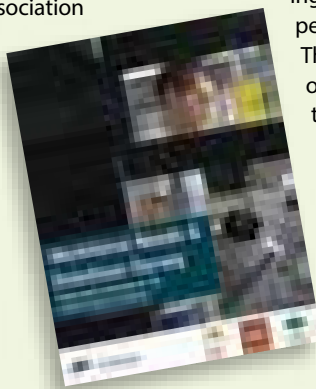
**How do you feel about the role of K-12 school systems?**



**About the Survey**

The Workforce Needs and Solutions Survey was developed by The Manufacturing Institute and targeted to companies’ human resources, recruitment personnel, and operations managers at three member associations: APA – The Engineered Wood Association, the Composite Panel Association and the Hardwood Plywood and Veneer Association. Participants also included some individuals who did not indicate membership in any association. The survey was administered online and survey responses were collected throughout the month of September 2016. A total of 101 individuals participated in the survey.

The final data set included responses from a cross-section of small, medium and large companies with a variety of years of experience located in the U.S. and Canada.



Participants included individuals from companies with membership in one or more of the sponsoring associations as well as some individuals working in companies that did not report membership in any association.

Sixty-nine percent of respondents identified as people working in human resources or training departments, with 19.4 percent responding as someone in the operations division. The remainder of the responders were owners/CEOs or other employees. Ninety-five percent of the companies that participated had more than 75 employees, and more than 70 percent had been in business for more than 30 years. Nearly half identified as an APA member.

After the survey was complete and the results tabulated, The Manufacturing Institute released a “recommendations” report for leaders of the participating associations, detailing the ways they can help their members deal with the workforce and talent shortage.

## Taking action

The takeaway? The manufacturing industry is facing some key workforce talent shortages that are expected to continue into the future. But there are things engineered wood industry employers can do to turn that around.

Weil recommends a number of actions for wood manufacturing companies concerned about hiring and retaining employees at a time when overall interest in the industry is low and the number of retiring workers is high. One suggestion

is to participate in The National Association of Manufacturers' "Manufacturing Day," an annual, nationwide event that aims to raise people's perception of manufacturing and millworking jobs. Typically held the first Friday in October (this year it's scheduled for Oct. 6), Manufacturing Day serves as a kick-off for other related events, informational seminars and industry exhibitions throughout the month and beyond. For details, visit the Manufacturing Day website at [www.mfgday.com/events](http://www.mfgday.com/events). Beyond structured



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events, wood manufacturing company employees are encouraged to speak about their industry at area high schools, tech schools and community colleges. Opening up their facilities for tours by students was also suggested.

### Association recommendations

A final report of the workforce study in which APA participated included an “Executive Summary,” which lists six specific ways the associations – including APA – can help their members navigate the workforce training and shortage issue. APA President Ed Elias joined leaders of the Composite Panel Association and the Hardwood Plywood and Veneer Association on a conference call with The Manufacturing Institute in February to discuss a plan of action. High on the list was a plan to sponsor a series of webinars during which members from all three industry organizations could interact and share ideas for workforce training and retention. Also discussed was support of a web-based portal for market-tested

*Continued page 16*



## Training and Retaining

### How One APA Member Company Faced Its Workforce Issues Head-On



Plywood and OSB manufacturing company RoyOMartin was dealing with many of the same workforce issues industry folks were facing across North America when they decided to take action.

Four years ago, the Alexandria, La.-based company – with a plywood manufacturing plant in Chopin, La., an OSB facility in Oakdale, La., and a sister OSB facility currently under construction in Corrigan, Texas – was having trouble attracting and retaining qualified mill operators and craft employees such as electricians and millwrights.



Image courtesy of RoyOMartin

Upon successful completion of their training, graduates of RoyOMartin's Certified4Success paid training program moved on to full-time production team member positions at the company's Chopin, La., plywood manufacturing plant.

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Company leaders reached out to area technical and community colleges, but at the time, the schools were not equipped to help RoyOMartin facilitate a relevant training program. The company decided to create its own in-house training and apprenticeship program, and has since seen a marked decrease in worker turnover.

RoyOMartin put in place an in-house facilitator to create a curriculum that included classroom work as well as field work. Students studied applicable subjects each week, then paired up with a mentor in the facility, who made sure the apprentices were applying what they learned. Of the 19 that graduated from the 13-month Maintenance Apprenticeship Program, 14 are still with the company, says Ray Peters, RoyOMartin's vice president of human resources and marketing. The program was so successful, Peters says, that there has yet to be a need for a second class.

RoyOMartin has created a separate training curriculum that focuses on the company's operations side, says Peters. The Certified4Success (C4S) training program, modeled after a similar Louisiana Economic Development program, pays participants to train for RoyOMartin's mill manufacturing jobs (currently just in the company's plywood mill in Chopin). The curriculum includes classroom instruction applicable to the manufacturing environment, along with significant hands-on training in the mill. One key to the program's success, says Peters, is that the trainees' pay is increased as they acquire skills and demonstrate knowledge. The first graduating class produced a dozen qualified mill workers, says Peters. A second slightly modified program started in March, and RoyOMartin leaders are hoping for even more qualified graduates.

"We will consider it a success if we can identify 24 people to sit in the C4S program," Peters says.

– Sheila Cain



Image courtesy of RoyOMartin

Andre Winn, a millwright on the construction crew at RoyOMartin's Chopin, La., plywood and timbers mill, is a graduate of the company's Maintenance Apprenticeship Program.

# Recruiting That Overcomes the Skills Gap

by Michelle Hill

Executive Recruiter, The HT Group

Change can be painful but it's also necessary in order to overcome the skills gap in the engineered wood industry. Thankfully the changes you may need to make in order to recruit and retain more skilled workers don't need to be groundbreaking. It simply takes some ingenuity when it comes to recruiting and retaining the right talent. Start with these three areas:

## 1 Recruit more efficiently.

It's easier than ever these days to research wages and create packages that will be attractive to job candidates, and getting the price right from the beginning can help win over top talent quickly and efficiently. Websites like LinkedIn and Glassdoor have tools available for this purpose. Many recruiters and headhunters have access to detailed industry wage data as well. Working directly with schools, colleges and military veteran organizations to find top talent can also help you pinpoint the right talent quickly.

At the same time, be careful about being too specific about who exactly

you want. Being firm on the amount and type of experience required for the job may weed out some otherwise desirable candidates. There is value in bringing in fresh, unique perspectives from other industries.

## 2 Consider your culture.

Manufacturing companies don't necessarily have a long history of focusing on company cultures in order to woo candidates, but times are changing. Overlook this area and your recruiting and retention will suffer. Gone are the days when workers will tolerate inflexible schedules and lack of guidance, for instance, especially if they were sold on something different during the hiring process.

To reduce turnover, it's important to provide support during onboarding in the way of mentors or job shadowing. Over time, recognition for achievements, incentives for managers and other practices can help keep top talent engaged.

## 3 Invest in skills development.

The best way to fill positions that open, due to retirement, is to promote from within. However, in order for this practice to be successful, the process must be in place to groom future leaders years in advance, including having a consistent approach to supervisory training, upskilling for new technologies and performance incentives.

We know the skills gap exists and that it's widening. So, whether you plan to promote from within or hire workers from outside the organization—or even the industry—a renewed focus on skills development will be necessary to keep the knowledge and skills pipeline flowing.

*Michelle Hill is the senior executive recruiter for the manufacturing/engineering vertical at The HT Group, based in Austin, Texas. The HT Group, an EWTA member company, provides nationwide recruiting and staffing services providing access to the nation's premier technical, professional, management, and executive talent. Hill can be reached at (512) 680-5995, or michelle.hill@thehtgroup.com*

Continued from page 14

brochures, posters and other outreach material specific to wood products careers. These would be available to member companies to use in recruiting and training efforts.

"Getting the word out about careers in the wood products industry is important," says Elias. "We want to do everything we can to make it easier for our member companies to recruit the right people into a field that we know is lucrative and rewarding."<sup>30</sup>

*Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.*

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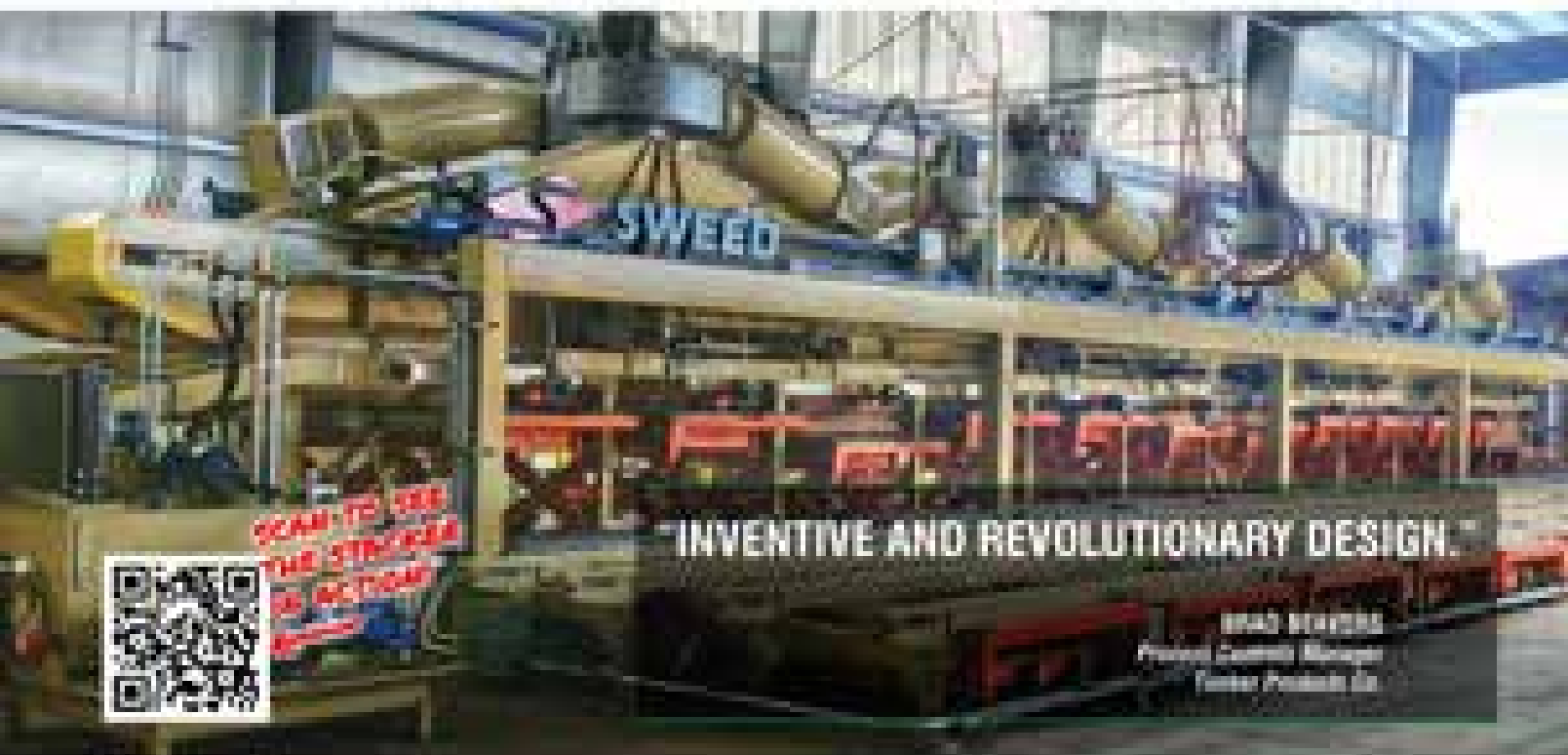
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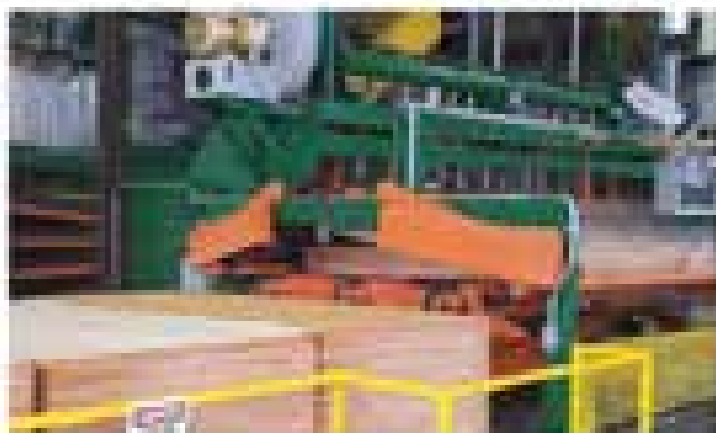
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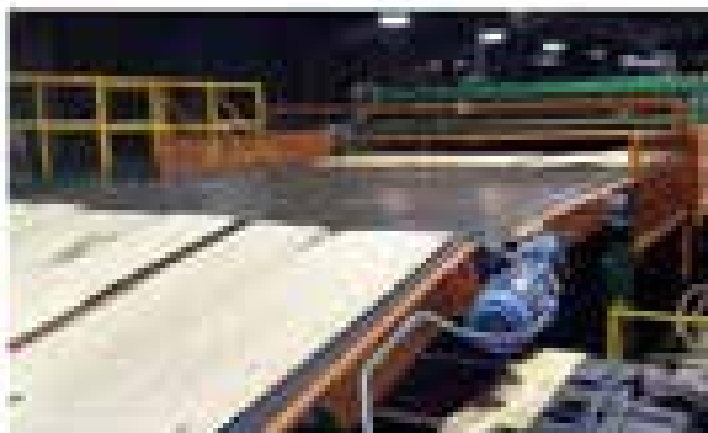
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# OPTIMISTIC EXPECTATIONS

*Annual Business Outlook Survey Indicates Improvement for 2017*

*by Sheila Cain*

If expectations reflected in the Engineered Wood Technology Association's Business Outlook Survey hold true, wood-related business for EWTA members will improve in 2017.

Last year, 42 percent of survey respondents said they were "more optimistic" about business success in 2016. This year, 68 percent said the same. Perhaps the optimism is reflective of the improving economy. Housing starts in North America totaled 1.372 million in 2016, according to APA reports; up 5 percent from 2015.

Other survey responses closely mirrored those from the previous year, with slightly elevated improvement and optimism in most categories. Comparing survey responses from the past seven years, the industry's most positive responses still appear to have been in 2013 and 2014, when the improving economy started to feel more solid.

The web-based survey was sent to all EWTA members in January of this year and posed five questions relating to wood-product business' performance, future expectations and employment levels. Sixty-one percent of respondents were in the equipment/tooling category, 29 percent in the materials/supplies category, and 10 percent in the services/consulting category. Sixty-eight percent of respondents had business headquarters in the U.S., 10 percent were headquartered in Canada, and 22 percent were offshore.

## Boost in Business

This year's survey found that 71 percent of responding members felt that their business improved in 2016, compared to 68 percent of respondents answering the same question the year before. Seven percent said business worsened in 2016 (five percent said this the year before), while 22 percent said it stayed the same (compared to 26 percent the year before).

## How important are the following for recovery:

	Very Important	Important	Unimportant
State of the U.S. housing market	79%	21%	0%
Government regulation	27%	63%	10%
Government economic policy	43%	55%	2%
Marketplace competition	37%	54%	10%
Raw material prices or supply	35%	47.5%	17.5%
Transportation costs	17%	61%	22%
International exchange rates/trade policies	41.5%	41.5%	17%
Labor issues	15%	62.5%	22.5%
Economic uncertainty	39%	56%	5%

Members seem slightly more optimistic about business opportunities in the current year than they did last year. Seventy-one percent said they expect business will improve in 2017, compared to 63 percent who predicted improvement in 2016. Twenty-seven percent expect business will stay the same, while only two percent predict business will decline.

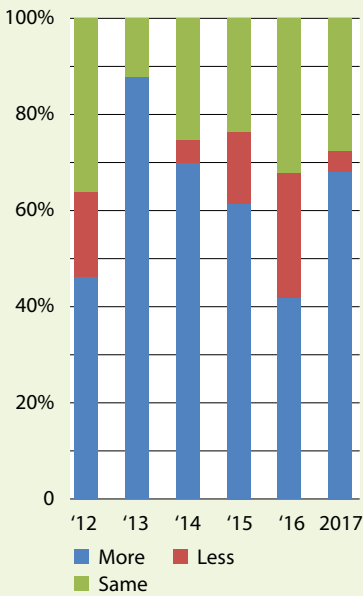
When asked, "Did your employment levels change last year?" 15 percent of respondents said they decreased in 2016. No respondents indicated a decrease in employment in the previous year's survey. Whether this is aberration or the beginning of a trend remains to be seen. To be sure, the engineered wood industry – and the manufacturing industry as a whole – is facing considerable worker shortages due to an aging workforce and fewer younger people entering the field (see more in "Workforce Remedies" feature on page 10). The silver lining: 39 percent of respondents report that employment levels increased in 2016, and 46 percent said they stayed the same.

As we continue into 2017, responding members seem optimistic that employment levels will improve. Forty-nine

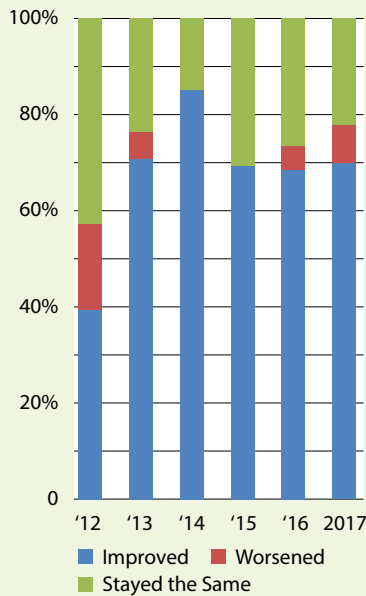
percent indicated that they expected employment at their companies to increase in 2017, a sizable increase over the 39 percent who said the same thing last year. Another 49 percent expect employment to stay the same in 2017, while two percent feel it will decrease.

As they are each year, members were also asked to rank several factors as "very important," "important" and "unimportant" for industry recovery. As they have in past surveys, most responding members (79 percent) indicated that the state of the U.S. housing market was "very important," with 21 percent ranking it as "important." Government economic policy was, understandably, also on members' minds. This year, 43 percent of members ranked it as "very important" (only 29 percent did so the previous year,) while 55 percent felt it was "important." Members appeared less concerned about the economy as they have in years past. This year, 39 percent felt the issue was "very important" (compared to 60 percent last year,) while 56 percent agreed that it was "important" (compared to 32 percent last year.)

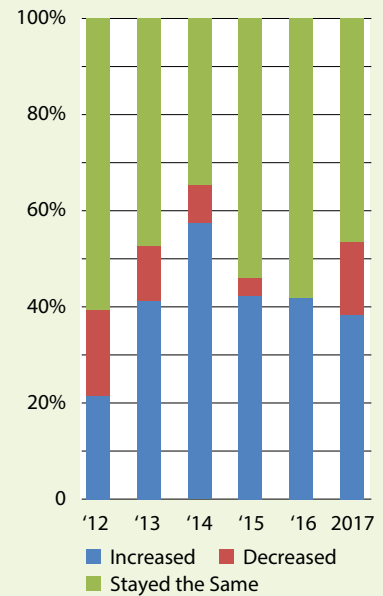
### How optimistic are you about your wood-related business this year versus last year?



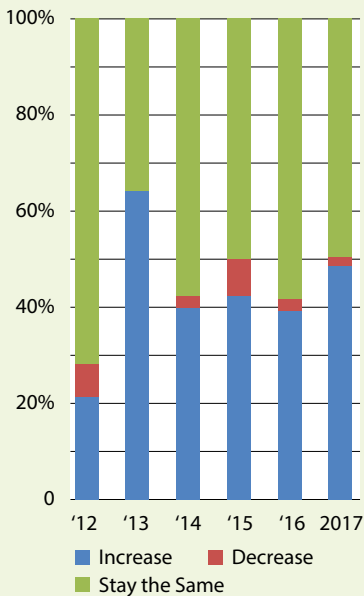
### Did business improve, worsen or stay the same this past year?



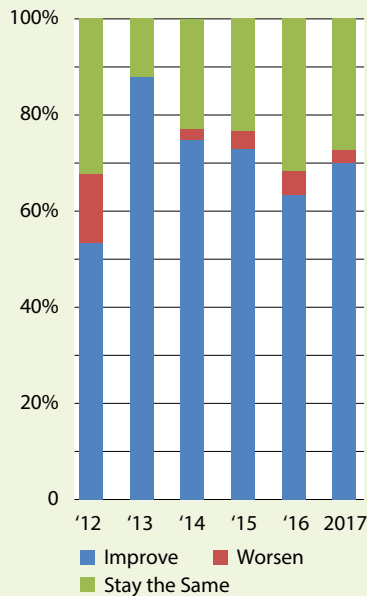
### Did your employment levels change last year?



### What is your employment projection for the new year?



### What is your business projection for the new year?



## Taking Charge

Whether things are looking up, looking the same, or not looking so good, members are continuing to respond to the economy, workforce issues and other industry-affecting factors with hard work and dedication. Members offered up a

number of comments when asked about strategies they are using to move forward.

Many mentioned efforts they have made to cut back on costs.

“We have tightened up on our procedures, quotation specifications, material costs, and labor times to make

sure our margins are as predicted,” says one member. “This includes being firm with the customers on the costs of additional work and changes to the scope of projects as these are completed.”

“We have tightened our costs and reduced our margins,” says another. “This has enabled us to win more work and thus increase our sales to better cover our overhead.”

Many are moving ahead with new products and business strategies to improve business. One member says they have added sales and engineering staff, as well as increased the company’s marketing budget, while several comment that they are placing an increased focus on new technology.

At least one member is getting ready for potential turnover down the line: “We have hired some new, young, and energetic people to step in for us older folks as we move forward.”<sup>EWJ</sup>

*Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.*

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# INTERNATIONAL UPDATE

## *APA's Activities Abroad*

by Sheila Cain

While North America has always been – and remains – the number one user of domestically produced structural panels and engineered wood products, a significant portion manufactured on American and Canadian soil is exported overseas to a number of established and growing markets. APA – The Engineered Wood Association's International Division oversees several wide-ranging export promotion and market access programs that help create demand and facilitate APA member products getting into the hands of offshore users.

As the post-recession North American market for engineered wood products continues to improve, so do some of the markets internationally, while others face strong challenges. The *Engineered Wood Journal* recently sat down with

Charles Barnes, the director of APA's international marketing division, to talk about the state of global exports and what APA is doing to keep international relations solid.

### **Engineered Wood Journal:**

**What kinds of engineered wood products – and how much – are exported outside the U.S. and Canada?**

### **Charles Barnes, APA's International Marketing Division Director:**

Everything we produce and use here in North America is also used in countries abroad, including softwood plywood, OSB, LVL, and wood I-joists. Based on annualized data, the collective value of exports of all APA member North American product categories was an estimated

\$334 million last year. Broken down by product, this translates to 12 percent North American I-joists, 17 percent LVL, 33 percent OSB and 38 percent softwood plywood.

### **EWJ:**

**What does APA's international presence look like?**

### **CB:**

I am based in the APA Office in Taiwan, and there are APA U.S. program representatives in China, Korea and Panama as well as shared offices in Japan and Mexico. In addition, APA has a Canadian member product-focused export program for Japan and an APA office in Tokyo within the Canada Wood Japan Office.



The APA booth at the Sylva Wood Show in Shanghai, China, last summer, drew many visitors.

Image courtesy of APA

**EWJ:**

**What are some of the most popular products exported?**

**CB:**

U.S. softwood plywood represents the largest North American structural panel product category by export value, with an estimated volume of 364 million square feet in 2016. The value of those exports is approximately \$122 million, placing softwood plywood at the top of the list based on export value. That's a 16 percent increase by volume compared to 2015. Canadian OSB is a close second at 399 million square feet and an export value of \$75 million. In fact, Canadian OSB represents the largest North American structural panel product category by export volume, up 14 percent over 2015. U.S. OSB and Canadian softwood plywood are also very strong exports.

**EWJ:**

**What are the largest markets for APA members' products?**

**CB:**

In 2016, the biggest overseas markets for APA members' structural panels were Mexico, Japan, China and South Korea, driven by the acceptance of wood products for certain applications and the ability of the U.S. and Canadian manufacturers to provide competitive products. Some of this acceptance has come through long-term presence and promotion efforts by the North American industry. Mexico received 197 million square feet of primarily U.S. plywood and U.S. OSB, while exports to Japan were 189 million square feet of primarily Canadian OSB. China's interest in North American structural panels last year – mostly U.S. softwood plywood and Canadian OSB – jumped by 29 percent to 180 million square feet. Chile, Vietnam, Taiwan and the Dominican Republic also proved to be large export markets. Of particular note is the amount of product exported to Vietnam. While the volume last year was relatively low – 19 million square feet and mostly Canadian OSB – it represented a 169 percent increase over 2015. This is an example of a growing



Image courtesy of APA

APA is represented at industry trade shows across the globe, including the Dubai Wood Show in the United Arab Emirates.

economy that has begun to use North American structural panels in industrial applications, such as furniture.

**EWJ:**

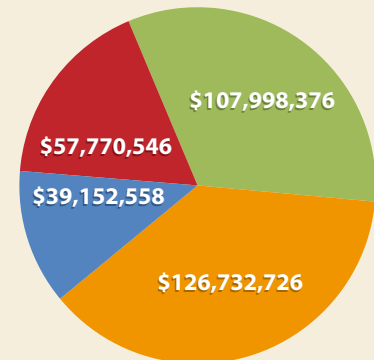
**What products are less strong?**

**CB:**

Exports of other North American engineered wood products, such as LVL and wood I-joists, took a sizable hit in 2016, due to a shift to strong domestic North American markets and appreciation of the U.S. dollar versus the currencies of competing products from other countries. Exports of these products in 2016 represented a value of \$99.2 million, 20 percent less than their strong showing in 2015. The leading export destinations for these products are Australia, Japan, the Bahamas, Mexico and the Philippines.

### North American Structural Panel and Other Engineered Wood Exports By Value

2016 Export Value = USD \$334 million



- I-Joist: 12%
- LVL: 17%
- OSB: 33%
- Softwood Ply: 38%

The export value of North American structural panel and other engineered wood products was \$334 million in 2016.

Image courtesy of APA

**EWJ:**

**What is APA's International Marketing Division doing to keep exports strong overseas?**

**CB:**

APA staff, contractors and members all work together on promotional efforts and market access activities to expand growth in export markets. Just last year, with the support of leveraged funding from the USDA Foreign Agricultural Service, Natural Resources Canada and Forestry Innovation Investment of British Columbia, APA conducted 61 promotional and technical activities in 20 countries including seminars, trade shows and promotional activities. One of the most important activities our division participates in is the harmonization of product standards and building codes. It's important that these match up as closely as possible with North American industry standards so member products aren't disadvantaged and so North America is viewed as the world leader for structural panels and engineered wood products. In

2016, APA staff and overseas consultants participated in 13 code, standards and technical meetings in nine separate countries. APA also continues to conduct mill certification and quality assurance work for APA members exporting to Japan, the European Union and Australia.

**EWJ:**

**How are APA international efforts funded?**

**CB:**

As referenced above, our programs are supported by industry contributions and leveraged funding from the U.S. Department of Agriculture, Foreign Agricultural Service and, separately, Natural Resources Canada and Forestry Innovation Investment of British Columbia. In 2016, APA received \$1.9 million in funding from these agencies. We recently received \$1.5 million in leveraged funding from the U.S. Department of Agriculture's Foreign Agricultural Service for U.S. product export promotion and international market access for the 2017 calendar year. APA was one of only two cooperators in

the wood products industry that received 100 percent of its requested funding, due in large part to APA's performance against stated program goals and documentation of success stories generated by program activities.

**EWJ:**

**How are APA international projects supported by members and other APA divisions?**

**CB:**

Support from our APA member companies is vital in our international efforts to promote engineered wood products throughout the world. Last year, 38 personnel from 14 member companies donated their time to promote our products on behalf of the industry. Examples include attending events such as trade shows and conferences in Dubai and Australia last spring. In all, APA members participated in 23 days of seminars, 93 days of tradeshow promotion and 59 days of trade servicing visits in 2016.



Image courtesy of APA

APA attended the Frame Australia conference in Melbourne, Australia.





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**EWJ:**

Any notable efforts or inroads APA has made recently in specific countries?

**CB:**

In 2016, Japan was the single largest export destination for Canadian OSB, Canadian-fabricated structural wood members, and U.S. and Canadian glulam. To keep this momentum going, APA's Japan office recently produced a 12-issue compendium of builder-focused Canadian OSB newsletters and is creating another 12 to be posted on APA's Japanese language websites. APA is also continuing work on the development of an OSB-connector database to enhance the position of Canadian OSB in the Japanese market. China and Taiwan are also very strong export markets, especially for U.S. softwood plywood and Canadian OSB. The APA program in Greater China is now retaining its own Foreign Agricultural Service-supported China representative based in Chongqing and Shanghai, with work expanding from solely focusing on wood construction to include other market segments such as furniture frames and cabinetry.

**EWJ:**

What are some of the International Marketing Division's most recent successes?

**CB:**

Our efforts to promote our products in Japan are paying off. A presentation by our Canadian program manager on OSB early last year caught the attention of an architect, and after additional meetings with our team, this designer specified APA member products in the walls and floors of his three-story elderly care facility near Yokohama. APA efforts have also resulted in the use of Douglas fir glulam in an elementary school in Gifu Prefecture as well as the use of 6 x 24 ft. jumbo panels in the roofing structure of large-scale wood-based museum in Gunma.

## APA's International Division: At a Glance

**Director of International Marketing:** Charles Barnes  
**Canadian Program Manager:** Scott Anderson (incoming manager on April 1, replacing the retiring Hiroyuki Moritaka) at the Canada Wood Office in Tokyo  
**Direct APA Overseas Representation:** China, Japan, Korea, Panama and Taiwan  
**Shared offices (all U.S. program related):** Japan and Mexico  
**Funding:** U.S. Department of Agriculture, Foreign Agricultural Service, Natural Resources Canada and Forestry Innovation Investment of British Columbia  
**Other support:** Time and resources from APA member companies

**EWJ:**

What barriers is the division facing?

**CB:**

The largest current trade issue on the horizon relates to Korea's enactment and potential upcoming enforcement of inappropriate wood product standards, and specifically the standard for OSB. APA is working closely with U.S. and Canadian government officials to challenge the standard and has put Korea on notice through an ongoing WTO process. APA is exploring other avenues to gain acceptance of PS 2/CSA-O325 standards and their span rating system further recognized in Korean building codes even if they are not referenced as the product standard per se.

**EWJ:**

What are the goals of APA's international team in 2017 and beyond?

**CB:**

Our focus on industrial market activities is increasing demand in greater China and Mexico and Latin America in 2017. Also in Mexico and Latin America, our promotion of glulam for nonresidential markets is expanding. And we're continuing to steadily promote Canadian OSB in Japan. [ewj.org](http://www.ewj.org)

*Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.*

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## 2017 Membership Directory

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

This membership directory, updated for 2017, includes company descriptions and contact information for all EWTA members. It's just one of many tools designed to help members connect with each other and the industry.

### Membership Benefits

*The benefits of EWTA membership are many. Among them:*

- Direct business-to-business links with your customers in the engineered wood products industry through such vehicles and events as Info Fair, an annual supplier show held in conjunction with the APA annual meeting; industry forums and seminars; APA annual meeting events; company news and advertising in the *Engineered Wood Journal*; and dissemination of your company news and technology innovations via the EWTA website and *Connections* e-newsletter.
- Free access to the APA monthly housing starts and quarterly production reports, and discounts on other APA publications and reports.
- Discounts on APA events and *Engineered Wood Journal* advertising.
- Free company listing and profile in the annual meeting issue of the *Engineered Wood Journal* for EWTA Info Fair exhibitors.
- Member products and services directory.
- Annual meeting and other event sponsorship opportunities.
- Supplier award program participation.
- Opportunities to exchange information with other EWTA members, APA members and APA staff via an EWTA advisory and subcommittee structure.
- Opportunities to support, participate in and receive the results of important industry technical and market research projects.

The annual cost of EWTA membership is just \$1,200. For more information about the benefits of membership or for a membership application, contact Terry Kerwood, Managing Director, [terryk@engineeredwood.org](mailto:terryk@engineeredwood.org) or 253-620-7237, or visit the EWTA website at [www.engineeredwood.org](http://www.engineeredwood.org).



### AkzoNobel Wood Adhesives

AkzoNobel Wood Adhesives is one of the leading global producers of adhesive systems for the woodworking industry. Our goal is to significantly improve our customers' productivity, environmental impact and production process by partnering with the industry and focusing on advanced research and development.

Contact: Alan Grainger - Sales Manager

Phone: 336-801-0888

PO Box 2103

High Point, NC 27260

[alan.grainger@akzonobel.com](mailto:alan.grainger@akzonobel.com)

[www.akzonobel.com/casoadhesives](http://www.akzonobel.com/casoadhesives)



### 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 custom-designed 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 applies paper machine clothing technologies to develop unique materials and structures for a variety of other industries, including engineered wood products.

Contact: Tom Israel - Global Product Manager

Phone: 920-521-4618

3601 Electric City Blvd.

Kaukauna, WI 54130

[tom.israel@albint.com](mailto:tom.israel@albint.com)

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



### ALTEC Integrated Solutions, Ltd.

ALTEC Integrated Solutions are industry leaders in scanning, optimization, control systems, engineering services and quality control, with particular expertise in Veneer Lathe Peeling Lines and plywood manufacturing. In addition to the controls we also supply hardware such as Chargers (electric and hydraulic), Core Drives, Electric Clipper with controls solution and Stackers. We are the industry leaders in applying electric linear actuators. Our customers use our technology and our services to improve their recovery, product quality, and their bottom line.

Contact: Chris Bartlett - Vice President

Phone: 604-529-1991

#120 - 185 Golden Drive

Coquitlam, BC V3K 6T1 Canada

[cbartlett@alteconline.com](mailto:cbartlett@alteconline.com)

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



### ANDRITZ Inc.

With a comprehensive range of technically advanced products and more than half a century of experience, ANDRITZ Wood Processing Global Product Group can supply a customized system for all the stages of your log handling, debarking and wood and bark processing operations worldwide. ANDRITZ is specialized in supplying complete systems including total project management, all relevant process equipment and control/automation systems. Our range covers all sizes of plants. Our globally organized project group can take responsibility for all stages of your project: Design, Manufacturing, Transportation, Erection, Commissioning, Start-Up, Staff Training. The level of each project service can be structured to match your specific project requirements.

Contact: Jarno Kamarainen - Director, Wood Processing North America  
Phone: 770-640-2467  
5405 Windward Parkway, Suite 100W  
Alpharetta, GA 30004  
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www.andritz.com



### 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, non-wovens 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.

Contact: James Slay - Sales and Technical Manager  
Phone: 678-781-4431  
1000 Holcomb Woods Parkway, Suite 342  
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### Argos Solutions AS

Argos is a technology company utilizing innovative machine vision technology to automate manual visual inspection and manual repair work of wood products. We provide the latest technology of vision-based scanning systems for a wide range of wood panels and other building and furniture products. Argos, established in 1992, is a leading and preferred supplier of grading systems after sanding machines with installations in more than 30 countries worldwide. Argos' latest development includes a fully automatic panel repair line for patching plywood panels. Argos was the first company worldwide to install a high-speed panel repair line and offers fully automatic solutions for soft and hardwood plywood.

*(continued in next column)*

### Argos Solutions AS (continued)

Our technology and knowledge will help wood-based companies to automate and reduce labor in the finishing area.

Contact: Tor Gustavsen - Managing Director  
Phone: +47 9166 9414  
Dyrmygata 35 NO\_3611  
Kongsberg, Norway  
tor@argossolutions.no  
www.argossolutions.no



### Ashland Specialty Ingredients

ISOSET® adhesives from Ashland 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. Ashland Inc. (NYSE:ASH) is a Fortune 500 specialty chemical company providing products, services and customer solutions throughout the world.

Contact: Mark Vlasisavich - Account Manager, Structural Assembly Adhesives  
Phone: 708-205-1586  
5200 Blazer Parkway  
Dublin, OH 43017  
mvlasisavich@ashland.com  
www.ashland.com



### Babcock & Wilcox MEGTEC

Babcock & Wilcox MEGTEC offers environmental equipment solutions that range from VOC abatement and energy recovery systems to particulate and acid gas control. B&W MEGTEC supplies packaged clean air solutions that are proven to meet stringent emissions regulations: wet scrubbers for high efficiency particulate removal for dryers and press vents; wet and dry electrostatic precipitators for gas cleaning, and ultra-high efficiency RTO/RCO systems for VOC abatement. We also offer fabric filters (baghouses), SNCR Systems and Multiclone dust collectors. B&W MEGTEC also provides upgrades, parts and services for every make of APC equipment for the engineered wood industry.

Contact: Kathy Brugman - Sales & Marketing Specialist  
Phone: 920-337-1582  
PO Box 5030  
De Pere, WI 54115  
kbrugman@megtec.com  
www.megtec.com



### BASF - We create chemistry

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

Contact: Letha Smith - Business Manager, Rigid Urethanes North America  
Phone: 732-324-6837  
BASF Corporation  
1609 Biddle Avenue  
Wyandotte, MI 48192-3736  
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### Baumer Inspection GmbH

Baumer Inspection GmbH specializes in optical surface inspection systems. In over 35 years of quality service, we have installed more than 500 systems world-wide and are a leader in scanners for fully automatic inspection and process control. Baumer Inspection offers inspection systems for plywood, MDF, MDP, paper, film and foils, flooring and surfaces of furniture panels. Our highly skilled and motivated team always pushes the limit of what is possible to bring you the newest innovation in vision technology.

Contact: Tim Battke - Area Manager  
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Phone: +49 173 289 9494  
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78467 Konstanz Germany  
tbattke@baumer.com  
www.baumerinspection.com



### Biele, S.A.

The Biele Wood division is specialized in the design and manufacturing of automation solutions for industrial wood processes. Biele provides highly efficient solutions for the manufacture of plywood in a wide variety of wood and qualities: Feeding & Sorting Systems for Veneer Drying Lines, Veneer Patching Lines, Gluing & Lay-Up Press Lines, Trimming & Sanding Lines, Panel Repairing Lines, Panel Coating Lines and Packaging Lines. Proposals range from high productivity multidaylight presses and automation projects for construction and commodity boards to coating lines for fine wood boards for the furniture application.

Contact: Paul Gavin - Area Sales Manager  
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# BRUKS

## BRUKS Rockwood

Bruks is a specialty Materials Handling company with a 120 year history in engineering and manufacturing innovative equipment for Wood Chipping and Hogging, receipt at the Mill through Truck Dumps and Pits, Storage & Recovery, Material Drying, Log Handling, Butt Flare Reducing, Conveyor systems, Screening Hogs and Hammermills. Bruks Drum Chippers, especially, have been marketed and installed in North America since the 1970's with over 10,000 units operating worldwide.

Contact: Rene van der Merwe - Sales Manager  
North America  
Phone: 770-849-0100  
5975 Shiloh Road, Suite 109  
Alpharetta, GA 30005  
rve@bruks.com  
www.bruks.com



**BRUNETTE**  
MACHINERY CO.

## 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: Kirk Forbes - President  
Phone: 604-522-3977  
8717 - 132nd Street  
Surrey, BC V3W 4P1 Canada  
kirk@brunnettemc.com  
www.brunnettemc.com

## Casey Industrial, Inc.

Casey Industrial has provided process installation services for over 60 years to the Forest Products sector. We self-perform all major trades, work nationwide and have experience with all major technology providers supporting APA members.

Contact: Tom Lepak - VP, Business Development  
Phone: 720-974-2659  
1400 West 122nd Avenue, Suite 200  
Westminster, CO 80234  
tlepak@caseyind.com  
www.caseyind.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

*(continued in next column)*

## Chem-Trend LP (continued)

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  
PO Box 860  
Howell, MI 48844-0860  
gprzekop@chemtrend.com  
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  
PO Box 4876  
Jackson, MS 39296-4876  
info@clarkevneers.com  
www.clarkevneers.com



## 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  
PO Box 2428  
Eugene, OR 97402  
andyc@clarkes-ind.com  
www.clarkes-ind.com



## 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, bienergy plants, engineered wood product plants and sawmills.

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

## 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: Mike Coil - Manager  
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8269 - 130th Street  
Surrey, BC V3W 7X4 Canada  
mdc57@telus.net  
www.coilmanufacturing.com

## Combilift USA

Combilift is a specialist forklift & straddle carrier manufacturer producing a wide range of customized handling solutions, all of which are designed for the safe, space saving and very productive handling of the long and bulky loads. 4-way Combilifts work as counterbalance, sideloader, and narrow-aisle forklifts. The Combi-SC (Straddle Carrier) is the cost effective solution for the handling of containers and oversized loads.

Contacts:  
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Phone: 336-378-8884  
303 Concord Street  
Greensboro, NC 27406  
gearoid.hogan@combilift.com  
www.combilift.com



## 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 & Vancouver. Formerly Viking Chains, l'Anco Products and Lacey Harmer Inc.

Contact: Cliff Lane - President & General Manager  
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27474 Gloucester Way  
Langley, BC V4W 4A1 Canada  
clane@cnxsind.com  
www.connexusindustries.com



## Con-Vey Keystone, Inc.

Con-Vey has over 70 years experience in custom material handling solutions. We engineer and manufacture equipment for Plywood, OSB, PB, MDF, LVL, I-Joists and Specialty Panels. Con-Vey Supplies world class saw lines, finishing lines, sanding lines, feeders, stackers, conveyors, specialty automated equipment and robotic solutions. Con-Vey means Quality and Value you can count on.

Contact: Dave Larecy - President  
Phone: 541-672-5506  
PO Box 1399  
Roseburg, OR 97470  
dave.larecy@con-vey.com  
www.con-vey.com



### **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 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 Particle Board, Fiberboard, Plywood, OSB, or CLT. Our sanding systems are capable of processing up to 125" wide panels with thicknesses up to 10" at the required industry production speeds

Contact: Eric Johnston - Product Manager

Panel Industry

Phone: 336-434-6644

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Archdale, NC 27263

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www.costasanders.com

### **Cross Wrap Ltd.**

CW BOARD PACKAGING LINE – WEATHERPROOF, WORRY-PROOF. CW board packaging lines automatically wrap boards without straps, saving cost and trouble of a strapping unit. The unique advantage is CW packaging lines automatically wrap different sized packages on the same line. Suitable for all materials; plywood, veneers, MDF, OSB and any wood-based boards. All-weather and moisture protection for contents and label. High quality packaging – durable in handling, storage and transportation. Save packaging material cost – no need for straps, side or corner covers or bottom pallets. Recyclable packing material. Fully automatic machine saves labor costs. Optional automatic bottom skid feeder. Optional package labelling.

Contact: Kalle Kivelä - Founder

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Siiinjärvi, Finland 71800

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www.crosswrap.com

## **DIEFFENBACHER**

### **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, LVL and wood fiber insulation board plants.

Contact: Cole Martin - Sales Manager, Capital Sales and Modernizations

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1345 Ridgeland Parkway, Suite 100

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www.dieffenbacher.com

### **Dominion Chemical Company, Inc.**

Wax nuances 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: Ferrell Maclin - Vice President

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2050 Puddledock Road

Petersburg, VA 23803

maclinferrell@dominionchemical.com

www.dominionchemical.com

### **Dürr Systems, Inc.**

Dürr makes a key contribution to reducing emissions in diverse industry sectors, including the wood processing industry. State-of-the-art technology ensures efficient disposal of exhaust gases and residues while ensuring a high level of process reliability and reduced energy consumption. Dürr supplies complete solutions from planning to implementation and service. With over 5,000 installations worldwide and 45 years of air abatement experience, the best partner for environmental or energy services and solutions is Dürr.

Contact: Scott Brayton - Key Account Manager

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26801 Northwestern Highway

Southfield, MI 48033

scott.brayton@durrusa.com

www.durr-cleantechnology.com

### **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, Moisture Measuring, Mass (WPUA) Measuring, Weigh Scales and Density Profile Measuring Systems.

Contact: Steven Mays - Partner

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Beaverton, OR 97005-2349

steve@ews-usa.com

www.ews-usa.com

### **Engineered Coated Products, a division of Intertape Polymer Group**

Engineered Coated Products supplies an exclusive automatic wrapping system and other wood wrapping products, promoting safety, reducing labor and providing new packaging alternatives to the engineered wood marketplace.

Contact: Scott Maw - Director of Wood Packaging

Phone: 780-224-6569

392 Heritage Drive

Sherwood Park, AB T8A 6A4 Canada

smaw@itape.com

www.itape.com

### **ESOT**

ESOT began operation in 2005 in the Central Texas area. As a result of customer referrals we are now bringing LED retrofits, new installation lighting and hazardous lighting solutions to commercial, retail, institutional and industrial facilities around the country (www.esotx.com). ESOT is the South Central U.S. distributor for SonicAire fans (www.iesclean.com) that provide continual and safety compliant cleaning of fugitive combustible dust and lint. ESOT offers facility audits and turn-key installation services for all projects and is a member of ISNet and VPPPA. Let ESOT design the right engineered solution for your next project.

Contact: Darrell Cloudt - President

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Waco, TX 76712

dcloudt@esotx.com

www.esotx.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 Edwards - Director, Industrial Business Development

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1740 Willow Creek Circle

Eugene, OR 97402-9152

aedwards@eeeug.com

www.evergreenengineering.com



### **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 - Minifog Product Manager

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Greensboro, NC 27410-8116

epridgen@sparkdetection.com

www.sparkdetection.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.

Contact: Joshua Bartlett - Business Development Manager

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www.franklinadhesivesandpolymers.com



### Fusoni U.S.

Fusoni develops and manufactures release agents and additives for panel board manufacturing, and also for paper impregnation processes. For more than 30 years we have been serving clients in Europe, Asia and the Americas. Our chemicals expertise extends to other industries, such as release applications in bakery and polyurethane systems. 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 - Managing Director  
Phone: 210-712-7803

Fusoni U.S.

955 Lightstone Drive  
San Antonio, TX 78258

Fusoni Componentes, S.L.  
Poligono Industrial de Argame  
C/ Mostayal, parcela D4  
33163 Argame - Asturias  
España, Spain

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www.fusoni.net



Georgia-Pacific  
Wood Adhesives

Make that last. *adhesives.that.work.*

### Georgia-Pacific Chemicals, LLC

Georgia-Pacific Chemicals offers a portfolio of thermosetting resins for plywood, oriented strand board and laminated veneer lumber applications as well as custom-formulated solutions to meet our customer's specific needs. An innovative, reliable supplier to the wood products industry for decades, our new Resi-Boost™ resin for structural plywood and laminated veneer lumber has demonstrated decreased press times as much as 10-20% without sacrificing bond quality nor increasing temperatures. It can lower glue usage as much as 3-10%. Resi-Boost resin joins our other quality products - WOODWELD® spray dried powders, RESI-STRAN® liquid adhesives and RESI-MIX® and RESI-MIX® Ultra ready-to-use mixed adhesives.

Contact: Georgia-Pacific Wood Adhesives

Phone: 866-4GP-CHEM/866-447-2436

133 Peachtree Street NE, Suite 19

Atlanta, GA 30303

gpchemical@gapac.com

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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 over 95 years Globe Machine has served the forest products industry.

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Tacoma, WA 98401

sales@globemachine.com

www.globemachine.com



### GreCon

GreCon - 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: Terry Franklin

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15875 SW 74th Avenue

Tigard, OR 97224

sales@grecon-us.com

www.grecon-us.com



### GRENZOBACH

#### Grenzobach Corporation

We are a leading global manufacturer and supplier of drying systems to the veneer and building materials industries with over 400 dryer installations worldwide. Grenzobach's new Wood Fiber Insulation Board line produces materials in densities of 3 to 10 lbs. per cubic foot. Our veneer product line includes dryer infed and outfeed systems, jet and longitudinal dryers, and color veneer grading and stacking systems. Grenzobach has completed extensive rebuilds on all makes and models of veneer and gypsum dryers. Complete parts and service support is also available.

Contact: Charles Shurtliff - Sales Manager -

Building Materials Division

Phone: 678-488-8369

10 Herring Road

Newnan, GA 30265

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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 PRESSGUARD 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

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Sturgeon Industrial Park

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#### H.B. Fuller

H.B. Fuller Plywood Adhesive Coated Solutions has specialists for all your composing needs. Gain improved wood recovery and reduced unit costs at the composer through a package of specialized tapes and strings, patented adhesive application equipment, process improvement tools and expert service for both green and dry veneer process.

Contact: Daniel Gonzalez - Senior Technical

Sales Manager

Phone: 318-349-4081

417 NW 136th Street

Vancouver, WA 98685

daniel.gonzalez@hbfuller.com

www.hbfuller.com



### Henkel

Henkel is the world's largest Adhesive company, and LOC-TITE PURBOND offers advanced chemistry, ecologically compliant 1 and 2 component structural wood adhesives. LOC-TITE PURBOND is a world leader in Polyurethane and Polyurethane Hybrid adhesives, 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 press. 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 traditional wood bonding and innovations of the future.

Contact: Chris Whelan - Business Development Manager

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www.purbond.com



### 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 more than 50 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, particleboard, oriented strandboard, medium density fiberboard, structural beams, furniture, mouldings and millwork.

Contact: Dale Leeper - PF Technology Manager

Phone: 936-829-8054

100 West Borden Drive

Diboll, TX 75941

dale.leeper@hexion.com

www.hexion.com

### The HT Group

The HT Group provides nationwide recruiting and staffing services providing access to the nation's premier technical, professional, management, and executive talent. We work extensively in building products, forest products, and consumer goods.

Contact: Craig Patterson - Managing Partner

Phone: 512-345-9300

7718 Wood Hollow Drive, Suite 200

Austin, TX 78731

craig.patterson@thehtgroup.com

www.thehtgroup.com



### Hunt Guillot & Associates LLC

Hunt, Guillot & Associates, LLC (HGA) is a multi-disciplined 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: Jason McIntosh - Business Development Manager

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PO Box 580

Ruston, LA 71273

jmcintosh@hga-llc.com

www.hga-llc.com



Enriching lives through innovation

### Huntsman Polyurethanes

For approximately 30 years, Huntsman has been a global leader in the production of the 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 they are considered "exempt" under requirements of the California Air Resources Board (CARB) standards.

Contact: Sheila Patel - Industry Manager

Phone: 281-719-7539

8600 Gosling Road

The Woodlands, TX 77381

sheila\_patel@huntsman.com

www.huntsman.com



### IBC, International Bar Coding Systems & Consulting Inc.

IBC, International Bar Coding Systems & Consulting Inc. - An integrated manufacturer of the fastest individual piece WOOD PRODUCT specific printer applicator worldwide. For finished or in process units 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 our specialized Vendor Managed Inventory of consumables. We supply fully integrated data collection systems across North America. Manufacturing or distribution operations in BC, WA and TN. 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

1940 Barnes Street

Penticton, BC V2A 4C3 Canada

cpedersen@ibcworld.net

www.ibcworld.net

### Idemitsu Lubricants America Corporation

IDEMITSU/Idemitsu Lubricants America Corporation offers wood industry members a full line of lubricants including synthetic high-temperature chain oils, environmentally friendly gear and hydraulic oils as well as compressor lubricants. By using highly refined, hydro-cracked base oils Idemitsu Lubricants America Corporation can provide high quality blended lubricant products to meet your critical requirements. The customer-oriented philosophy of IDEMITSU is to develop products based on the customer's requirements. Professional Lubrication Engineers can assist in all facets of your lubrication project from problem analysis to product selection and from lubrication maintenance to development of customized lubricant-check systems.

Contact: Ryan Stanton - National Accounts Engineer

Phone: 248-455-1458

3000 Town Center, Suite 2820

Southfield, MI 48075

rstanton@ilacorp.com

www.ilacorp.com



### 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

PO Box 870949

Stone Mountain, GA 30087

andrew.jowett@imalpal.com

www.imalpal.com



### IMEAS Inc.

IMEAS is a world leader in surface finishing solutions, with over 3,000 machines operating worldwide. 2016 marked IMEAS's 50th 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, composite wood panels, decorative laminates, flooring and solid surface products, etc. IMEAS specializes in extra wide machines - 10' (3.2 meter) and cross-belt sanding for wood products.

Contact: Nathan Rutherford - President

Phone: 678-364-1900

1125 Commerce Drive, Suite 200

Peachtree City, GA 30269

imeas@imeas.net

www.imeasinc.com

## InterWrap

InterWrap® 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. InterWrap 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. InterWrap's global supply chain efficiency is achieved by our strategic manufacturing and distribution centers located throughout North America, Asia & Europe.

Contact: Drew Gagnier - Sr. Marketing Manager  
Phone: 778-945-2888  
1818 - 1177 West Hastings Street West  
Vancouver, BC V6E 2K3 Canada  
dgagnier@interwrap.com  
www.interwrap.com



## Itipack Systems

Established in the 1970's, the Group is a world leader in the manufacture and supply of equipment and systems. Its 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: Harry Scholtens - Sales Manager  
Phone: 905-333-3695 Ext. 224  
919 Zelco Drive  
Burlington, ON L7L 4Y2 Canada  
hscholtens@itipacksystems.com  
www.itipacksystems.com



## JAX, Inc.

JAX is a full-line lubricant manufacturer with expertise in compounding high-end synthetic and petroleum lubricants. With over 60 years of industry experience, JAX has earned its reputation as a leader in lubricant technology. JAX lubricants are compounded with the finest raw materials and additive chemistry in the industry. Formulation decisions are based upon performance and quality which ultimately lead to substantial, verifiable cost savings in terms of extended machine life, reduced downtime and increased production. Lubrication technology is a continually evolving science. Products that have worked in the past may not be sufficient to provide adequate lubrication in the future. In order

*(continued in next column)*

## JAX, Inc. (continued)

to meet the evolving needs of our customers we are constantly analyzing the JAX product line for opportunities to improve value. JAX is a Manufacturer and Global supplier of the highest quality LUBRICANTS for machinery and process.

Contact: Ted Schultz - Director OEM & Engineered Wood  
Phone: 800-782-0570 Ext. 307  
W134 N5373 Campbell Drive  
Menomonee Falls, WI 53051  
tjschultz@jax.com  
www.jax.com



## 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 SmartDISC Strand-ers, SmartRING Strand-ers, Rotary Debarkers and Conveying/Feeding equipment for the oriented strand board market. As a global leader in stranding technology, KADANT Carmanah holds an impressive 80% of this market share.

Contact: Carlos Vieira - Director, Capital Sales  
Phone: 604-299-3431  
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Surrey, BC V3S 5X7 Canada  
info.carmanah@kadant.com  
www.kadantcarmanah.com

## Kalesnikoff Lumber Co.

For over 75 years, Kalesnikoff Lumber has practiced sustainable forest management in the fertile Kootenay Wet-Belt region of British Columbia, Canada. Our mill produces some of the finest grain, highest quality softwood lumber products in the world. We offer over 1,000 different products from lamstock to dimensional timbers, clears and commons; we do standard runs, in addition to, specialty custom cuts. Kalesnikoff produces lamstock in Douglas Fir, Western Larch and SPF. Our lamstock program has been perfected over 25 years, and we are one of only a few mills to cut and manufacture specifically for lamstock. We are currently serving Canadian, US & Global Markets. FSC products are available.

Contact: Griffin Augustin - Sales Manager  
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PO Box 3000  
Castlegar, BC V1N 3L8 Canada  
griffina@kalesnikoff.com  
www.kalesnikoff.com



## Kimwood Corporation

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: Mike Simmons - Vice President  
Sales & Service  
Phone: 800-942-4401  
77684 Highway 99 South  
Cottage Grove, OR 97424  
msimmons@kimwood.com  
www.kimwood.com

## KOCH KNIGHT LLC

### Koch Knight, LLC

A domestic manufacturer and global leader in RTO ceramic media that can be used in 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 also used for OSB Dryer applications and the wood products industry.

Contact: Skip Anderson - Business Development Manager - Environmental  
Phone: 330-488-1651 Ext. 269  
5385 Orchard View Drive SE  
East Canton, OH 44730  
james.anderson@kochknight.com  
www.kochknight.com



## KTC Panelboard Engineering

Complete engineering services for the engineered wood products industry.

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



## LIMAB

LIMAB supplies non-contact laser measuring systems for composite panels and engineered wood products, including thickness and squareness measurements, and blow detections on panels.

Contact: Jens Svensson - President  
Phone: 704-321-0760  
9301-B Monroe Road  
Charlotte, NC 28270  
jens.svensson@limab.com  
www.limab.com

## Lonza Wood Protection, Inc.

Lonza Wood Protection is a global leader in the development and supply of innovative technologies for the treatment of wood. Lonza's technologies improve the performance of wood products, making them resistant to termites, fungi, fire, mold and moisture. Lonza manufactures and supplies many of the highest quality and well-known wood protection products, including its Wolman® line of preservatives, Sillbor® borate treatments, Chemonite® ACZA industrial preservatives, Dricon® fire retardants, FrameGuard® and Wolman® non-pressure mold inhibition and preservative products and the Diacon Mycostat® and Antiblu® antisapstain lines. Together with its New Zealand-based affiliate, Zelam Ltd, Lonza offers formulations specifically designed for the treatment of engineered wood. With global operations and an expansive offering of services and expertise, Lonza is dedicated to the success of its customers.

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Phone: 678-627-2280  
360 Interstate North Parkway, Suite 450  
Atlanta, GA 30339  
jr.virnich@lonza.com  
www.wolmanizedwood.com

## Lundberg

Lundberg 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 and GeoCat Oxidizers and GeoWet Scrubbers. Geoenergy systems have provided environmental compliance to the engineered wood products industry on wood dryers, press vents and boilers since 1984.

Contact: Jaymie Deemer - Market Development Manager

Phone: 425-283-5070

13201 Bel-Red Road

Bellevue, WA 98005

jaymie.deemer@lundberg-us.com

www.lundberg-us.com



Matthews Marking Systems

## 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: Donna Meade - Strategic Initiatives Manager

Phone: 800-775-7775

6515 Penn Avenue

Pittsburgh, PA 15206

info@matw.com

www.matthewsmarking.com

# McLube

## McLube Division, McGee Industries, Inc.

McGee Industries' McLube Division has manufactured high-technology mold releases agents and industrial lubricants since 1954, including water/solvent-based release agents for the rubber, plastics, composite, wood fiber composite/panel pressing, concrete and stone veneer and polyurethane markets, antitack coatings for hundreds of industrial applications and a full line of Moly lubricants (Moly Lube), PTFE lubricants oils, greases and dry film aerosol and bulk containers lubricants. Lines includes antistick coatings, rubber lubricants, antiseize compounds, cleaners and protective coatings. Through six decades of innovation, we've earned an international reputation for performance and worldwide industry recognition as expert problem solvers. Specialists in assessing complex processes, unusual conditions and developing working solutions.

Contacts:

Evan Silo - Technical Representative

Glenn Dublisky - Sr. Technical Representative

Phone: 1-800-2 McLube (800-262-5823)

PO Box 2425

Aston, PA 19014-0425

info@mcLube.com

www.mcLube.com

# meinai

## 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 yield, and extremely close thickness tolerance. The lathe is part of an automatic veneer peeling line featuring automatic stacking and green composing of random strips into full veneer sheets 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: Etsuro Tame - Sales Director

U.S. Representative: Merritt Machinery, LLC

Contact: Anna McCann, President

Phone: 716-434-5558

10 Simonds Street

Lockport, NY 14094

amccann@merrittmachinery.com

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

575 Ninth Street SE, Suite 200

Minneapolis, MN 55414

info@mereen-johnson.com

www.mereen-johnson.com



## Metriguard, Inc.

High-speed Metriguard veneer graders operate in LVL and structural plywood mills worldwide. Laboratories depend on Metriguard Panel Bending & Performance Testers to evaluate structural panels. The new Model 840 tests OSB used as I-joist web stock. For MSR/MEL lumber producers, Metriguard offers the Model 7200 for longitudinal installations and the Sonic Lumber Grader for transverse installation - both are compatible with scanners. The Model 312 Bending Proof Tester is a standard in MSR QC labs. With over 40 years in the engineered wood products business, Metriguard has the knowledge and equipment for grading and testing structural veneer, panels and lumber.

Contact: Daniel Uskoski - Vice-President of Sales

Phone: 509-332-7526

PO Box 399

Pullman, WA 99163

duskoski@metriguard.com

www.metriguard.com



## Mid-South Engineering Company

Mid-South Engineering is a full service, consulting engineering firm that provides a broad range of professional engineering services. Our multi-disciplined staff has served government as well as industrial and commercial clients with a particular expertise within the forest products industry. Mid-South has offices in Hot Springs, Arkansas; Cary, North Carolina; and Millinocket, Maine. Established in 1969, MSECO has since grown steadily in knowledge and experience. Our services include Engineering, Project Development, Project Management, and Construction Services.

Contact: Scott Stamey - Vice President

Phone: 919-481-1084

200 Mackenon Drive

Cary, NC 27511

sstamey@mseco.com

www.mseco.com



## Mill Machinery LLC

Mill Machinery is a provider of new and used machinery to the veneer and panel industries. Mill Machinery's inventory of used production machinery includes veneer lathes, 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 systems, press platens, hydraulic units, lay-up line flying saws and side shift accumulators, panel feeders, stackers and conveyors.

Contact: Tim Peterson - President

Phone: 503-720-0540

31670 South Highway 213

Molalla, OR 97038

tim@millmachinery.net

www.millmachinery.net



### NESTEC, Inc.

NESTEC, Inc. is a turnkey provider of thermal oxidation systems for the wood products industry including regenerative and regenerative catalytic technologies, process duct design, system upgrades, energy audits, inspections and parts. Our staff of engineers has over 30 years of experience in the field of thermal oxidation and has participated in solving air emissions problems for the wood products industry since the early 1990's. Whether you need a new air pollution control system or require upgrades and improvements to an existing system, NESTEC, Inc. is your best resource to ensure a successful project.  
 Contact: James L. Nester - President  
 Phone: 610-323-7670  
 PO Box 568  
 Douglassville, PA 19518  
 jnester@nestecinc.com  
 www.nestecinc.com

### Nicholson Manufacturing Ltd.

Industry Leader in ring debarking technology since 1948.  
 Contacts: James Bowden, P. Eng. - NCVS Manager  
 Ron Hait - NA Capital Sales Manager  
 Phone: 250-656-3131  
 PO Box 2128  
 Sidney, BC V8L 3S6 Canada  
 forestsales@nmbc.com  
 www.debarking.com



### Nondestructive Inspection Service

Nondestructive Inspection Service (N.I.S.) was incorporated in 1960. Since that time we have taken preventative maintenance to higher levels of predictive maintenance while saving our customers costly unpredictable down time, on all types of process equipment along the entire production line. We are the established leader in applying our knowledge of NDT and perfecting inspection procedures to exceed industry standards. In the case of wood processing and construction board plants we have developed, tested and implemented significant innovations on the standard inspection techniques to shrink costly inspection downtime and overcome the issues of inspecting difficult-to-reach parts of the equipment.  
 Contact: Ed Hauldren - VP of Operations  
 Phone: 304-562-6835  
 PO Box 220  
 Hurricane, WV 25526  
 ed@nisfordnt.com  
 Contacts:  
 John Sanders  
 Brad Carr - President

### OCI Melamine

OCI Melamine (formerly DSM Melamine) is a melamine crystal supplier for use in resins with formaldehyde that are used for (among others) OSB, plywood, and other panels.  
 Contacts:  
 Lee Miller - Application Support  
 Rhonda Pizzolato - Customer Service  
 Phone: 800-615-8242  
 c/o Advanced Louisiana Logistics (ALL)  
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 Baton Rouge, LA 70802  
 lee.miller@ocinitrogen.com  
 rhonda.pizzolato@ocimelamine-all.com  
 www.ocimelamine.com

### Pallmann Industries, Inc.

For more than 100 years, Pallmann has designed and built size reduction machinery. Specializing in high-capacity, high-performance stranders, flakers, refiners and mill utilized by the engineered panel board industries.  
 Contact: Rolf Gren - General Manager  
 Phone: 973-471-1450  
 820 Bloomfield Avenue  
 Clifton, NJ 07012  
 info@pallmannindustries.com  
 www.pallmann.eu

### Panel Machinery & Controls, LLC

At Panel Machinery & Controls, our focus is to provide the most up to date and trouble free Equipment design, Servo Motion Control and Automation systems for the Engineered Wood Products Industry. Our engineering staff has years of experience in quality-designed and field proven equipment and controls for the Plywood Industry. We have service technicians experienced with hydraulic & electrical motion control, capable of on-site trouble shooting and programming of all brands of PLC's and motion controllers. We are a United Laboratories 508A certified panel shop experienced in custom panel design and fabrication.  
 Contact: Roger Daniels - President  
 Phone: 503-744-0830  
 5422 SE International Way  
 Milwaukie, OR 97222  
 roger@panelmachinerycontrols.com  
 www.panelmachinerycontrols.com



### Panel World Magazine / Hatton-Brown Publishers, Inc.

Panel World publishes six issues per year for a 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  
 PO Box 2268  
 Montgomery, AL 36102  
 rich@hattonbrown.com  
 www.panelworldmag.com



### Paneltech

Paneltech is a young and growing, forward-thinking company comprised of people who have common values and share a common goal...providing environmentally responsible leadership in manufacturing the highest quality green 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 products end use.  
 Contact: Ron Iff - General Manager  
 Phone: 360-538-1480  
 2999 John Stevens Way  
 Hoquiam, WA 98550  
 roniff@tecline.com  
 www.paneltechintl.com



### Permapost

Permapost provides custom pressure treating solutions for engineered wood products used throughout the U.S.A. and Asia.  
 Contact: David Bond - Chief Operations Officer  
 Phone: 503-648-4156  
 PO Box 100  
 Hillsboro, OR 97123  
 david@permapost.com  
 www.permapost.com

### PFS - HAWE Hydraulik

HAWE Hydraulik is a well-respected, German based company that recently acquired Pacific Fluid Systems, LLC. HAWE's primary business is providing high quality hydraulic components through modular design and energy efficient solutions. With the acquisition of PFS, HAWE has increased its offerings to provide complete linear hydraulic and electro-mechanical motion control systems. This partnership offers a full range of products from custom hydraulic manifolds to complete hydraulic press conversions.  
 Contact: Dan Wilson - Industrial Group Manager  
 Phone: 503-222-3295  
 12990 SE Highway 212  
 Clackamas, OR 97015  
 d.wilson@hawehydraulics.com  
 www.hawe.com



### Player Design Inc.

PDI offers complete drying island packages including equipment supply, design and installation. PDI Drying Systems are designed to meet the dryer system needs of today's manufacturers. The result is innovative equipment that provides cost-effective and environmentally compliant performance, responsive to even the most stringent guidelines. Our customized solutions use advanced technology to ensure a consistent, quality finished product, giving our customers a competitive edge.  
 Contact: Tyler Player - President  
 Phone: 207-764-6811  
 29 Second Street, Suite 2  
 Presque Isle, ME 04769  
 tyler@playerdesign.com  
 www.playerdesign.net



### Process Combustion Corporation

Incorporated in 1969 and based in Pittsburgh, Pennsylvania, USA, Process Combustion Corporation (PCC) designs, supplies and services combustion, heat transfer and pollution control systems. PCC provides solutions to the industry's air pollution control needs via Thermal Oxidation and Bio-Oxidation System Technologies. Our 45+ year commitment to industry ensures customer satisfaction. • Our principal industries and applications include: Chemical, Petrochemical and Petroleum; Automotive; Sulfur Recovery; Resins; Plastics; Chlorinated Hydrocarbons; Rubber; Carbon; Pharmaceutical; Pulp & Paper; Building Products; Fertilizers and Pesticides. • PCC is a global company with additional office locations in Beijing, China and Aylesbury, England.  
 Contact: John Dormire - President  
 Phone: 412-655-0955  
 5460 Horning Road  
 Pittsburgh, PA 15236  
 pcc@pcc-sterling.com  
 www.pcc-sterling.com



### Raute

Raute is Your Partner in Performance. Global expertise in wood products technology and innovation driven, Raute continually leads the market in developing cutting-edge advancements in the production of plywood, LVL, and engineered wood solutions. Raute provides profitable solutions for large mill-wide projects as well as individual process lines, line modernizations, and equipment upgrades  
 Contact: Martin Murphy - Senior Vice President  
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 1633 Cliveden Avenue  
 Delta, BC V3M 6V5 Canada  
 martin.murphy@raute.com  
 www.raute.com



### REA JET

Because REA JET knows that real demands need real solutions, we continue to be a global leader of coding and marking equipment for the building materials industry. German engineered, our technology has been consistently designed and developed to withstand the demands of harsh production environments. Our extensive line of technology includes Large Character Ink Jet Printers (DOD), zero maintenance High Resolution Ink Jet (HP) printers as well as Laser and Spray Mark systems. Contact REA JET today to learn more about our products, capabilities and service offerings.  
 Contact: Nicole Richie - Marketing Manager  
 Phone: 404-310-9055  
 7307 Young Drive  
 Walton Hills, OH 44146  
 nrchie@reajetus.com  
 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 and packaging requirements. Samuel's product line includes steel and plastic strapping, pneumatic and manual hand tools, seals, edge protection, stretchwrap, product identification equipment and 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.  
 Contact: Dave Gagnon - Forest Industry Manager  
 Phone: 630-783-8900  
 204 Meadow Ridge Court  
 Canton, GA 30115-6623  
 dgagnon@samuelstrapping.com  
 www.samuelstrapping.com



### SASCO Chemical Group Inc.

Researcher and manufacturer of release agents for the engineered wood industry.  
 Contacts:  
 Bill Holbrook - Director of Sales  
 bholbrook@sascochemical.com  
 706-766-6888  
 Lance Gallagher - Technical Sales Rep  
 lgallagher@sascochemical.com  
 229-435-8394  
 827 Pine Avenue  
 Albany, GA 31701  
 www.sascochemical.com

### Siempelkamp L.P.

The Siempelkamp Group of Companies are world leaders in the supply, installation and startup of equipment and complete production plants for the manufacture of wood based panel products, energy systems, dryer systems, panel handling and finishing systems.  
 Contact: Dirk Koltze - Executive Vice President  
 Phone: 704-522-0234  
 3506 High Hamptons Drive  
 Charlotte, NC 28210  
 d.koltze@siempelkamp-usa.com  
 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: Claude Gregory - Forest Products Industry Manager  
 Phone: 877-744-3673  
 2107 Chester Ridge Drive, Suite 103  
 High Point, NC 27262  
 cgregory@signode.com  
 www.signode.com



Dust control innovations™

### SonicAire

SonicAire is a progressive air-engineering firm that eliminates the problems with combustible dust through its line of SonicAire® fans. All the fans apply the new, innovative BarrierAire™ technology system, which delivers enterprise-wide continuous clean through robotic engineering design. All fans clean by using high velocity and high mass airflow to create an overhead barrier preventing combustible particles from accumulating on steel structures, pipes, ducts and process equipment. Our engineers have customized different fans for every industry since fugitive particles vary by the materials processed. Take advantage of our Try and Buy.  
 Contacts:  
 John Sanders  
 Brad Carr - President  
 Phone: 336-712-2437  
 3831 Kimwell Drive  
 Winston-Salem, NC 27103  
 jsanders@sonicaire.com  
 www.sonicaire.com



### Spar-Tek Industries

Spar-Tek 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. Spar-Tek'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 Spar-Tek. 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: Rodney Bell - General Manager  
 Phone: 503-283-4749  
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 Portland, OR 97217  
 rjb@spartek.com  
 www.spar-tek.com



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Phone: 630-517-1283  
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brian.valley@spray.com  
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Phone: 704-522-9435  
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Nashville, TN 37219  
mlarke@stratachemsolutions.com  
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Contact: Roy Nott - President  
Phone: 360-827-0994  
2102 Milwaukee Way  
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roy.nott@surfactor.com  
www.surfactor.com



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Phone: 866-800-7411  
PO Box 228  
Gold Hill, OR 97525  
sweed@sweed.com  
www.sweed.com

### Taihei Machinery Works Ltd.

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Contact: Daisuke Ishida - Sales Person  
Phone: +81-568-73-6431  
955-8 Miyamae  
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Homaki, Aich 4850084 Japan  
d\_ishida@taihei-ss.co.jp  
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70 Lancing Drive  
Hamilton, ON L8W 3A1 Canada  
jvanspronsen@tebulo-na.com  
www.tebulo-na.com



### TIP - The Industry Pivot Ltd.

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Contact: Amnon Shoshani - CEO  
Phone: 972-4-6377757  
7 Chalamish Street  
Caesarea, Israel 3088900  
amnon@the-industry-pivot.com  
USA Contact: Peter Schneider - Sales Director  
Phone: 888-339-4359  
411 Waverly Oaks Road #331  
Waltham, MA 02452  
EMAIL: peter@the-industry-pivot.com  
www.the-industry-pivot.com



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Contact: Andrew Johnson - Vice President  
Phone: 425-771-1190 Ext. 128  
20818 - 4th Avenue West, Suite 201  
Lynnwood, WA 98036-7709  
ajohnson@tsi-inc.net  
www.tsi-inc.net

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Contact: Anne Brummett - Sr. Business Manager - Panel Products  
Phone: 402-544-5209  
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Omaha, NE 68179  
ambrummett@up.com  
www.up.com

## University of Tennessee, Center for Renewable Carbon

The Center for Renewable Carbon is a state-of-art 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  
2506 Jacob Drive  
Knoxville, TN 37996-4570  
tmyoung1@utk.edu  
www.spc4lean.com

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Contact: Mark Manning - Global Manager, Preservation  
Phone: 303-713-5228  
8051 East Maplewood Avenue  
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mark.manning@riotinto.com  
www.borax.com

# USNR

## USNR

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Contact: Tim Fisher - Veneer/Panel Business Development  
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tim.fisher@usnr.com  
www.usnr.com

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Contact: Nyla Vogel - Sales Manager  
Phone: 814-739-2211  
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nvogel@venangomachine.com  
www.venangomachine.com

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Contact: Dane Floyd - President and CEO  
Phone: 317-346-0711  
50 Washington Street, 3B  
Columbus, IN 47201  
dane@veneerservices.com  
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Phone: 610-796-1606  
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jacob@yantaiamericas.com



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crondahl@westmill.com  
www.westmill.com



### Willamette Valley Company

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. Willamette also makes many fillers and extenders for wood adhesives and plywood glues. Pretec, the company's equipment solutions division, specializes in the design and manufacture of advanced fluid systems and the integration of robotic application systems.

Contact: Tony Vuksich - Vice President  
Phone: 541-484-9621  
1075 Arrowsmith  
Eugene, OR 97402  
tony.vuksich@wilvaco.com  
www.wilvaco.com

### Zelam Ltd.

Zelam Ltd. is an innovative research and development based specialty chemical company supplying protectants into the Engineered Wood Products Industry. Zelam develops preservative systems to control decay, mold and insects in wood products. One key area of expertise is in the protection of engineered wood via glue-line application.

Contact: André Siraa - Technical/Research Manager  
Phone: +64 6 755 9234  
PO Box 7142  
New Plymouth 4341 New Zealand  
andre.siraa@lonza.com  
www.zelam.com

### WPS Industries / Eagle Project Services

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Contact: Doug Steed - VP Business Development  
Phone: 318-812-2800  
228 Industrial Street  
West Monroe, LA 71292  
dsteed@wpsindustries.com  
www.wpsindustries.com



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**REGISTRATION OPENS April 10th**  
Early Bird Registration Ends August 22  
Info Fair 2017: October 28 - 30  
Hyatt Regency Beach Resort & Spa  
in Huntington Beach, California

For more information:  
Melinda Lilley: mlilley@engineeredwood.org



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# BEHIND THE SCENES

*Plywood and OSB Used Extensively in Upholstered Furniture*

by Sheila Cain

Market Focus:

## INDUSTRIAL APPLICATIONS

While a significant amount of APA – The Engineered Wood Association member-produced OSB and plywood panels are used in the walls, floors and roofs of new homes and multifamily dwellings, much is used in a way many of us never see: as an integral part of upholstered furniture.

Such panels are used to form the frame of sofas, loveseats, couches and similar types of household furniture, then they are covered by foam, padding and upholstery. Heavier pieces – especially those with moving parts or motors such as recliners – typically use plywood, while OSB panels are popular in many other pieces.

The use of plywood and OSB in furniture represents approximately three percent of the North

American market, according to a 2013 APA

research report. Although the number may seem small, the use of frame-grade wood structural panels in furniture has been growing in popularity as manufacturers have realized that their use achieves higher material yields and reduced assembly costs when compared

to solid wood stock such as hardwood lumber. A recent APA research report shows that manufacturers have gone from a 30 to 40 percent yield using hardwood lumber to 90 percent yield using plywood or OSB.

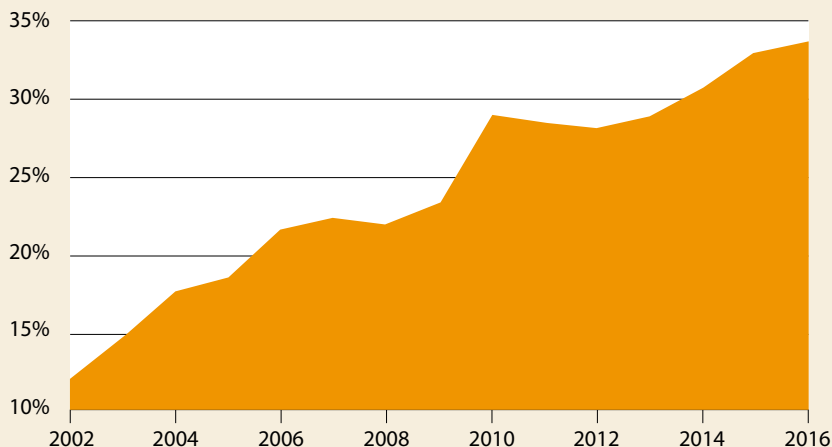
APA categorizes upholstered furniture as an “industrial end-use” application, joined (to a smaller degree) by other manufactured products such as cabinets, crates, pallets, and truck and trailer liners.

### Imports on the rise

Of course, not all furniture sold in the U.S. uses North American-produced plywood and OSB. Imported furniture using foreign-produced engineered wood products has long penetrated the U.S. market, and the numbers are on the rise. In 2002, imports accounted for 12 percent of furniture sales in the U.S. By 2010, that number had risen to almost 30 percent. Today, imports make up around 34 percent of all the furniture sold in the country (see Figure 1). China is by far the biggest exporter (see Figures 2 and 3). Of the nearly \$5 billion in furniture coming

Figure 1

### Import Share of U.S. Upholstered Furniture Sales



Source: US Trade, Census Bureau, BLS

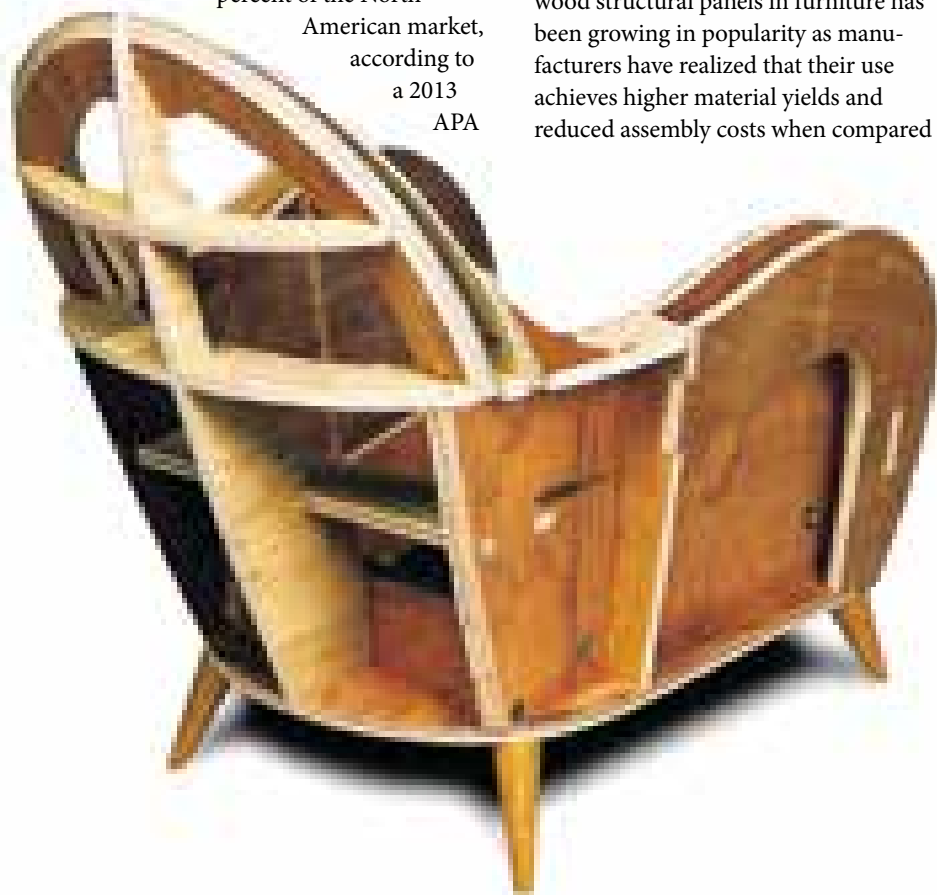


Figure 2

### U.S. Upholstered Furniture Imports, by Country (BILLIONS)

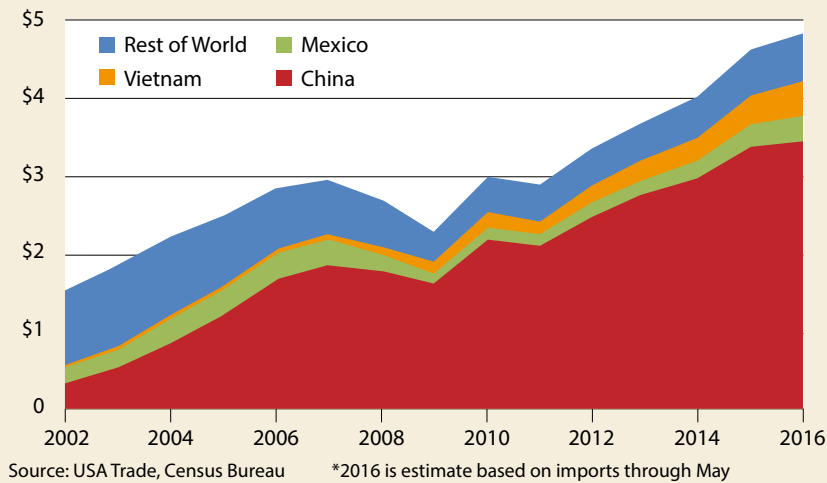
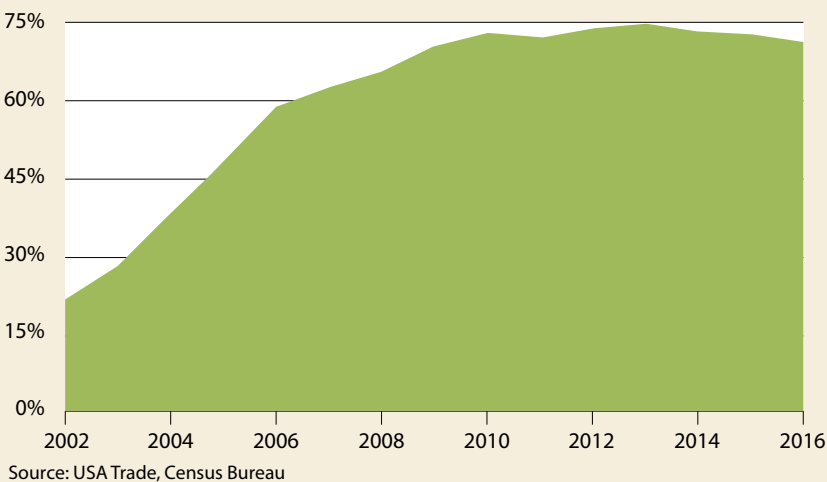


Figure 3

### China's Share of U.S. Imports of Upholstered Furniture



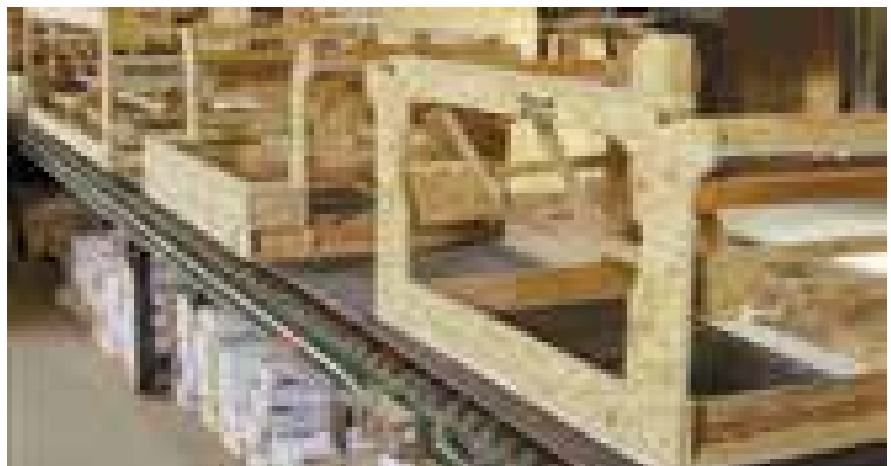
### EWTA Contributes to Industrial Market Study

In 2015 and 2016, EWTA contributed a total of \$20,000 in financial support towards APA's ongoing studies of the industrial market. Funding helped APA update and conduct more in-depth studies of wood market usage trends in these markets. One recently published study that benefitted from EWTA's contribution is the Trailer and Vehicle Market Study, which focuses on the use of wood products in the production of trailers, busses and other land transportation vehicles. The study was a strategic initiative of the industrial section of the APA Strategic Marketing Plan. The report is available free to EWTA members and is also available to APA members on the Members Only section of the APA website under "Market Research Reports."

EWTA funds were also used to study the wooden cabinet industry, non-upholstered wood furniture and office furniture. The recently published report "Wood-based Cabinet Market Study" estimates total wood product usage and the potential for APA member products to gain share in the cabinet production process. A similar report for non-upholstered wood furniture and office furniture will follow at the end of April. Both reports will be available free to EWTA and APA members as well.

into the U.S. from across the world, close to 70 percent comes from China alone.

Imported cabinets – kitchen and otherwise – make up less than 10 percent of the share of what is sold in the U.S., but that's more than twice the four percent share it held in 2006 (see Figures 4 and 5 on next page). Again, China is the major player in this market, exporting close to 70 percent of all U.S. cabinet imports. While the majority of cabinets (both imported and domestically produced) use particleboard and MDF in their construction, many do use plywood.



## Safety concern

The use of non-domestically produced plywood and OSB in imports is cause for some concern for consumer safety. Here at home, APA-trademarked frame-grade panels meeting U.S. Product Standards PS-1 and PS-2 have such low formaldehyde emission levels that they easily meet or are exempt from the California CARB regulations and the soon-to-be-implemented EPA standard applicable to composite wood.

With the new U.S. administration, it remains to be seen how imports will be handled. Early campaign rhetoric touched on imposing tariffs on goods coming into the U.S. from countries such as Mexico and China. If such talk becomes reality and tariffs trickle down to furniture, the industry may see some shift.

## Housing connection

The volatility of the furniture and cabinet markets are closely tied to the housing market. This is understandable, as people typically buy new furniture when they move into a new home. Single-family housing starts have been slowly climbing back up each year from their lowest point in 2009. In 2016, housing starts in the U.S. totaled 1.174 million, up 5.6 percent

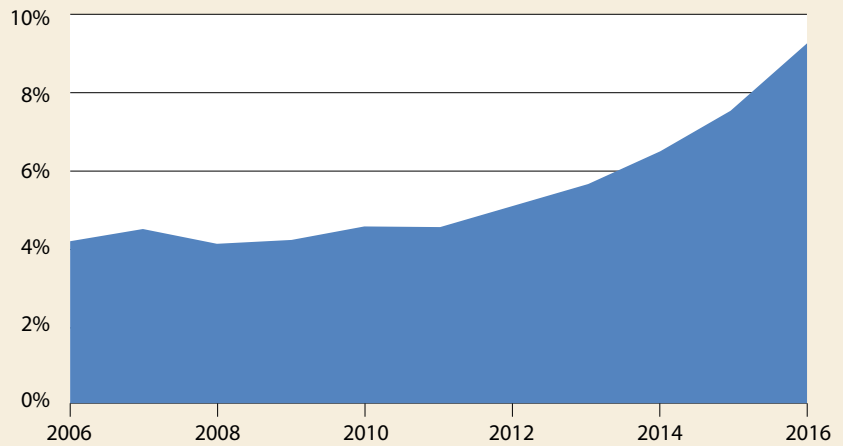
### APA's Support of Industrial Markets

APA—The Engineered Wood Association has long supported the use of North American frame-grade wood structural panels in furniture and cabinets. **PerformancePanels.com** is APA's online resource devoted to these industrial markets and provides plywood and OSB product and sourcing information, technical data, and other resources regarding the many non-construction uses of wood structural panels.

APA industry experts also **author informational articles and technical sheets** about APA-member-produced plywood for industrial uses. These articles are published in trade and mainstream publications aimed towards industrial manufacturers and fabricators throughout North America and abroad.

Figure 4

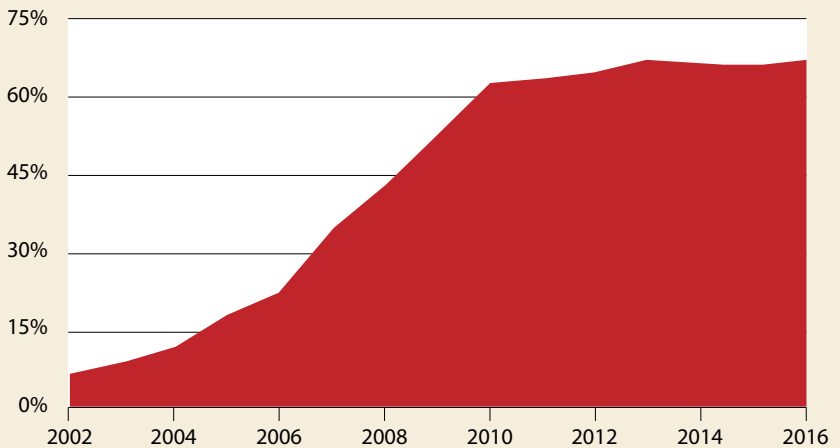
### Import Share of Cabinet Sales



Source: Census Bureau

Figure 5

### China's Share of Cabinet Imports

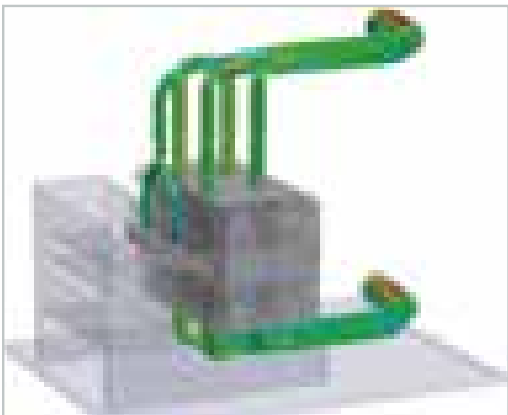
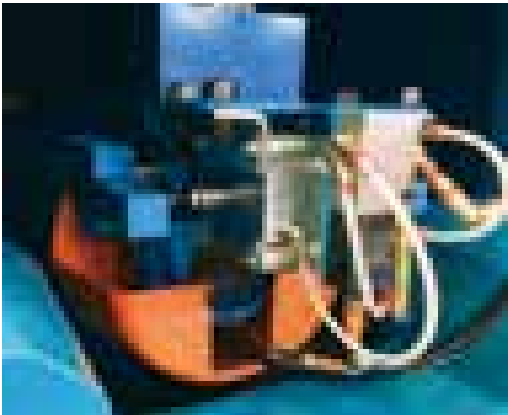
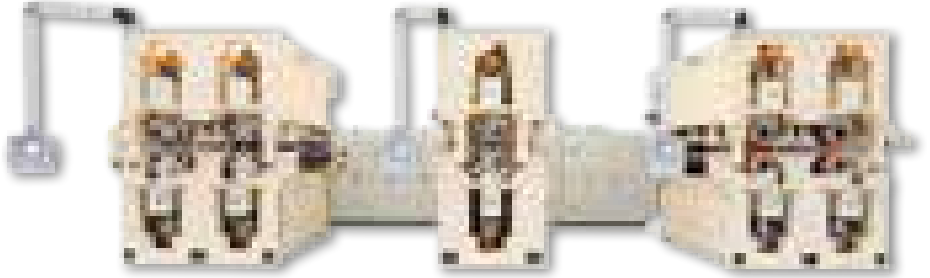


Source: USA Trade, Census Bureau





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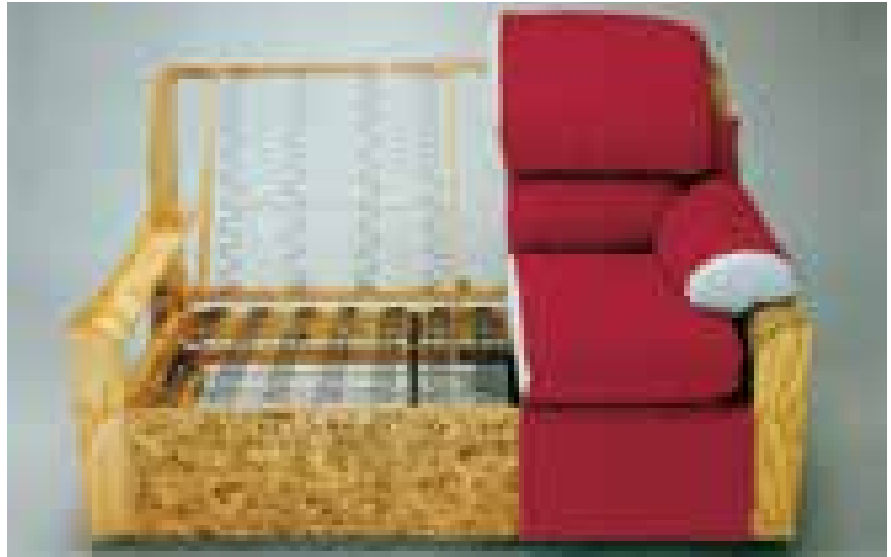
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from 2015. (Starts for North America were 1.372 million in 2016.)

Economists expect more slow and steady growth of residential construction and getting back to 1.5 million starts by the end of the decade.

“The return of household growth to trend levels is encouraging,” said Joe Elling, APA’s director of market research. “The furniture and cabinet markets should follow.” 

*Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.*



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# INFO FAIR 2016

*EWTA Members Gather for Annual Supplier Exhibition*

Engineered Wood Technology Association members gathered Nov. 5-7 for the association's annual supplier exhibition. Held annually in conjunction with APA's Annual Meeting, Info Fair is an opportunity for members

to share ideas and network with others in the engineered wood industry. This year, 80 member companies from around the world exhibited at the event, which was held at the Hyatt Regency Coconut Point Resort and Spa in Bonita Springs, Fla.

In addition to Info Fair, the extended weekend also provides an opportunity for both EWTA and APA members to attend APA-sponsored workshops, participate in roundtable discussions and listen to presentations about association activities.

*Continued page 50*

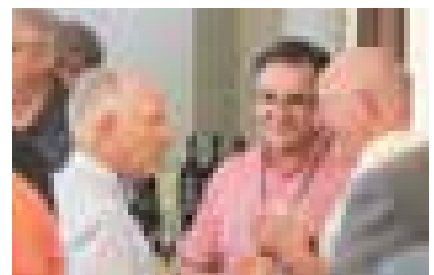


EWTA's Info Fair supplier exhibition featured booths from 80 member companies.





EWTA members posed for the association's annual group photo.



Continued from page 48

Members also took part in numerous receptions, luncheons and sporting competitions, including the annual Mike St. John Memorial golf tournament, cripple coot shoot and Ole Sorenson Memorial Tennis Tournament.



### Next Up: Info Fair 2017

Info Fair 2017 moves to the west coast this year. The supplier exhibition will be held Oct. 28-31 at the Hyatt Regency Resort & Spa in Huntington Beach, Calif. Registration opens April 10. For information, visit [www.engineeredwood.org](http://www.engineeredwood.org) and click on Events and Programs, or email coordinator Melinda Lilley at [mlilley@engineeredwood.org](mailto:mlilley@engineeredwood.org)



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- Extra recognition in the *Journal* member directory.

### Gold

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- Recognition in the *Engineered Wood Journal* on the gold sponsor page
- One entry into the Annual Meeting golf tournament or other recreational event
- Three issues EWTA Newsletter sponsorship

### Silver

#### *Get connected*

Includes:

- One issue of EWTA Newsletter sponsorship
- Company name included on silver banner at the APA Annual Meeting/EWTA Info Fair
- A silver listing in the *Engineered Wood Journal*

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- Supplier Awards
- Cripple Coot Shoot
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# SUPPLIER EXCELLENCE

*EWTA Members Recognized in Annual Supplier Awards Program*

*by Sheila Cain*

Three EWTA member companies were honored at the APA Annual Meeting in Bonita Springs, Fla., last November for excellence in the industry. The companies were winners in EWTA's annual Supplier Awards program. The two-pronged awards program includes the Supplier of the Year Award (three categories) and the

Innovation of the Year Award.

The Supplier of the Year Awards are based on the quality, service and delivery of EWTA member products and services to APA member companies. Supplier of the Year Awards are presented for each of EWTA's membership categories: Equipment and Tooling, Materials and Supplies, and Consulting and Services. The

Innovation of the Year Award recognizes a company providing a new technology, product or service that has been shown to reduce production costs, increase productivity, improve product quality, or in some other way provide a bottom line benefit to APA members.

The award winners are selected by votes of APA member representatives.



APA Board of Trustees Chairman Mark Luetters (far right) congratulates the winners of the 2016 EWTA Supplier of the Year Awards at the Chairman's Dinner during APA's Annual Meeting last November. From left: Rob McNicol, KADANT Carmanah Design (Equipment/Tooling Category); Terry Kerwood, EWTA; Rich Donnell, Panel World Magazine/Hatton Brown Publishers (Consulting/Services Category); and John Harrison, Willamette Valley Company (Materials/Suppliers Category).



Supplier of the Year award winners take home trophies for their hard work.

## WINNERS OF THE 2016 SUPPLIER OF THE YEAR AWARDS ARE:



### EQUIPMENT/TOOLING CATEGORY

#### **KADANT Carmanah Design**

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### MATERIALS/SUPPLIES CATEGORY

#### **Willamette Valley Company**

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. Willamette also makes many fillers and extenders for wood adhesives and plywood glues. Pretec, the company's equipment solutions division, specializes in the design and manufacture of advanced fluid systems and the integration of robotic application systems.



### CONSULTING/SERVICES CATEGORY

#### **Panel World Magazine/Hatton Brown Publishers**

*Panel World* publishes six issues per year for a 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).

## THE WINNER OF THE 2016 INNOVATION OF THE YEAR AWARDS IS:

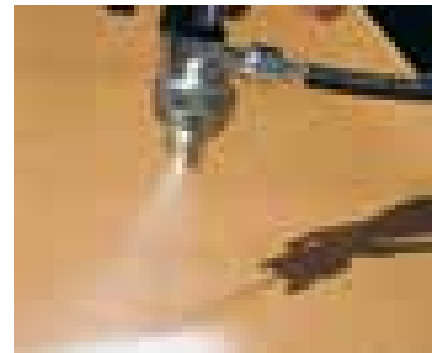


#### **Willamette Valley Company: Wil-Spray 500 adhesive**

Wil-Spray 500 is a water-based, odorless spray adhesive eliminating the need for staples/hot melt to affix overlays to veneer in the matching process. A superior bond between the overlay and veneer is achieved with a larger bond area reducing overlay damage during layup process.

It has enabled automation of the matching process, reducing labor and eliminating strenuous actions.

Customers have quantified increased production, reduced fall down, and reduced product cost associated with this product. Automation has been developed for this process through the use of spray guns and automatic spray systems.



## EWTA Adds New Members To Advisory Committee

At its fall meeting in Bonita Springs, Fla., the EWTA Advisory Committee voted to add three new members to the committee. Dan Uskoski (Metriguard) and Dale Leeper (Hexion),

both formerly at-large members, joined the committee as regular members. Mike Crondahl (Westmill) was added as a new regular member. Three other members replaced outgoing members.

From Weyerhaeuser, Rick Nelson replaced Jon Rashleigh; from Grenzebach, Charles Shurtliff replaced Don MacHarg; and from Arclin, James Slay replaced Blair Wilding.

### Info Fair Breaks Sponsorship Record

This year's Info Fair in Bonita Springs featured the highest number of paid sponsors in the history of the supplier exhibition. Sixty out of 80 companies who exhibited also sponsored the event.

Twelve companies were Platinum sponsors: BRUKS Rockwood, Chem-Trend LP, CMA engineering Inc., COSTA Sanders LLC, Huntsman Polyurethanes, SASCO Chemical Group Inc., Signode Packaging Systems, Stratachem Solutions Group LP, Sweed Machinery Inc.,

USNR, Veneer Services LLC, and Westmill Industries USA Corp. Seventeen companies were Gold sponsors and 30 provided sponsorships at the Silver level. A complete list of exhibitors and meeting sponsors can be found on the EWTA web site. (<http://www.engineeredwood.org/info-fair>). The next Info Fair supplier exhibition is Oct. 28-30, 2017, at the Hyatt Regency Huntington Beach Resort and Spa in Huntington Beach, Calif.

### EWTA Allocates \$75,000 For APA Projects, Research

EWTA's Advisory Committee, at its fall meeting in Bonita Springs, Fla., voted to recommend an allocation of \$75,000 to fund three projects benefiting the engineered wood industry. The project proposals, presented by APA staff, included \$10,000 for a study on siding material usage trends, \$35,000 for research on a panel test frame to create harmonization with an existing flexure test system at the APA laboratory, and \$30,000 in funding for the Coalition for Fair Energy Codes (CFEC) that would promote adoption of key proposals to the 2018 International Energy Conservation Code. The recommendation was forwarded to the APA Board of Trustees as part of the overall EWTA budget for 2017.

### EWTA Advisory Committee Recommends 2017 Budget

The EWTA Advisory Committee finalized the association's 2017 budget during its meeting earlier this month in Bonita Springs, Fla. The budget is for income of \$446,000 and expenses of \$454,600, resulting in a year-end net deficit of \$8,600 and cash reserves of \$138,960. The deficit is due to increased allocation of funds towards APA research projects in light

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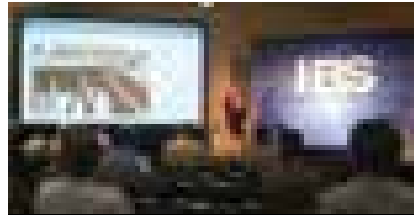
of ample cash reserves. The proposed budget was forwarded to the APA Board of Trustees for approval.

## APA Participates in Two Industry Shows

APA was the featured presenter at an International Builders Show (IBS) seminar at the annual event in Orlando last December. One hundred builders and designers attended the seminar, *Frequent Framing Faux Pas*. The presentation focused on how to avoid common framing problems that result in callbacks for builders and claims for manufacturers. While at the show, APA staff also participated in meetings of the NAHB Construction Codes and Standards Committee and met with editors of residential construction trade magazines.

APA also participated in the World of Concrete, which took place in Las Vegas in mid-January. The APA booth promoted APA-trademarked wood structural

panels in concrete formwork and the association's industrial market website, PerformancePanels.com.



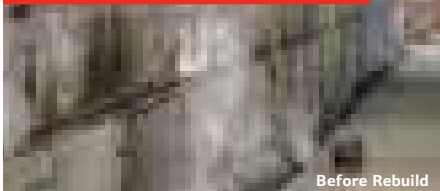
APA presented at the World of Concrete exhibition in Las Vegas, Nev.

## Continued Recovery in Construction Drives Higher Demand in 2016

Housing starts in North America in 2016 are estimated to have totaled 1.373 million units, up five percent from 2015, according to APA's Quarterly Production Report. Most encouraging was the nearly 10 percent increase in single-family starts in the U.S. Construction and refurbish-

ment of nonresidential buildings in the U.S. was up 10 percent, led by 25 percent increases in the lodging and office sectors. Apparent consumption of structural panels totaled 32.7 billion square feet in 2016, up 5.6 percent from 2015, while production totaled 32.6 billion square feet, up 5 percent. Plywood shipments to the U.S. and Canada from offshore sources, primarily South America, are estimated to have increased 43 percent to 1.07 billion square feet in 2016. With respect to engineered wood products, production of LVL and I-joists increased 6.8 percent and 6.3 percent in 2016, respectively. The I-joist production value suggests that I-joists maintained market share in raised floor applications, if not increasing slightly, in 2016 over 2015. Glulam output rose 2.7 percent for the year.

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## Van Voorhis Wins Bronson J. Lewis Award

Rodger Van Voorhis, co-owner and president of EWTA member company Ventek, Inc. (now part of USNR; see story below), was the recipient of APA's Bronson J. Lewis Award for leadership and industry contribution. The award was bestowed at the APA Annual Meeting Nov. 7, 2016, in Bonita Springs, Fla. Van Voorhis started his career in the forest products industry in 1974 as a part time draftsman for Morvue Electronics. Ventek, which specializes in the design, manufacture and installation of vision-based industrial controls and material handling systems for the veneer and plywood industry, was founded in 1991 and Van Voorhis was hired a year later.

Over the past 10 years, Ventek has received EWTA's Supplier of the Year



Photo courtesy of APA – The Engineered Wood Association

APA Chairman of the Board (previously vice-chairman) Jim Baskerville of Tolko Industries, Ltd., congratulates Rodger Van Voorhis, with wife Pam, on winning the Bronson J. Lewis Award.

Award six times and was the winner of the Innovation of the Year award in 2013. Van Voorhis and his wife Pam

recently celebrated their 36th wedding anniversary and have two children, Cody and McKenna.

### USNR Acquires Ventek

USNR last fall acquired the business of Ventek, Inc. Based in Eugene, Ore., Ventek has provided veneer scanning, grading, and handling systems for the plywood industry since its founding in 1991. The group's patented multi-point diverter has become the flagship product of Ventek's veneer handling product catalog.

"I am thrilled to join the USNR team, and I am excited to see what we can do with our veneer scanning, grading, and handling products as part of a larger organization," says Rodger Van Voorhis, former president of Ventek and one of its founders. "I think there are going to be a lot of great opportunities to learn from each other – such as taking our plywood technology and applying it to lumber

grading, and vice versa." Van Voorhis has joined USNR as director of sales for veneer systems.

"I am tremendously pleased that Rodger and the rest of the Ventek team have decided to join USNR to help us build the next generation of products for the plywood industry," says Alan Knokey, vice president responsible for USNR's plywood and panel business. "The people

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### New, Returning Members Join EWTA

Three companies – two new and one returning – have recently joined as members of EWTA, bringing the association’s member company count to 111.

- **Taihei Machinery Works LTD** of the Aichi prefecture of Japan is a specialized manufacturer of veneer and plywood machinery, including automatic knife grinding and honing machines, horizontal hot presses, veneer jet dryers and veneer stackers. Salesperson Daisuke Ishida can be reached at [d\\_ishida@taihei-ss.co.jp](mailto:d_ishida@taihei-ss.co.jp)
- **Union Pacific Railroad** of Omaha, Neb., is a railroad franchise that covers

23 states across the western two-thirds of the U.S. and ships a wide variety of raw materials and finished goods, including lumber and panel products. Anne Brummett, senior business manager for panel products, can be reached at [ambrummett@up.com](mailto:ambrummett@up.com). UP is a returning member to EWTA.

- **Wechsler Engineering & Consulting LLC** of Charleston, S.C., is an engineering and consulting firm with experience optimizing the interrelated components of energy, production processes, safety and environment. President Kimble Garrett can be reached at [kgarrett@wechslereng.com](mailto:kgarrett@wechslereng.com)

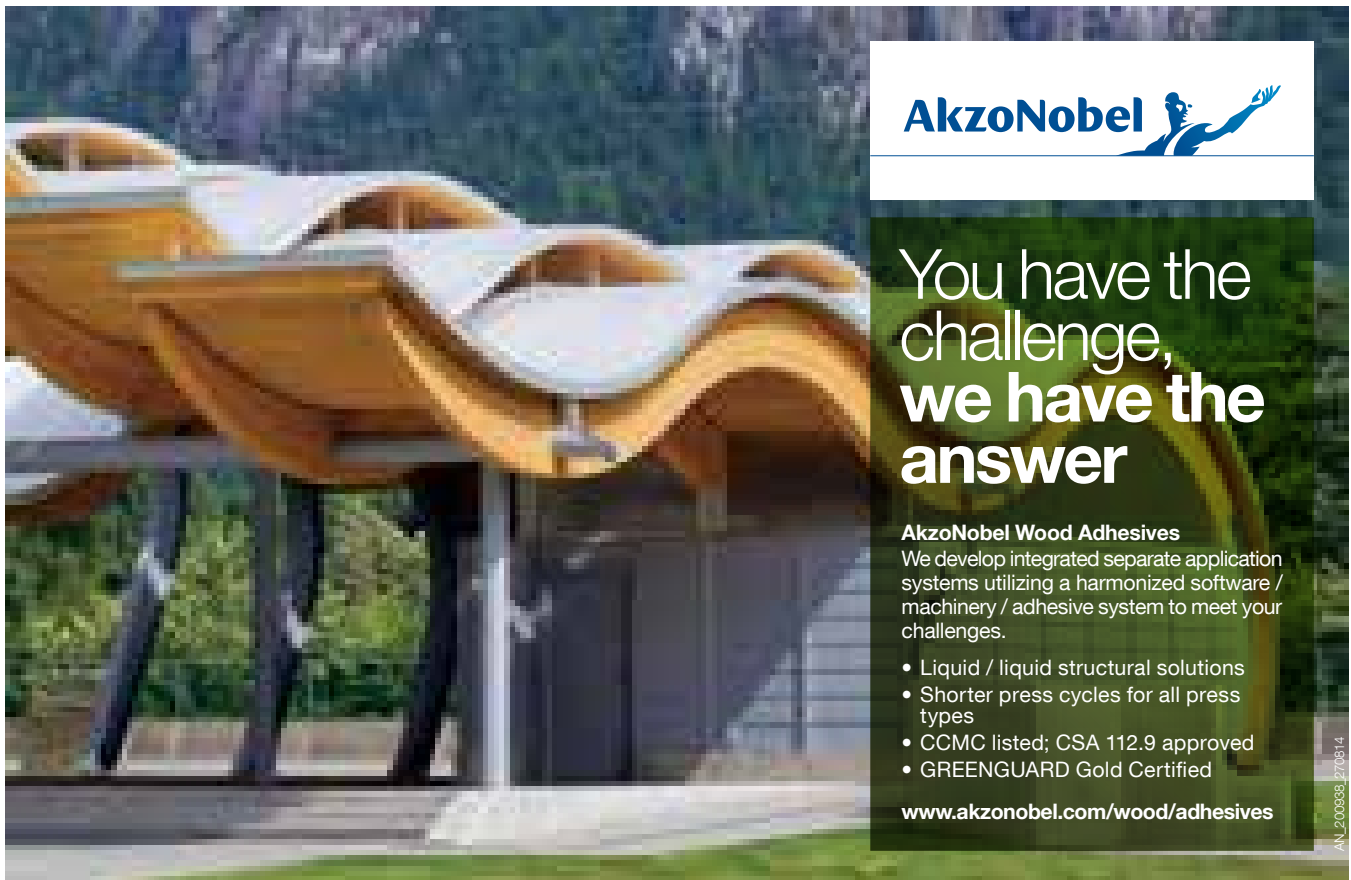
### surfactor Acquires L.P. Pacific Firms

surfactor recently announced that it has acquired L.P. Pacific Firms from Kotkamills Oy of Finland. L.P. Pacific, founded in 1997, is located in Pasir Gudang,

Malaysia, and operates two treaters and a resin plant. The company employs approximately 50 people.

### Signode Canada and IBC Form Partnership

Signode Canada, a division of Signode Packaging Group and IBC, International Bar Coding Systems and Consulting Inc. have formed a strategic partnership for labeling and bar coding solutions for the wood products and building materials sector. The partnership is expected to increase Signode’s position as a one-vendor solution, while growing its market share in wood products utilizing IBC’s label applicators and printer applicators. The new partnership broadens the tools that Signode offers wood products customers and acts as a catalyst for further advanced research and development at IBC, while driving scale and efficiency in both partners’ respective supply chains.



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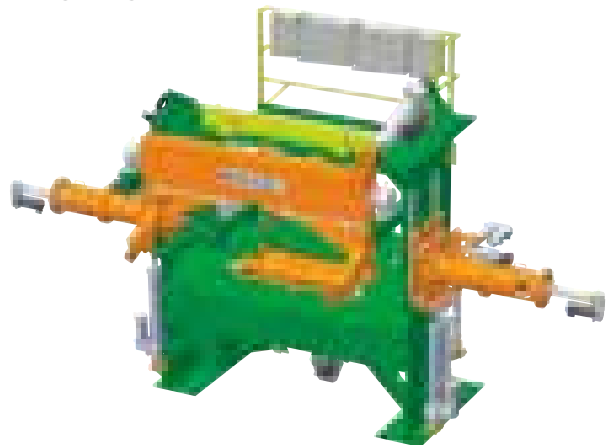
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**28-30** Mass Timber Conference, Portland, Ore., [www.masstimberconference.com](http://www.masstimberconference.com)

### APRIL

**10** EWTA Info Fair registration opens

**5-7** IWPA 61st World of Wood Annual Convention, San Francisco, Calif., [www.iwpawood.org](http://www.iwpawood.org)

**9-11** American Wood Protection Association Annual Meeting, Las Vegas, Nev., [www.awpa.com](http://www.awpa.com)

**13** EWTA Advisory Committee Spring Meeting, Springfield, Ore.

**27-29** American Institute of Architects (AIA) Conference on Architecture 2017, Orlando, Fla., [conferenceonarchitecture.com](http://conferenceonarchitecture.com)

**30-5/3** Composite Panel Association Spring Meeting, Los Cabos, Mexico, [www.compositepanel.org](http://www.compositepanel.org)

### MAY

**7-9** Hardwood Plywood and Veneer Association Spring Conference, Vancouver, B.C., Canada, [www.hpva.org](http://www.hpva.org)

**11** 2017 Global Softwood Log and Lumber Conference, Vancouver, B.C., Canada, [www.woodmarkets.com/conference](http://www.woodmarkets.com/conference)

**22-26** LIGNA: World Fair for the Forestry and Wood Industries, Hannover, Germany, [www.ligna.de](http://www.ligna.de)

### JUNE

**14-16** Southern Forest Products Association's 2017 Forest Products Machinery and Equipment Expo, Atlanta, Ga., [sfpexpo.com](http://sfpexpo.com)

**26-28** Forest Products Society 71st International Convention, Starkville, Miss., [www.forestprod.org](http://www.forestprod.org)

### JULY

**19-22** Association of Woodworking and Furnishings Suppliers Fair, Las Vegas, Nev., [awfsfair.org](http://awfsfair.org)

### SEPTEMBER

**6-8** Bioenergy 2017, Jyväskylä, Finland, [www.bioenergiamesstut.fi](http://www.bioenergiamesstut.fi)

**12-14** World Forest Institute's Who Will Own the Forest? Conference, Portland, Ore., [www.wwotf.org](http://www.wwotf.org)

**12-15** 2017 International Nondestructive Testing and Evaluation of Wood Symposium, Madison, Wis., [www.forestprod.org/symposium/](http://www.forestprod.org/symposium/)

**12-15** 23rd China International Furniture Expo, Shanghai, China, [www.furniture-china.cn/en-us/fmp](http://www.furniture-china.cn/en-us/fmp)

### OCTOBER

**28-30** APA Annual Meeting and EWTA Info Fair, Huntington Beach, Calif., [www.apawood.org](http://www.apawood.org), [www.engineeredwood.org](http://www.engineeredwood.org)

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### For APA member product questions or assistance:

Contact the APA Product Support Help Desk, 253-620-7400, [help@apawood.org](mailto:help@apawood.org).

### Mailing and membership lists:

As a matter of policy, mailing lists for this publication are not available. For a listing of members of the Engineered Wood Technology Association (EWTA), log on to [www.engineeredwood.org](http://www.engineeredwood.org). For a listing of APA members, visit [www.apawood.org](http://www.apawood.org).

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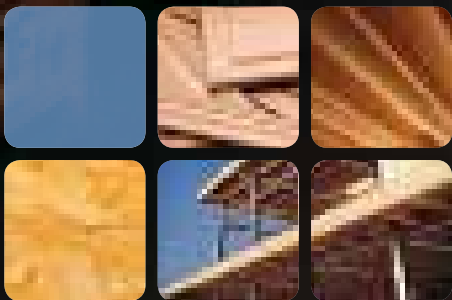
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