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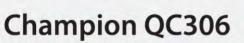
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WPA MAGAZINE

North American Softwood Prices

Western Pallet

Softwood prices listed as of April 24, 2019, courtesy of NRCAN.

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Residential Construction and Diesel Fuel Update

Latest housing start and fuel price information.

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Participation in Life Cycle Survey Needed

There is still time to participate in this crucial life cycle survey

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NWPCA Congressional Fly-In

NWPCA will be hosting this year's event on June 19 - 20.

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Cover Story:

CHEP Austria Automates Service Center

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Other Features

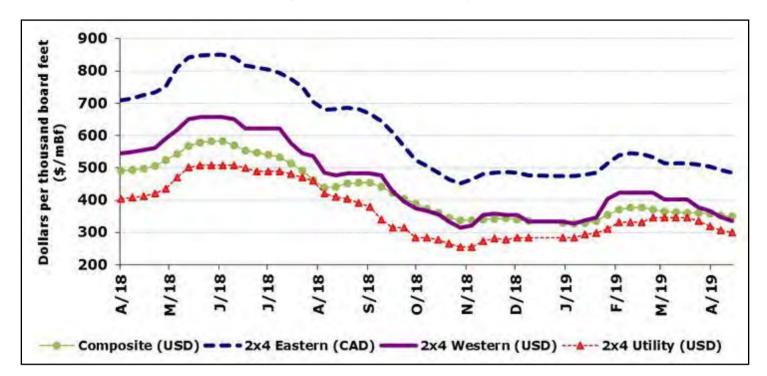
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North American Softwood Prices

Weekly softwood lumber prices to April 24, 2019 are shown below, sourced at http://www.nrcan.gc.ca/forests/industry/13309.



The Membership Drive Is On!

This year's membership drive is now underway, and as always, the competition will be intense.

In addition to valuable cash prizes, the winner now also receives the membership plaque, presented at the Annual Meeting. With the highly successful 2019 Annual Meeting now in the books, it is time to work toward 2020.

When you recruit new members, the entire WPA membership is the winner!

New members can join and pay on the website. Here is the link: www. westernpallet.org

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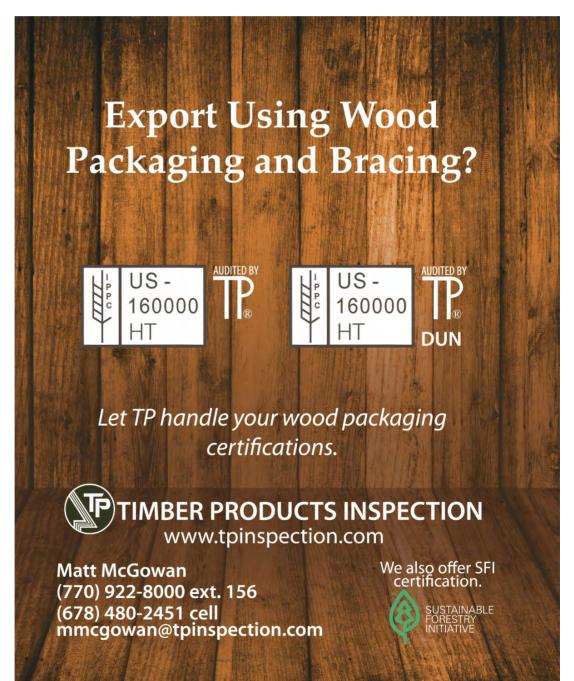
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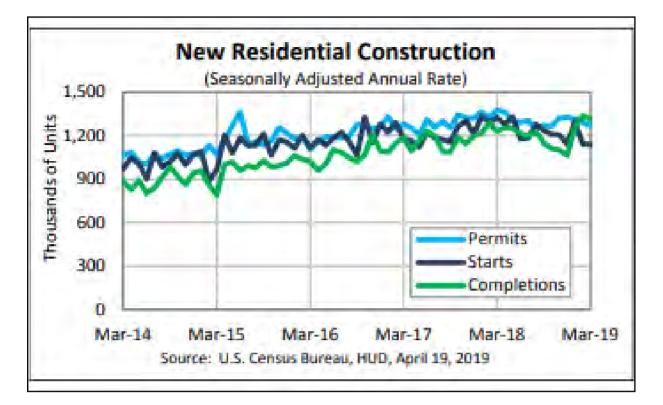
Stackers - Conveyors - Dismantlers - Trim Saws - Band Saws - Splicers - Platers - More





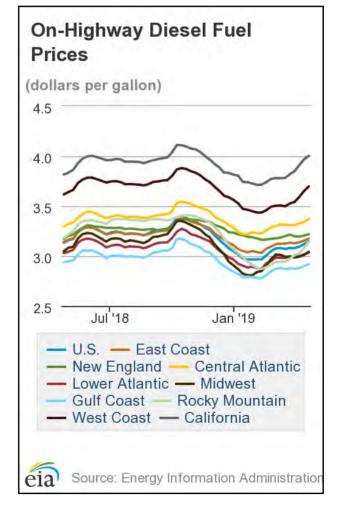
Residential Construction, March 2019

Released April 19, 2019 (www.census.gov)



EPA Diesel Fuel Update, Release Date: April, 2019

Click on graph at right to view source information:



Participation in Life Cycle Assessment Survey Needed by May 31

While wood pallets have a great sustainability story to share, customers are increasingly looking for vendors to back up their claims with verified sustainability information about the products and services they offer.

Brad Gething, PhD, NWPCA's Director of Science & Technology Integration stresses the need for the data to back up environmental claims. The information, he continues, is critical to both the industry and your company.

As he noted in an April 24 mailing:

All companies, large and small, are needed to complete one or both surveys (new and/ or recycled pallets.) All data is submitted directly to USDA and will remain strictly confidential.

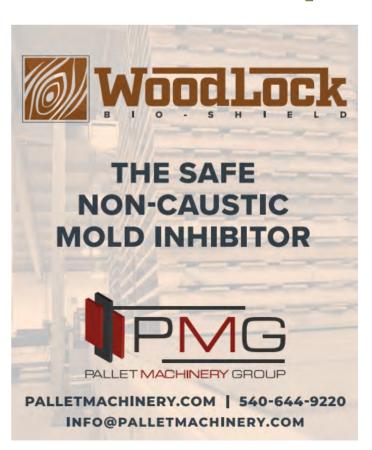
You'll need to collect electricity usage, fuel consumption, material flows, and environmental emissions - your energy provider can supply this information to you. If some information is not available, estimates are acceptable. We've now developed an equipment list to help with the energy calculations available online. You can expect to find some hidden cost

pallets have a great *savingsforyourcompanyduringtheenergy* story to share, customers *audit process*.

There is an instructional video to assist in the process online. Industry peers and agency staff are also available to assist you.

If you've started the process but not yet completed it, please send Brad an email so we know.

To get started, visit www.palletcentral. com/lcasurvey.



NWPCA Congressional Fly-In June 19-20, 2019 | Washington, DC

To be held June 19 - 20 in Washington, DC, the NWPCA Congressional Fly-In is a must-attend for everyone interested in advancing the wood packaging industry and having their voice heard by key constituents on the Hill.

The two day event includes presentations and Capitol Hill visits where you'll hear from legislators and their key staff on what they are doing to support our industry and your business.

Attendees will benfit from subject matter experts and journalists giving their perspective of the view from Washington, DC. Jeff DeFour has been confirmed as one of the speakers. He is a senior editor for National Journal, overseeing print version of National Journal Daily. Prior to National Journal, he was a columnist and editor for The Hill newspaper and the Washington Examiner. He has been a panelist and guest on television and radio outlets, including NBC's "Today Show," Fox News, MSNBC, "The Dennis Miller Show" and WTOP radio. A Connecticut native, Jeff is a graduate of Georgetown University.

Congress needs to hear from you about the need to protect the industry from groups opposed to wooden pallets and packaging, and the importance of labor and transportation; if you don't speak up for the industry, who will?

Virginia Tech hosts the national 2019 Packaging Jamboree

Virginia Tech hosted the national Packaging Jamboree on April 2-4. This year, the annual conference focused on the global trends of emerging packaging technology under the theme "iPackage." The event welcomed 95 students from six universities, including 40 Virginia Tech students and 50 industry professionals from 20 companies.

The conference, a student-led event with

educational and networking opportunities, was the largest Packaging Jamboree in recent years. Industry representatives gave presentations about emerging technology and trends in e-commerce packaging and innovation, and students attended a career fair to facilitate conversations with potential **Cont'd Page 14**

Virginia Tech 2019 Packaging Jamboree Cont'd from Page 13

employers, including Merck, Nestle, Newell Brands, and the Packaging Corporation of America.

The career fair was such a success that Virginia Tech's packaging systems and design program, based in the College of Natural Resources and Environment's Department of Sustainable Biomaterials, plans to host its own packaging career fair in 2020.

"Most of the career fairs at Virginia Tech don't really have companies who are specifically looking for a packaging student," said Jessie Arevalo, a senior packaging systems and design major who handled industry outreach for the conference. "At this event, every company invited has positions with packaging engineers, and they have a better understanding of what our role entails."

Newell Brands and the Packaging Corporation of America were recognized for their involvement in the program and

Nestle, support toward Virginia Tech students. Both companies hire students for fulltime and internship positions and assist students with class projects. Don Woodward, general manager for PCA in Roanoke, Virginia, was the inaugural lege of recipient of a new award named in his honor. He was recognized for mentoring packaging students and providing tools and connections to elevate their careers.

> Hosted by the Packaging Systems and Design Club at Virginia Tech, the 2019 Packaging Jamboree took about 10 monthstoplan. "Withoutthe 23 dedicated and passionate student volunteers, this event wouldn't have happened," said Assistant Professor Young-Teck Kim. "Our students should all be very proud of themselves about this success."

Universities with packaging programs rotate hosting the annual Packaging Jamboree. Virginia Tech last hosted the event in 2014.



Stockton Pallet Fire Causes Millions in Damage

23, resulting in millions of dollars in damage, a major electrical outage, and sending one firefighter to hospital. The six-alarm blaze involved about 75 Arson investigators inspected the scene, firefighters at its peak.

and materials at two businesses — Masonite and California Pallets. According to its website, California Pallets The day prior, the same firefighters batted also has locations in Hayward and a fire at a recycling center in the Port of Fairfield, California.

A pallet fire took place on Tuesday, April Firefighters were still pouring water on active flames more than nine hours after the fire was first reported.

but the point of origin and the cause of the blaze remained uncertain. It was the The fire damaged buildings, equipment second major blaze in Stockton in 24 hours.

Stockton industrial district.





WTO Delivers Mixed Softwood Ruling, Canada Appeals

The World Trade Organization ruled in a mixed decision this April that the U.S. violated international trade rules in the way it calculated tariffs on Canadian imports of softwood lumber in a key dispute.

The decision also provided a boost to the U.S.'s use of a controversial methodology used when calculating anti-dumping duties on Canadian lumber, however. In the past, the WTO has struck down American use of the process, called zeroing, which typically results in higher duty margins. That part of the ruling is a victory for the U.S.

"Canada's forest industry sustains hundreds of thousands of good, middleclass jobs in communities across our country," Canadian Foreign Minister Chrystia Freeland said in a statement announcing Canada's appeal of the WTO

decision. "We firmly believe that the U.S. duties on Canadian softwood lumber are unfair and unwarranted. That is why we are challenging these duties at the WTO and under NAFTA." She described zeroing as "a method of calculating and applying artificially high and unfair duty rates, inconsistent with WTO rules."

"The WTO rules do not prohibit 'zeroing'," U.S. Trade Representative Robert Lighthizer said in a separate statement, saying that any previous WTO appellate body decisions that prohibit zeroing are erroneous and not binding. "The United States commends this panel for doing its own interpretive analysis, and for having the courage to stand up to the undue pressure that the appellate body has been putting on panels for many years."

2019 Excellence in Reusable Packaging Award: Call for Applications

Applications for the 8th annual Reusable Packaging Association (RPA) Excellence in Reusable Packaging award are now being accepted. The award recognizes primary (end) user companies and organizations that have developed and implemented 16 WESTERN PALLET

measurable and innovative reusable transport packaging (including pallet) solutions in their supply chain. The application form is available on the RPA website at reusables.org. Submissions are due by June 15.

"The RPA Excellence in Reusable Packaging award spotlights and celebrates primary user implementation of reusable transport packaging solutions that reduce supply chain costs and environmental footprints," said Tim Debus, RPA President & CEO. "We honor achievements with reusable packaging and promote the successful outcomes for educational purposes."

Two awards will be given in 2019: one award to for-profit companies and one award to non-profit or governmental organizations. "We added the non-profit category in 2017 to recognize the increasing number of reusable packaging solutions being deployed in this sector," said Debus. "By highlighting and sharing these initiatives, we hope to spur even more adoption of reusable transport packaging across all types of industries and organizations."

The awards will be given to primary users of reusable packaging transport systems. Primary users do not have to be a member of the RPA to enter. Submissions will be reviewed and winners selected by an independent panel of judges, based on the quantifiable environmental and economic benefits of the reusable transport packaging system. Winners will be notified in August and should be available to attend PACK EXPO 2019 in Las Vegas September 23-25 to receive the award and to present their winning submission.



Primary User RPA membership for one year, airfare and lodging to attend and present their submission at the RPA Learning Center at PACK EXPO 2019, a commemorative trophy, RPA website, public relations, and social media exposure, and posting of their case study on the RPA website. Complete terms and conditions are on the application form.

Prior winners of the RPA Excellence in Reusable Packaging award include DS Smith Plastics and Anheuser-Busch InBev (2018), STIHLInc. and Goodwill Industries International (2017); Cardinal Health (2016); Subaru of Indiana Automotive, Herman Miller, and the Boulder Valley School District (2015); Svenska Retursystem and Full Belly Farm (2014); Finelite (2013); and Herman Miller Inc. (2012). Their winning case studies can be found at reusables.org

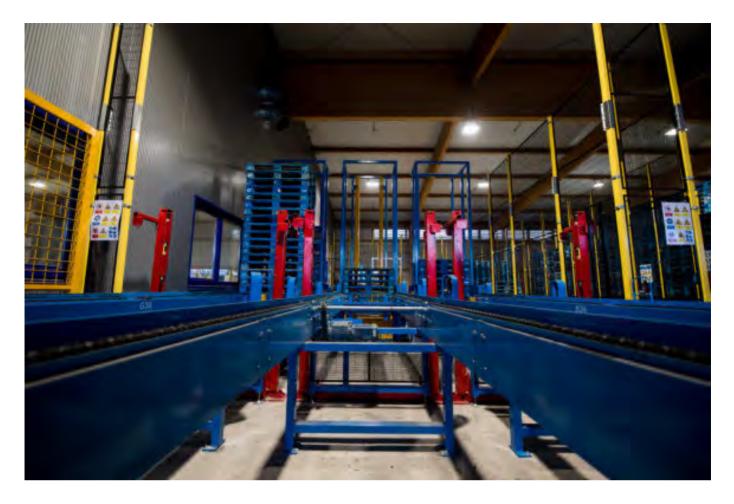


CHEP Austria Automates Service Center with Modern Technology



CHEP Austria is expanding its service potential center at Vienna using state-of-the-art technology. The market leader in pallet pooling invested in the single-digit millions in the automation of pallet inspection and repair in order to increase the efficiency of its service center in Hof am Leithaberge. At the beginning of 2019, the starting signal for the fully automated operation was given. Through the use of robotics, CHEP wants to consistently ensure the highest standards of performance, compliance, and sustainability.

Since 2010, CHEP has been supplying pallets to the Austrian market from Hof am Leithaberge, especially the Vienna, Graz and Salzburg regions. With Paletten Logistik Winter GmbH as a reliable and experienced partner, constant pallet availability is guaranteed even during busy periods. Millions of pallets are checked and repaired after each delivery cycle every year. Depending on requirements, CHEP Austria offers its customers a platform mix of Euro, Using automation to realize its full industrial, half and quarter pallets as well



customers a platform mix of Euro, industrial, half and quarter pallets as well as plastic pallets and the rollable Dolly display loader.

In the fully automated operation, CHEP pallets are routinely inspected for defects, damage or contamination. In this way, the double digit, constantly growing demand for the blue load carriers can be successfully managed. The new work environment gives service center employees greater comfort in terms of ergonomics, as robot units take over work steps such as repairing defective pallets.

Industry 4.0: prepared for the future

In detail, the newly installed automated system in Hof am Leithaberge comprises the following technology:

inspection and repair system for automatic unstacking, transport, turning and stacking of pallets

- A new laser system (Automatic Digital Inspection, ADI) that inspects individual pallets for damage and, if necessary, sends them for repair

- Automatic painting and stencil processes using brush painting booths and inkjet systems

- New roll nailer technology that ensures no nails stick out over the top of the pallets

A moisture meter monitors the moisture content of the pallets and probes the top deck and bottom of the pallets. If the moisture content exceeds a certain value, the pallet is sorted out of production. **Cont'd on Page 20**

- Multifunctional fully automatic

Cont'd from Page 19

"With automation, we are making our service center sustainable and at the same time strengthening the region," explains Wim Hermans, CHEP Country Manager Austria. "For several years, we have noted an increasing interest in our wide range of pallets offered in the pooling model. Even in peak economic times, we can now

ensure constant pallet availability – while maintaining consistently high quality. Most of our customers benefit from this high level of flexibility."

The new automated service center started operations in September 2018.

Brambles enjoys constant-currency sales revenue growth of 7% from continuing operations

Brambles Limited has reported sales revenue from continuing operations of US\$3.4 billion for the first nine months of the fiscal year ending 30 June 2019 (FY19), up 7% on the prior corresponding period at constant foreign exchange (FX) rates. Actual FX growth of 2% is below constant FX growth due to a stronger US dollar (Brambles' reporting currency) relative to all other major operating currencies in the period.

Constant FX growth from continuing operations of 7% comprised volume growth of 5% and price realization of 2%:

 – CHEP Americas sales revenue up 6% driven by strong price realization and ongoing expansion with new and existing customers in the US, Canadian and Latin American pallet businesses; – CHEP EMEA sales revenue up 8% driven by net new business wins and price realization across the region. Likefor-like volume growth was modest in the European pallet and automotive businesses; and

- CHEP Asia-Pacific sales revenue up 4% driven by solid like-for-like volume growth and price realization in the Australian pallets business.

Commenting on the year-to-date sales performance from continuing operations, Brambles' CEO Graham Chipchase said: "Volume momentum was strong across

all CHEP segments as we continue to convert investment new customers to our sustainable share-andreuse solutions. Notwithstanding positive volume growth, we saw a moderate slowdown in the growth of like-for-like volumes during the third quarter, particularly in Europe which is consistent with broader macroeconomic conditions in that region. Price realization continued during the third quarter and reflects ongoing pricing actions to offset input-cost inflation and cost-toserve increases, particularly in Americas."

FY19 expectations remain unchanged

Brambles continues to expect FY19 constantcurrency Underlying Profit growth to show modest improvement over the prior year, with increased price realization and the delivery of cost efficiencies largely offset by ongoing global input-cost inflation.

Cash generation is expected to improve in 2H19 from 1H19 levels, notwithstanding

in business growth and improvement projects and excluding IFCO transaction-related proceeds and costs.

Brambles' global automation, productivity and supply chain cost-out programs remain on track to progressively deliver margin benefits and improved business outcomes over the medium term.

CHEP IFCO sale process update and discontinued operations

The IFCO sale process is expected to be completed by the end of FY19.

As outlined in the IFCO sale announcement on 25 February 2019, proceeds from the transaction will be used to fund an on-market share buyback of up to US\$1.65 billion, a capital return of AU29 cents per share and to pay down debt.

LPR expansion in Central Eastern

LPR – La Palette Rouge, the pallet pooling in charge of Romania and Bulgaria. specialist, a division of Euro Pool Group, is accelerating its expansion into Central and Eastern Europe and announces the development of its support team in this region with the appointment of Slavomir Sykora, in charge of Czech Republic, Slovakia and Hungary and Andrei Nicolae,

LPR is responding to the growing demand of its customers, where more and more players in the mass retail market are operating in Central Eastern Europe and there is a need to support their supply chain requirements.



Hyster Introduces Power Match to Help Companies Evaluate Power Sources and Improve Operations

When evaluating opportunities improve efficiencies, many operations often overlook the power source of their materials handling equipment. With the introduction of advanced new technologies and improvements on existing power sources, there are compelling reasons to look again at better matching power source а to an application.

Hyster Company is offering a dedicated Power Match team to help customers determine the best power solution based on their application and specific needs. The Power Match team can help navigate the complexities of today's power needs and implement a range of power sources from a variety of brands. Selecting the best power source involves researching and calculating several variables, including shifts, utility prices, space requirements and operator discipline.

"It was only a few years ago that we really starting to explore alternative power solutions," said Steven LaFevers, vice president for motive power and telematics at Hyster Company. "Today the accelerated adoption and widespread availability of power sources like lithiumion batteries and hydrogen fuel cells are transforming how operations think about

to their materials handling equipment and ns overall cost of operations."

Hyster Company offers the broadestrange of power options across its full line of lift trucks, including internal combustion engine, lead acid battery, lithium-Ion battery and hydrogen fuel cell.

Interested customers can start a free evaluation of their power source needs by scheduling a consultation with their local Hyster® dealer or by emailing PowerMatch@hyster.com.

About Hyster Company

Hyster Company is a leading world-wide lift truck designer and manufacturer. Hyster Company offers 130 lift truck models configured for gasoline, LPG, diesel and electric power, with one of the widest capacity ranges in the industry from 2,000 to 105,000 lbs. Supported by one of the industry's largest and most experienced dealer networks, Hyster Company builds tough, durable lift trucks that deliver high productivity, low total cost of ownership, easy serviceability and ergonomic advanced features. accompanied by outstanding parts, service and training support.



50,000 manufacturing and supply chain executives set new record for **ProMat 2019**

Manufacturing and supply chain professionals gathered in record numbers in Chicago for ProMat 2019, the largest material handling and supply chain trade expo in North and South America.

ProMat 2019 was the largest in the 34history of the event, with vear registrations of 49,718 —an 11 percent attendance jump over 2017. The four-day expo, April 8-11, covered 425,000 net square feet of exhibit space on two show floors at Chicago's McCormick Place with 938 exhibiting companies. The ProMat expo was once again collocated with Automate 2019.

ProMat visitors included key decisionmakers in virtually all manufacturing and supply chain industries including a majority of the Fortune 1000 and Top 100 Retailers. The quality of the visitors was very strong with a large number of buying teams from key firms in attendance.

"The continued success of ProMat is proof of not only the strength of our industry but of MHI's commitment to offering a supply best-in-class chain event experience," says George Prest CEO of continents. They were welcomed MHI. "MHI is dedicated to creating the best ProMat's International Visitors Center.

environment for exhibitors to showcase their cutting-edge solutions and to maximizing ProMat's overall Wow-factor by constantly improving the show's educational networking and opportunities."

"Investment in supply chain innovation is at a critical inflection point, with a trend of declining investment from 2015 to 2018 being more than countered by a 95% increase in projected spending for 2019. As a result, the energy level among visitors and exhibitors was at an all-time high as more attendees were actively seeking best-in-class solutions for their manufacturing and supply chain operations."

According to registration data, 82% of attendees had buying authority and 34 % plan on spending \$1 million or more over the next 18 months on equipment and systems.

Reflecting the growing global nature of the event, attendees from outside the United States at this year's ProMat represented 145 countries and six bv

V

New Fire Retardant Wood Coating Is Made from Wood

A spray- or brush-applied fire retardant HefCel pigmen suited for improving the fire properties of airtight wood based materials, say researchers. It reduces the access of oxygen to the surface, thus significantly inhibiting combustion. The coating is set to revolutionize the market for coatings used in the fire retardant treatment of construction materials. VTT has found an effective production method for the in the V coating through piloting and is currently seeking a partner to commercialize the With its

The fire retardant coating is based on HefCel technology (High-Consistency Enzymatic Fibrillation of Cellulose) developed and patented by VTT. HefCel technology enables the efficient and cost effective production of nanocellulose from wood-based pulp. The solids content of HefCel materials is ten times the solids achieved with traditional content manufacturing methods. This makes them well suited for uses where low water content is preferred: for example, paints and coatings, packaging and composites.

Nanocellulose has a natural tendency to adhere to wood and to form an airtight film on the surface of wood and various other small particles such as pigments. This makes nanocellulose-based coatings highly suitable for the protective treatment of wood surfaces. Combining

HefCel nanocellulose with organic pigments forms a spray- or brush-applied, airtight film that prevents the access of oxygen through the coating and at the same time significantly inhibits combustion.

The idea was developed by VTT research scientists Vesa Kunnari and Jaakko Pere as part of the Design Driven Value Chains in the World of Cellulose (DWoC) project funded by Tekes (now Business Finland).

With its new piloting equipment VTT is now able to manufacture bigger HefCel batches. The research scientists were pleased with the quality of the first trial batch and the energy efficiency of the production method.. "We have many more good ideas about how to simplify the process and make it even more efficient, says Senior Scientist Panu Lahtinen from VTT.

Exploring the potential to commercialize the technology has been funded by Business Finland and under VTT's 'New knowledge and business from research ideas' funding program. A project implemented under the funding program studied, for example, the suitability of HefCel technology as a paint and coating industry raw material.



HefCel-coated wood (left) and untreated wood (right) after 30 seconds flame test. (Photo: VTT)

Sawmill profit margins fell substantially in North America during the second half of 2018

Lumber prices in North America continued their decline from the 3Q/18 with another quarter of substantial reductions. Average lumber prices for southern yellow pine were down 12% quarter-over-quarter in the 3Q/18, which was then followed by a reduction of 17% in the 40/18. With practically no change in log or chip prices, gross margins, and the EBIDTAs, have plunged in the Southern states, after having reached a 13-year high in the 20/18, as reported in the latest issue of the WRQ. However, the region's sawmill margins were still well above their ten-year average margin. With lumber prices continuing to decline faster than log prices in early 2019, profit margins have continued to slide in the 10/19.

Sawmills in British Columbia have also seen the prices for lumber in the US market come down substantially during the second half of 2018. Despite the weaker lumber market, sawlog prices still increased from the 3Q/18 to the 4Q/18 because of tighter supply and a rise in hauling costs. Sawmills saw their gross margins plunge to unprofitable levels and many companies decided to take marketrelated downtime in late 2018 and early 2019.

In Europe and Russia, market prices for lumber were much less volatile than in North America, with only small price adjustments from the 4Q/17 to the 4Q/18. Log costs were unchanged in Finland during most of the year, while the costs for spruce sawlogs in Sweden jumped in late 2018. Gross margins for sawmills in both countries are still at healthy levels and, in the 4Q/18, were close to the highest they have been in four years.

Sawmills in Siberia continue to expand exports to China with fairly stable lumber export prices the past three years. However, in the 4Q/18, lumber prices fell to their lowest level in almost two years. This occurred at the same time as sawlog costs remained unchanged from the previous quarter, resulting in reduced gross margins for many lumber producers at the end of 2018. Sawmill margins for 2018 were slightly below their five-year averages, but still higher than the average for the past 14 years.

For more information,vist www.woodprices.com





Upcoming Events

5/8/2019 - 5/9/2019, Global Softwood Log & Lumber Conference, Vancouver, BC. www.woodmarkets.com

5/27/2019 - 5/31/2019 LIGNA 2019, Hannover, Germany. www.ligna.de

6/7/2019 - 6/9/2019 CWPCA Annual General Meeting, Victoria, BC. www. canadianpallets.com

8/13/2019 - 8/15/2019 Unit Load Design & Performance Short Course, Virgina Tech, Blacksburg VA. www.unitload.vt.edu

10/1/2019 - 10/2/2019 NWPCA Fall Plant Tours, Toronto, Ontario. www.palletcentral. com.

10/9/2019 - 10/11/2019 FEFPEB Congress, Hamburg, Germany. www.fefpebcongress. org/

In case you missed them... (Click on back issues to read or download)













