

Microtec Springer



Idaho Forest Group

Lewiston Sawmill

Today's Presentation



Jesse Short

19 years in the sawmill industry

Labor, machine operator, supervision, plant manager, regional manager

4 years with Louisiana pacific 19 years with Riley Creek and Idaho Forest Group

Oversee 3 sawmills in Idaho and Montana

Lewiston operation being the largest at 310mmbf current operating level







Today's Presentation



Norvin Laudon

MiCROTEC[°]

SPRINGER

•In the wood industry for last 15 years, developing log and lumber scanning applications

•10 years with Springer-Microtec

•Lineal grading scanner development

•4 years in Germany as developing CT software

•Last 4 years in Vancouver, adapting European technology for use in North America





Today's Presentation



Over 30 years in the forest industry

Almost 7 years with HewSaw

- •Capital Sales
- Marketing
- •Involvement in English Global Marketing Initiatives

13 years at the corporate level with Canfor and West Fraser

Former Editor of Canadian Forest Industries magazine and technical writer on forest products technology















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IFG Locations And Scale





Raw Material Quality



Deep fertile soil, abundant rainfall, and a shorter growing season give the region surrounding IFG's mills some of the highest quality Douglas, Fir, White Fir, Cedar, Ponderosa Pine, and Idaho White Pine timber in the world.

The Intermountain West timber has tight grain and small knot size and as a result, very visually pleasing and structurally superior wood.



2007

Wholesaler

Appearance

Structural

Home Center, Export, Specialty Distributor, Pro Dealer, Reman,



Appearance Home Center, Export, Specialty Distributor, Pro Dealer, Reman, Structural Wholesaler 48% 52%



2017

MARKET SHARE OF THE TOP 30 HOME CENTRES • 2015





Sales Volume Trend





At 1.282 million housing starts building activity remains light from a historical perspective and well below theoretical equilibrium levels of roughly 1.5 million. The weakness is even more apparent once US population growth is factored in. The chart below divides starts by the US civilian non-institutionalized population. The only periods over the past 60 years to come close to current population adjusted housing activity was during the depths of the 1981 and 1991 recessions.





Todays Sawmills Are Much Bigger and Highly Automated

Sawmills Operating in the West





Lewiston Plant Overview





Microtec CT Log Scanner

Opportunities

- X-ray vision, saw logs from the inside out
- Avoid margin negative logs
- Advanced sorting for enhanced sawmill operations
- Calculation of product yield sitting in log yard
- Elevated Education for our scalers
- Avoid anomalies (metal, dead knots, metal, cracks)
- Educate contractors on log quality and optimal age to harvest
- Sort out high quality logs with higher return (veneer, moldings, mantels, log homes)



The Idea Behind The System, Sawing From The Inside Out





CT Technology – A Game Changer!



CT Data Changes Cant Width And Pattern





Wood Pecker Nest





Wood Pecker CT Images





What Size Center Cant Works With This Split?



IDFG.COM

Manufacturing Costs Exceeds Lumber And Residual Revenue





Revenue Negative Log Example





Improved Uptime and Reduced Operating Costs





Fall Break- Production Cost > Wood Revenue





18 Degrees Rotation Changes The Value +8% With -1% Volume







Saved Drying and Handling Costs!





Sorting With CT: Log Quality Trial

GROUP A

GROUP B





Sorting with CT: Log Quality Trial

GROUP A



IDEAL LOGS FOR SQUARE, HIGH GRADE BOARDS

GROUP B



LOW QUALITY BOARDS – INCREASE WANE AS MUCH AS POSSIBLE



THANK YOU



WOOD FOR A GROWING WORLD

IDFG.COM



CLOSING THE LOOP: USING X-RAY TECHNOLOGY TO EXECUTE CT LOG SCANNER OPTIMIZED SAWING SOLUTIONS AT THE SAWLINE



Microtec CT.LOG X-ray Computer Tomography Scanner

www.springer-microtec.com innovative wood processing solutions

Norvin Laudon, CTO, Springer-Microtec



CONTENTS

- TRADITIONAL VS. CT LOG SORTING
- CASE STUDY: IFG LEWISTON
- CT SCANNING TECHNOLOGY
- CLOSING THE LOOP: FINGERPRINT SCANNING
- SAMPLE LOG TRIAL



Traditional Log Sorting concept

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3D scanning

Merchandizing



Geometric Sort – either by diameter or cutting pattern





3D scanning

Sawing Optimization



High speed / low gap / batch mode sawing

www.springer-microtec.com innovative wood processing solutions

Traditional Log Sorting concept





CT Log Sorting – sorting and sawing <u>connected</u>

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Merchandizing

CT Log Full 3D internal defect scanning



Geometric + Quality Sort -cutting pattern with internal defects





Sawing Optimization

Logeye Fingerprint 3D + Xray scanning

www.springer-microtec.com innovative wood processing solutions



High speed / low gap / batch mode sawing



CT Log – Merchandising and Sorting



www.springer-microtec.com innovative wood processing solutions


Sawmiller's dream: "Saw from the inside out"

- See what's inside a log **before** sawing
- Use this information to optimize products for **Value** rather than Volume



innovative wood processing solutions



Scanner Output: 3D volume image





What can you do with a true 3D volume image?

- Virtual Sawing





3D Volume image:





Image processing to detect internal defects





Cutting Pattern insertion...





"Virtually Sawn" boards...





For every board in the cutting pattern...





3D defects are applied...





THANK YOU!



NORVIN.LAUDON@SPRINGER-MICROTEC.COM



OptiSaw 2018

HewSaw at

Idaho Forest Group



Today's Presentation

- A brief background on HewSaw
- What's in our line-up today?
- What do we have at Idaho Forest Group in Lewiston?
- A look at the technology we use in Lewiston
- What's coming next for HewSaw?



Who is HewSaw?

- A major producer of primary breakdown equipment for the sawmill sector
- Family-owned company based in Mäntyharju, Finland
- Celebrating our 55th anniversary next year
- Over 220 employees worldwide
- Operating on six continents in well over 30 countries



Who is HewSaw?





Who is HewSaw?



HewSaw Technology

R200 single pass machine



HewSaw Technology

SL 250 3.4 Line

Metsällood

Powered by







SL 250 3.4 Line



IFG HewSaw Timeline

























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dx Sawing Patent Pending Technology Developed by HewSaw



HewSaw dx Sawing - Advantages

Major benefits:

- Ability to run larger logs at faster speeds
- Reduced kerf resulting in higher recovery
- More production volume per shift
- Exceptional standard deviation
- Improved lumber finish
- More time between saw changes



HewSaw dx Sawing





HewSaw dx Sawing





HewSaw dx Sawing – How Does it Work?

Cant saw dx





HewSaw dx Sawing - Advantages




In a recent test with dx sawing, we ran 12 inch diameter logs at 500 fpm and produced approximately 160,000 BF in one hour.



HewSaw dx Sawing

Choose the Original - HewSaw Grey





Questions?



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Idaho Forest Group

Lewiston Sawmill