Kids of Today, Employees of Tomorrow: Best Practices for Developing a Local Workforce

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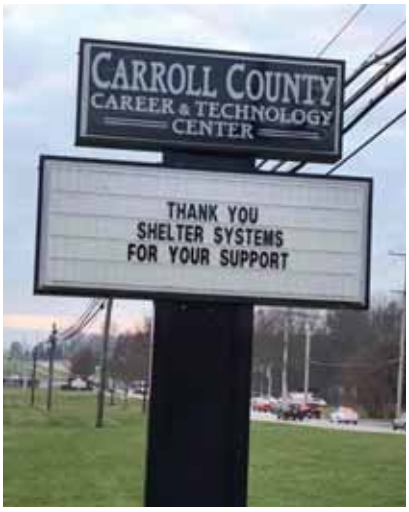
Kids of Today, Future of Tomorrow: Best Practices for Developing a Local Workforce

Shawnee Gunnett, Estimator, Big C Lumber
Justin Richardson, Sales Manager, Richco Structures
Randy Rickels, Safety Officer, Shelter Systems Limited

Summary

- Getting into schools
- What to talk about
- Best practices

Getting Into Schools - People



- Advisory boards
- School counselors
- Intern coordinators
- Teachers
- Cold calling and emails
- Leveraging employee connections

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Getting Into Schools - Events

- Summer career camps
- Special events/days
- Job fairs
- Be part of the community

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Getting Into Schools

- Communication
- Timing
  - Interns
  - Plant tours
  - Email
  - Academic calendar
- Class requirements & programs
- Patience is key

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What To Talk About

- Work with instructors (understand what they are teaching)
- Tell your story, make it personal
- Show how you and the industry can help them
- Your company

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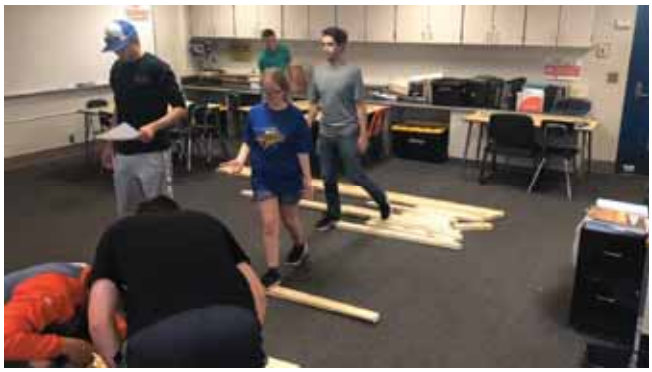
What To Talk About

- Be ready to adapt to the environment
- SBCA resources
- Get them involved – hands-on activities



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Best Practices – Plant Tours

- Make it an event:
  - Safety discussion
  - Smaller groups (allow for Q&A)
  - Keep it short
  - Upfront questions and follow-up quiz
  - Encourage participation by offering swag
  - Tour flow

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Best Practices – Internship Programs

- Office support team members
- Quality assurance representative
- Structural estimators
- IT and networking staff
- Maintenance assistant
- Production assembly

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Best Practices – Internship Programs

- Pay interns
- Have clear expectations
- Make it fun
- Personal and professional development opportunities

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Best Practices – Work-Life Balance

- 8-hour workdays
- Limited Saturdays
- Employee appreciation days
- Social events
  - Ice cream days
  - Grill out/brat fries
- Healthcare
- Bonus pool
- Gym membership
- Incentive programs
- Boot stipend

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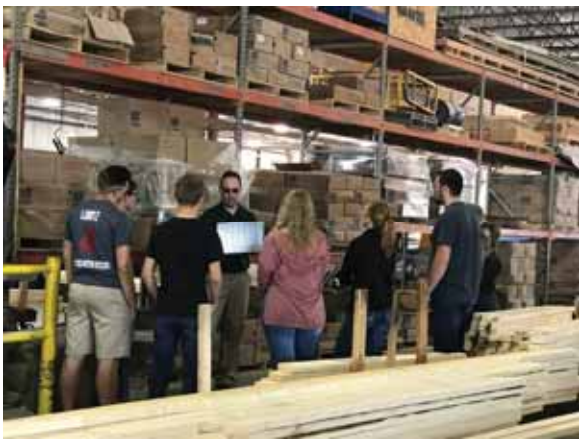
Best Practices

- Leadership buy-in
- School investments



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Final Thoughts

- Invest the time
- Invest the resources, make it attractive
- Don’t stop encouraging, push them

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Questions?

- Shawnee Gunnett
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- Justin Richardson
  - Email: jrichardson@richcostr.com
- Randy Rickels
  - Email: Randy.Rickels@sheltersystems.com

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SBCA Resources

- For more resources on this topic, visit www.sbcindustry.com and search for the below titles:
  - SBCA Workforce Development Webpage
  - Hiring & Assessing
  - Training & Retention
  - Case Studies
  - Finding Workers Takes a Proactive Approach
  - Rely on Relatable Recruiters
  - Plant Tours

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Learning Labs

Wednesday

- 1 pm – Partnering with a National Builder
- 2:30 pm – Best Practices for Developing a Local Workforce
- 4:00 pm – Designing for the Code

Thursday

- 12 pm – Knowing Your People to Keep Your People
- 1:30 pm – Safety
- 3 pm – Cybersecurity

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Next Session

- 11:00 am - Knowing Your People to Keep Your People
  - Scott Ward
  - Mike Kozlowski

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Please Fill Out Your Session Evaluation

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Outline provided by Randy Rickels, Shelter Systems Limited

Career and Tech Agenda

1. Open with a quick summary and overview of our company.

2. Go over what an open web floor truss is:

A floor truss is a system of support that helps to keep floors level and sturdy. Truss systems of this type usually go beyond the simple floor joists that are common to all types of floors. The floor truss actually creates an interconnecting network between the joists, providing the flooring with a level of strength that would be hard to accomplish otherwise.

Using a floor truss system as part of the floor installation process may be more expensive, but the extra cost is worth it. This becomes readily apparent when the new flooring involves high quality hardwoods. The intricate network of truss systems helps absorb the vibrations caused as people walk over the floor. This helps ease some of the daily stress on hardwood floors allowing each section to remain sturdy for years, even under constant use. While there are several different floor truss designs in use today, two are more common than any of the others. One approach is called the open web truss. This design calls for the use of top and bottom chords that are attached to the joists with the use of metal connector plates. Steel webbing can also be used with this design. The benefit of this type of floor truss is that the open design makes it easier to run plumbing or wiring through the flooring if necessary, while not compromising the overall integrity of the floor.

Floor Trusses are manufactured in lengths up to 40 feet and depths up to 24 inches. They are a custom engineered solution for each application, providing the highest degree of design flexibility as compared to “off the shelf” solutions as conventional floor joists or EWP (Engineered Wood Product).

3. Go over what a roof truss is:

Talk about the differences between roof trusses and rafters.

Talk about the main shape used when building a roof truss.

A roof truss is a frame that supports loads by efficiently transferring its force to end supports. While stick framing might use larger 2x8, 2x10, etc. members (which are expensive and hard to find without going into old growth forests), and might require either additional beams or interior load bearing walls. Trusses can span longer distances without additional supports, while using less expensive and more plentiful 2x4 members, usually arranged in intersecting triangles. Trusses can span up to approximately 90’, although very long truss spans are more challenging to deliver, erect, brace, and install properly. While longer trusses may be “wobbly” as they are lifted off the ground and onto a bearing wall, once they are properly braced, a truss system is extremely strong.

Outline provided by Randy Rickels, Shelter Systems Limited

All types of trusses have the same basic components and structure. The name “Truss” describes a triangular design, which may range from a simple individual triangle to a large number of interconnected units. The **outside framing members** are known as **chords,** while the **smaller inside connecting members** are called **webs.** A point to which the truss rests on a load-bearing wall is known as a bearing point.

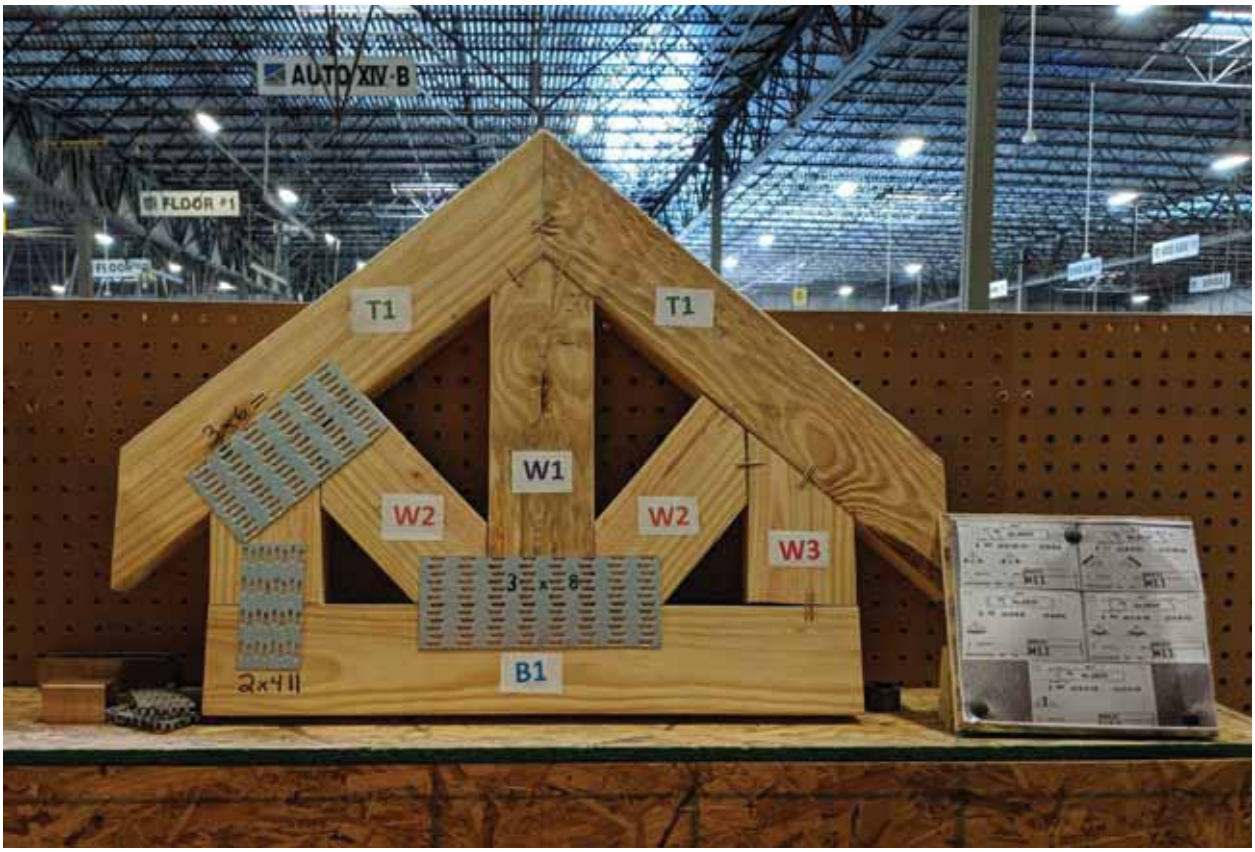
Roof trusses are used to support the weight of the roof deck or any finished material used to cover the roof. Sometimes the weight can be very significant. The **chords** support the roof while the webs brace and stabilize the chords, helping to distribute the load across the entire truss to the bearing walls on rather side.

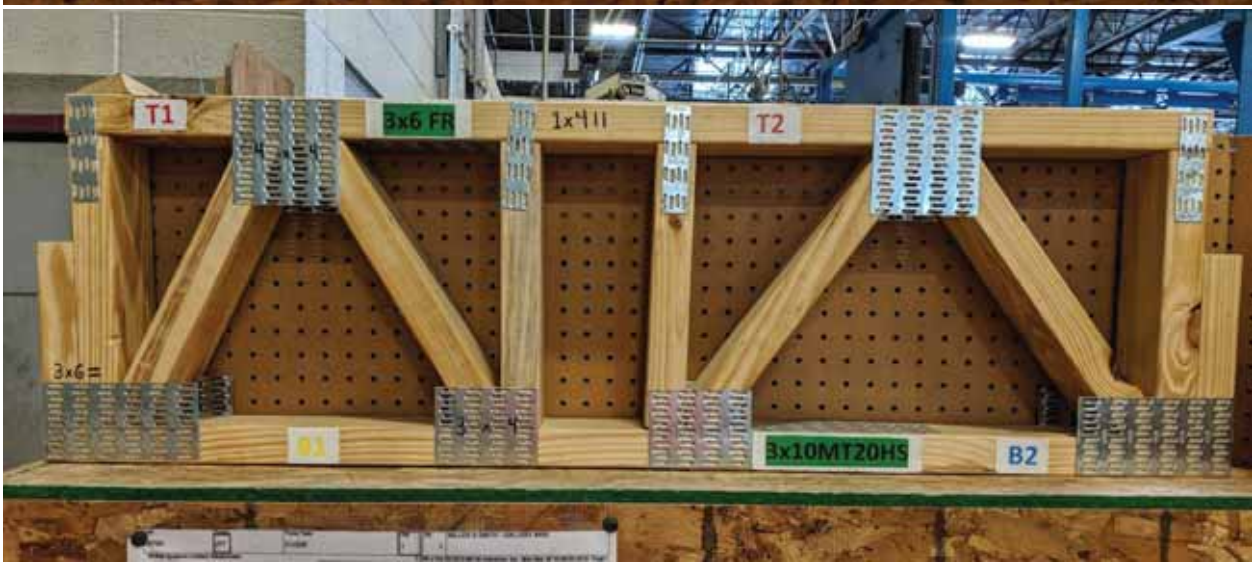
4. Go over how components offer a unique opportunity to teach about the many other factors that go into home building:

    - Angles
    - Calculating area and perimeter
    - Lineal board and square feet
    - Fractions
    - Length and width
    - Load capacity

5. Show Shelter System 360 degree video and explain the process: https://photos.app.goo.gl/dTEAJ3XvUR98qM9Z9
6. Go over www.Bestwaytoframe.com.
7. Go out into the production area.
8. Go over truss design.
9. Talk about different parts of the truss (Overhang, Bearing, Webs, Top and Bottom Chords, Gusset plates).
10. Discuss how to read a measuring tape.
11. Break students into groups.
12. Build trusses.
13. Help with any questions.

Outline provided by Randy Rickels, Shelter Systems Limited





Truss/Team Building Activity

This activity introduces students to what your facility has to offer as future contractors, or employees with your company (Designers, Estimators, Quality Control, or Production), and offers some knowledge about structural building components.

Goals of this Activity

The goal of this team building activity is to get all students involved, teach them the components of a truss, how to read a drawing, and most importantly, give them a taste of what opportunities they can encounter if pursuing an internship or career with your company. Students in construction trades programs are often rushed through or don't have an opportunity to learn about what goes into the structural building components they are setting. This activity provides students with that training, so when they are faced with the drawings in the field, or have a question, they have an idea of what they are looking at.

Preparing the Materials for the Students

Begin by designing a truss using your design software to the difficulty of your choice. This is often determined by how experienced the students are. Next, have production cut all the materials and label them as displayed on the drawing. Create the plates using OSB, or another material, to represent the steel plates. Finally, bundle all materials into sets for each group to open.

How to Execute the Activity?

1. **Introduce yourself and tell them about what you and your company do**
    a. *Tell them your story, how did you end up in this industry?*
2. **Briefly teach the students how to read a Truss Drawing**
   (Different from the drawing used in the activity)
    a. *How to find the Heel Height?*
    b. *Where is the span located?*
    c. *Pitch? Overhang? Plate Sizes?*
3. **Split the students into groups**
    a. *Splitting into groups encourages competition and allows the students to work with others they typically wouldn't.*
4. **Provide each group of students with materials**
    a. *At least 3 Drawings*
    b. *Tape Measures*
    c. *Truss Materials (Components and Mock Plates)*
5. **Let the groups compete to see who can finish the fastest.**
6. **Before a team can win, check their work using some examples from your company's Quality Control Program**

Feedback from Students

"Make the activity more challenging by adding random pieces that don't belong."
"Provide for teachers to use in a classroom setting for a learning tool."
"Fun and competitive!"

Student name: ___

SOUTHWESTERN MICHIGAN COLLEGE

SCHOOL OF ADVANCED TECHNOLOGY

Internship Program

FINAL EVALUATION OF INTERNSHIP OUTCOMES – Submit at 144 Hours

(CONSTRUCTION TRADES GREEN TECHNOLOGY)

Please evaluate the student intern for each required internship outcome by entering a whole or decimal number in the blank space provided. Example: 9 or 9.4.			
Rating scale: Superior (A) 9-10	Above Average (B) 8-8.9	Average (C) 7-7.9	Below Average (D) 6-6.9	Failing (F) 0-5.9	
1	Demonstrates an understanding of the fundamentals of residential construction auditing to analyze weaknesses and strengths in the thermal/pressure boundaries, combustion air zone, and HVAC distribution system in a residential structure.		
2	Demonstrates an understanding of the fundamentals of construction design to minimize the use of materials and resources while maximizing the capabilities and values of the materials and resources being used.		
3	Demonstrates an understanding of the fundamentals of residential construction and design relating to energy compliance as determined by codes, regulations, and industry standards.		
4	Demonstrates an understanding of the fundamentals of proper construction practices, correct tool usage, and safety.		
5	Demonstrates an understanding of the fundamentals of foundations and layout, framing, roofing, insulation and wall layouts, interior and exterior finishing, setting engineered trusses, and incorporating Green Building techniques throughout the entire construction process.		
6	Demonstrates an understanding of basic principles of applied mathematics, ratio and proportion, applied geometry, precision measurement, the use of formulas and techniques that are used in the construction field, and development of critical thinking skills.		
7	Demonstrates a fundamental knowledge of residential systems, and the ability to accurately read and interpret blueprint drawings and plans.		
8	Demonstrates an understanding of workplace safety, effective communication in the workplace, and other aspects of professional behavior.		
9	Demonstrates the ability to prepare a contractor's bid proposal taking into consideration daily outputs, unit costs, unit prices for estimating labor, material and equipment, productivity adjustment factors, overhead and profit, cash flow and interest calculations, conceptual estimating methods, and cost variance analysis.		
10	Demonstrates the ability to produce field documentation, develop reports, utilize various planning methods and scheduling techniques, procure materials, and complete a subcontract agreement		
GENERAL OBSERVATIONS			
1	Intern was well prepared for this internship.		

Student name: Shawnee Gunnett___

2	Intern demonstrates diligence, interest, enthusiasm, and positivism.		
			OVER➔
3	Intern has maturity, poise, and confidence and displays self-assurance.		
4	Intern demonstrates the ability to work independently to complete specific assignments, and completes assignments accurately.		

Are there other areas involving the internship program or the intern that you wish to comment on?

Supervisor's Signature Training Site Date

PLEASE SUBMIT THIS FORM TO THE INTERNSHIP COORDINATOR UPON INTERN'S COMPLETION OF 144 HOURS.

Copies: Internship coordinator
Supervisor
Student intern

Job Availability at Big C Lumber

2 – 3 Office Support Team Members

Dowagiac Location – Inquire with Dallas Austin

- *Availability:* Day shift, Flexible Hours, No weekends
- Internship, Part-time, Seasonal, or Full Time
- *Job Description:* Filing, Account Tracking, Invoicing, Inventory, Scheduling, Purchase Orders, and Answering Phones

1 Quality Assurance Representative

Dowagiac Location – Inquire with Dallas Austin

- *Availability:* Early Mornings (4am-8am with some flexibility on times), No weekends
- Internship, Part-time, or Seasonal
- *Job Description:* Inspecting Trusses, Data Collection, Reporting, and Calibrations

1 – 2 Structural Estimators

Dowagiac Location – Inquire with Dallas Austin

- *Availability:* Day shift, Flexible Hours, No weekends
- Internship, Part-time, or Full Time
- *Job Description:* CAD Design, 3D Modeling, Structural Truss Designs, Blueprint Reading, and Material Takeoffs

1 – 2 IT & Networking Staff Members

Granger, IN Location – Inquire with Brandon Magor

- *Availability:* Day shift
- Internship, Part-time, or Seasonal
- *Job Description:* General Problem Solving IT related issues, IT Projects, supporting 19 locations throughout Northern IN, Lower MI. Occasionally assist at remote sites with IT tasks

1 Maintenance Assistant

Dowagiac Location – Inquire with Wendall Whittaker

- *Availability:* Day shift
- Internship, Part-time, or Seasonal
- *Job Description:* Fabrication, Welding, Drilling, Machine Trouble Shooting

6 – 7 Production Assembly Members

Dowagiac Location – Inquire with Wendall Whittaker

- *Availability:* 1st Shift, 2nd Shift or 3rd Shift
- Internship, Part-time, Seasonal, or Full Time
- *Job Description:* Assemble Wall Panels, Roof Trusses, and Floor Trusses for Residential and Light Commercial Projects

Contacts:

Dallas Austin
Design Manager
Provide Resumes to
dallasa@bigclumber.com

Brandon Magor
IT Manager
Provide Resumes to
brandonm@bigclumber.com

Wendall Whittaker
Production Manager
Call (269) 782-5900, Stop in and fill out applications, or provide Resume to
wendallw@bigclumber.com

Notes:

How BCMC Contributes to Your Business Success

Best practices are shared by industry experts in every educational session.

Conversations with peers lead to ideas that transform individual businesses.

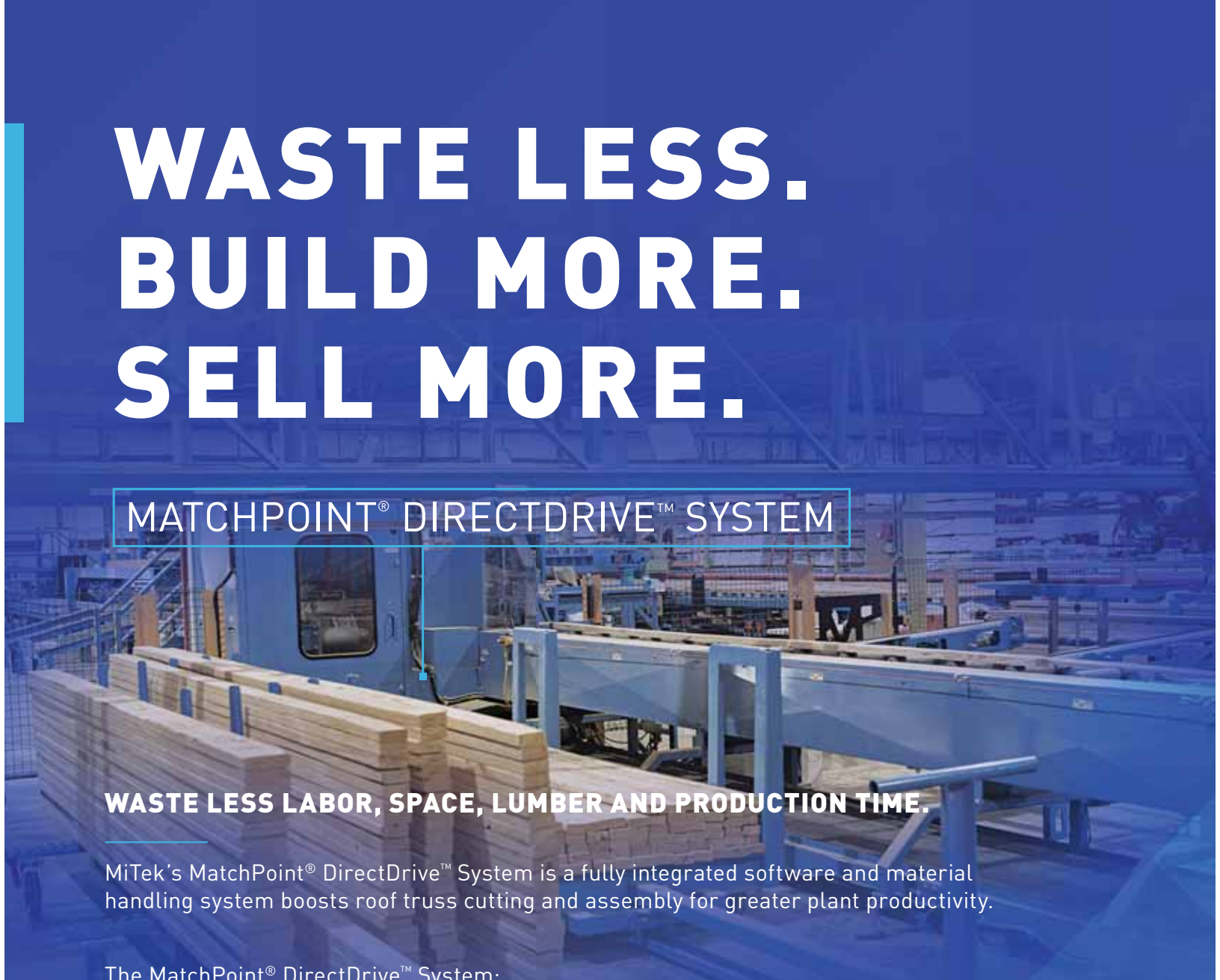
Meetings with suppliers give insight into opportunities for further innovation.

Coming together for one week every October generates ideas and energy that drive the industry forward throughout the year.

2020 KNOXVILLE

WASTE LESS. BUILD MORE. SELL MORE.

MATCHPOINT® DIRECTDRIVE™ SYSTEM



WASTE LESS LABOR, SPACE, LUMBER AND PRODUCTION TIME.

MiTek's MatchPoint® DirectDrive™ System is a fully integrated software and material handling system boosts roof truss cutting and assembly for greater plant productivity.

The MatchPoint® DirectDrive™ System:

- A cellular approach to truss manufacturing that takes multiple manually managed processes and coordinates them as a whole
- Utilize software and machinery relationship to stabilize the manufacturing schedule – thus allowing for better planning and less variability
- Pick, cut, and deliver material to a build station with no hands touching the material
- Designed to address labor shortages, complex truss designs, material handling issues, and productivity demands

Achieve a new standard of performance for you and your customers with the strongest, most complete commitment to support your success at every step.

Learn more at MiTek-US.com/DirectDrive or call us at 800-325-8075

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