



AUTOMATED ROOF & FLOOR TRUSS SYSTEMS

ROBOT AUTOMATION building the future of the COMPONENT industry.



ALPINE, an ITW Company, the exclusive representative for
House of Design's Automated Roof & Floor Truss Systems.
alpineITW.com

BENEFITS OF AUTOMATION

Reduce labor & lessen physical demand

Increase profits

Increase production capacity

Production flexibility

Reduce errors & waste

Improve plant efficiency



COLLABORATIVE WORKFORCE

AUTOMATED ROOF TRUSS SYSTEM

2,500+ Bf/Hr with 3 operators

The roof truss system is comprised of two independent systems, allowing different roof truss products to be built simultaneously.



AUTOMATED FLOOR TRUSS SYSTEM

1,000+ Bf/Hr with 3 operators

The floor truss system provides flexible production scheduling. Two lines feeding one assembly table.

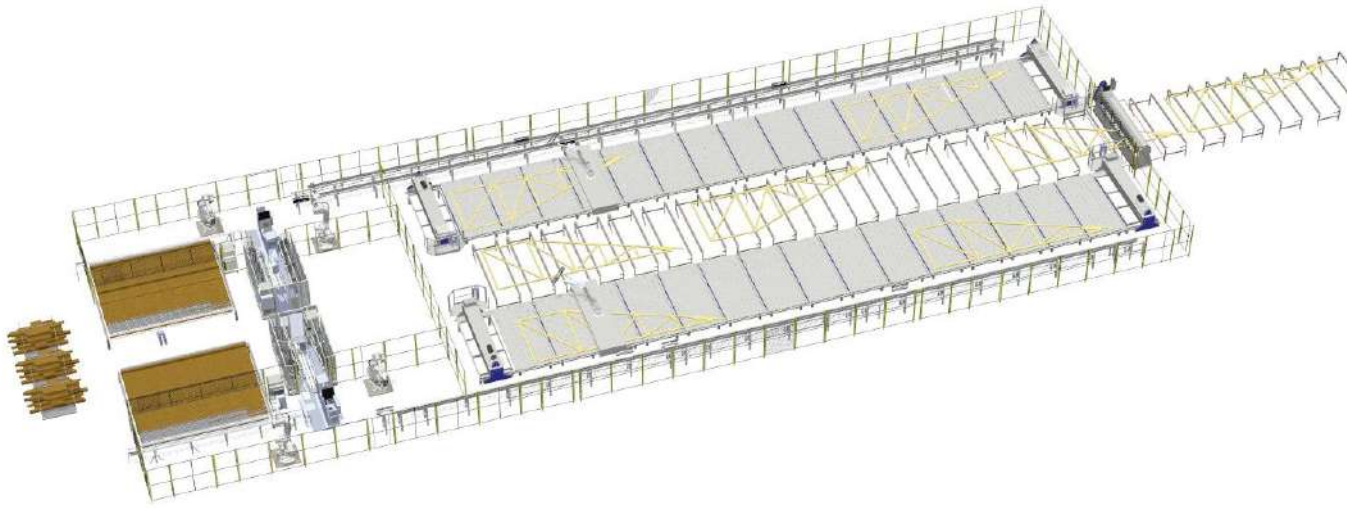


Our systems are collaborative to create an efficient use of manual & robotic labor. Automation does most of the heavy lifting & personnel ensure trusses meet internal specifications.

Factors that can affect rate are operator experience, lumber type, system maintenance, complexity of truss design, & number of connector plates. To ensure these factors are addressed, House of Design provides operator training, a comprehensive support program, & guidelines for truss design.

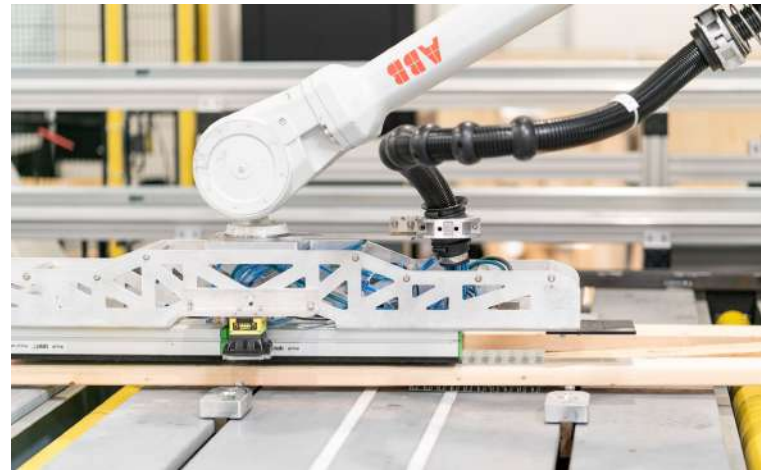


Roof Truss System



FLEXIBLE LAYOUTS AVAILABLE

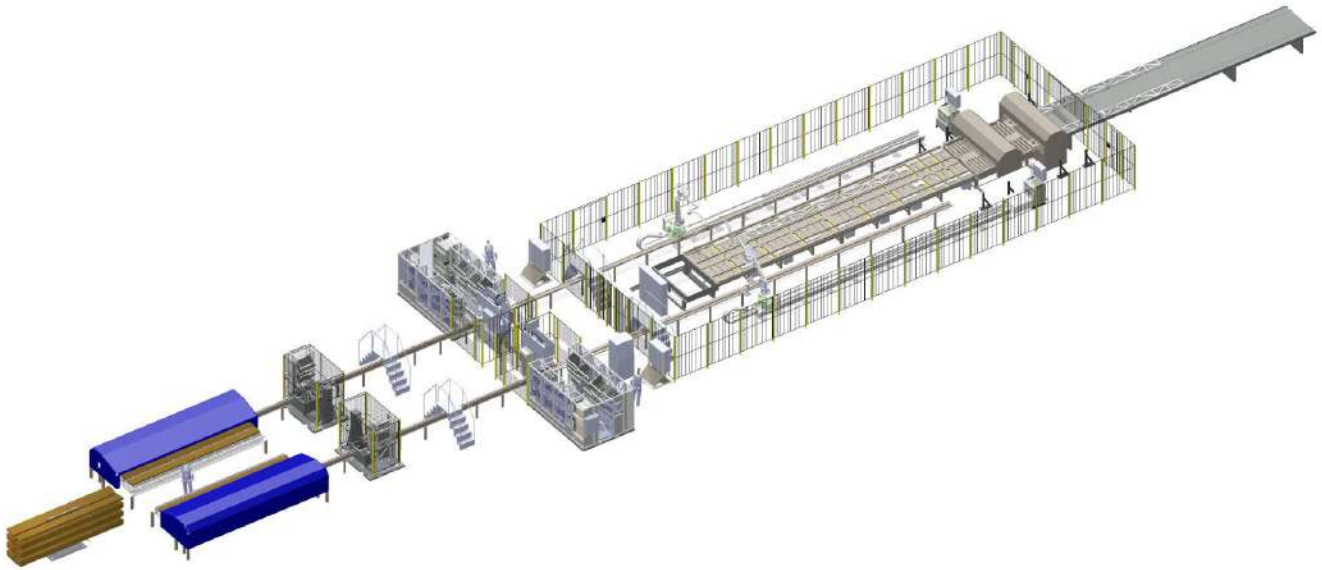
- The roof truss system is comprised of two independent systems, allowing different roof truss products to be built simultaneously.
- An operator loads multiple truss members on the manual infeed table in the proper sequence. The system automatically loads each member into the preplate station where connector plates are pressed into the member.
- The preplated member passes to the assembly robot, the member is placed on the table in the correct position & orientation.
- An operator performs a QC check, securing connector plates as needed. Once all members are in place, the truss is auto-pressed & side ejected to the finish press.



Floor Truss System

Two robotic lines feeding one assembly table.

Two trusses ejected with each gantry press for 1,000+ Bf/Hr!



- The floor truss system is similar in nature to the roof truss assembly with the addition of a splicing station prior to preplating.
- Visit us online to learn more about TEd software, system footprints & machine specifications.
- Products work with most connector plate brands & are currently configurable with 65+ connector plate sizes.

Available products support a range of existing floor systems. We can provide robotic automation solutions that enhance current equipment.

Our industry leading robotic truss systems are changing component manufacturing

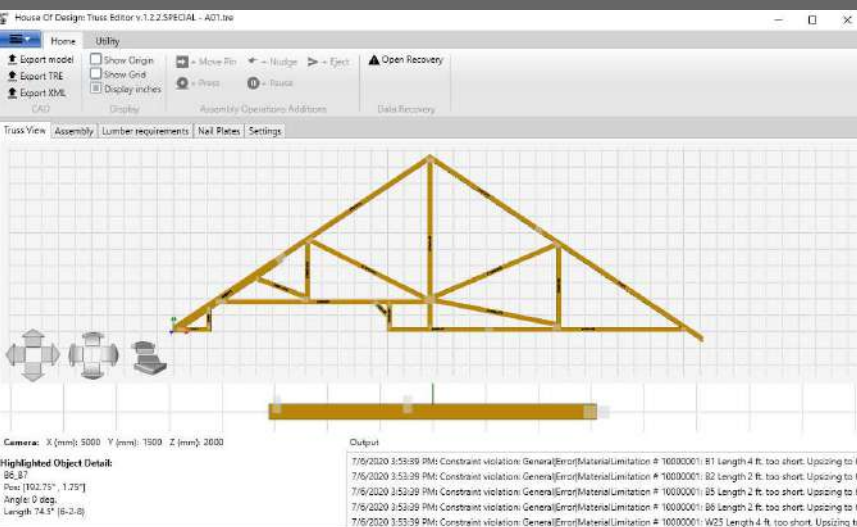
PREPLATE TECHNOLOGY - Standard flipping is a thing of the past



This is a completely fresh method of applying connector plates. Using a preplate system, combined with House of Design's TEd software, users can be assured that the right connector plate will be placed at the right location every time. This patent pending technology decreases interactions with plates which improves employee safety & reduces waste & lost production time.

Preplate station utilizes most connector plate brands, currently configurable with 65+ connector plate sizes.

TEd software enables efficiency & precision



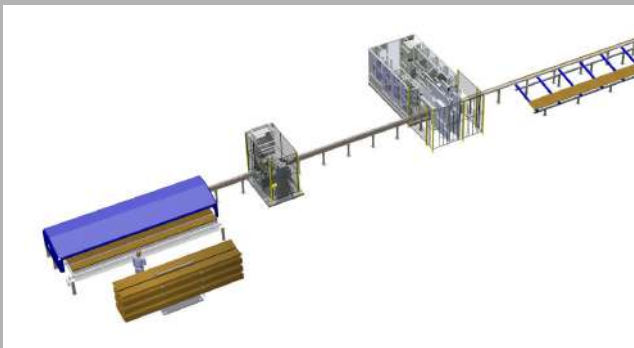
House of Design's powerful TEd (truss editor) software supports material sequencing & positioning of connectors. The TEd platform provides an easy-to-use graphical interface for operators & designers to layout assembly processes with minimal training & no coding required.

TEd enables customers to quickly change the design & size of desired truss, supporting maximum production capacity. No longer are users limited to a specific set of pre-programmed products.

ROBOTIC SOLUTIONS

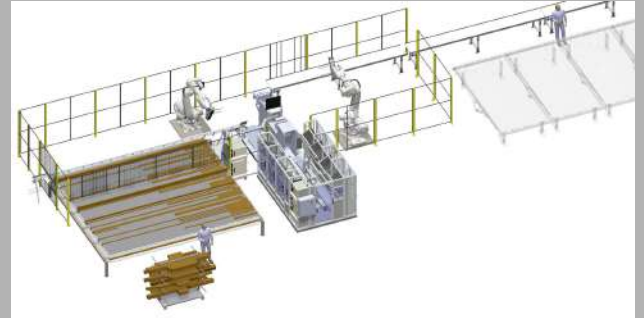
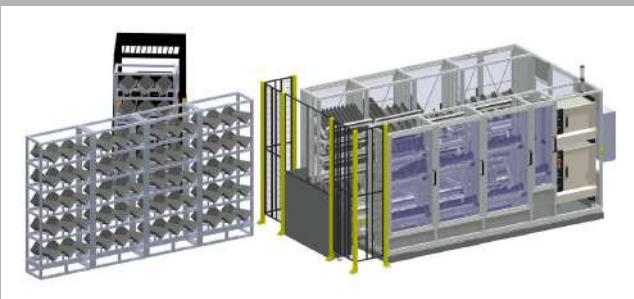
CHORD PREPLATE

Combining the splicing station with preplate technology improves production rates & accuracy of placements resulting in optimized material use.



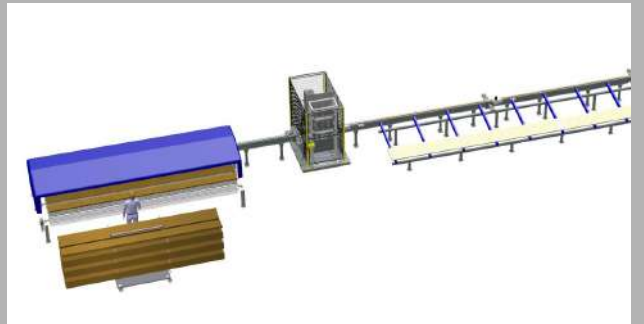
NAIL PLATE PICKER

Picks & sequences connector plates based on the chosen truss design, enhancing plant management & improving overall productivity.



ROOF MEMBER PREPLATE

Robotic solution for efficient production of jack & small specialty trusses. System infeeds pre-cut roof members & preplates them in the correct sequence for assembly.



SPLICING STATION

Picks connector plates & splices multiple members together efficiently which reduces material handling & increases worker safety.


BETTER TOGETHER

ABOUT House of Design

House of Design, LLC is an ABB robotics integration company with expertise in flexible & innovative automation. The mission is to transform industry through the implementation of state of the art robotics. Formed by engineers for engineers, we focus on enabling organizations to implement automation with the highest return on investment.

ABOUT Alpine ITW

Recognized for its engineering excellence, productivity-enhancing software & equipment solutions, & the industry's best service, Alpine is a leading provider of building component software, metal connector products & equipment to component manufacturers. The company is a division of Illinois Tool Works Inc., a Fortune 250 global multi-industrial manufacturing leader with revenues totaling \$13.4 billion in 2015.



Call us today for a
consultation on how
robotics can transform
your business & ease
labor issues



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