



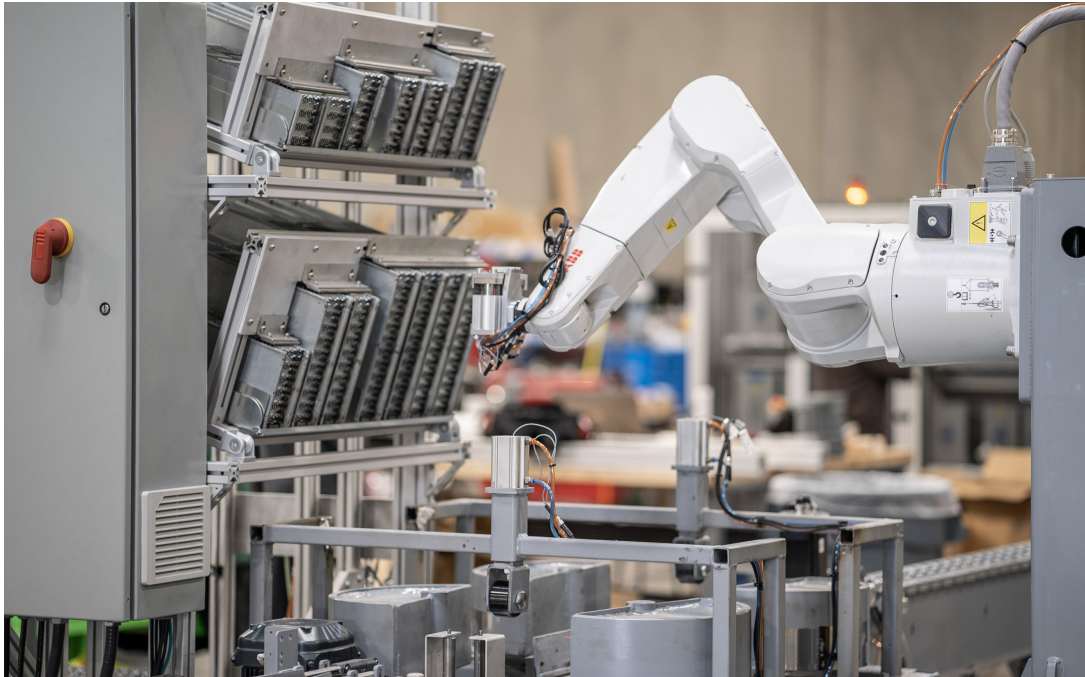
AUTOMATED ROOF & FLOOR TRUSS SYSTEMS

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



See the Splicing Station in action:
TheHouseofDesign.com/truss

Robotic solutions for automated truss manufacturing that increase component manufacturers' production output & capacity while helping reduce the challenges of labor shortages.

Reduce labor issues & supplement your workforce

Lessen physical demand & improve safety

Attract & retain the best in limited labor pools

Increase profits through higher production

Increase capacity & market share

Production flexibility, easy to scale

Reduce errors & waste for quality repeatable builds

Improve plant efficiency & competitive advantage

COLLABORATIVE WORKFORCE

AUTOMATED ROOF TRUSS SYSTEM

800+ Cp/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

800+ Cp/Hr with 3 operators

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



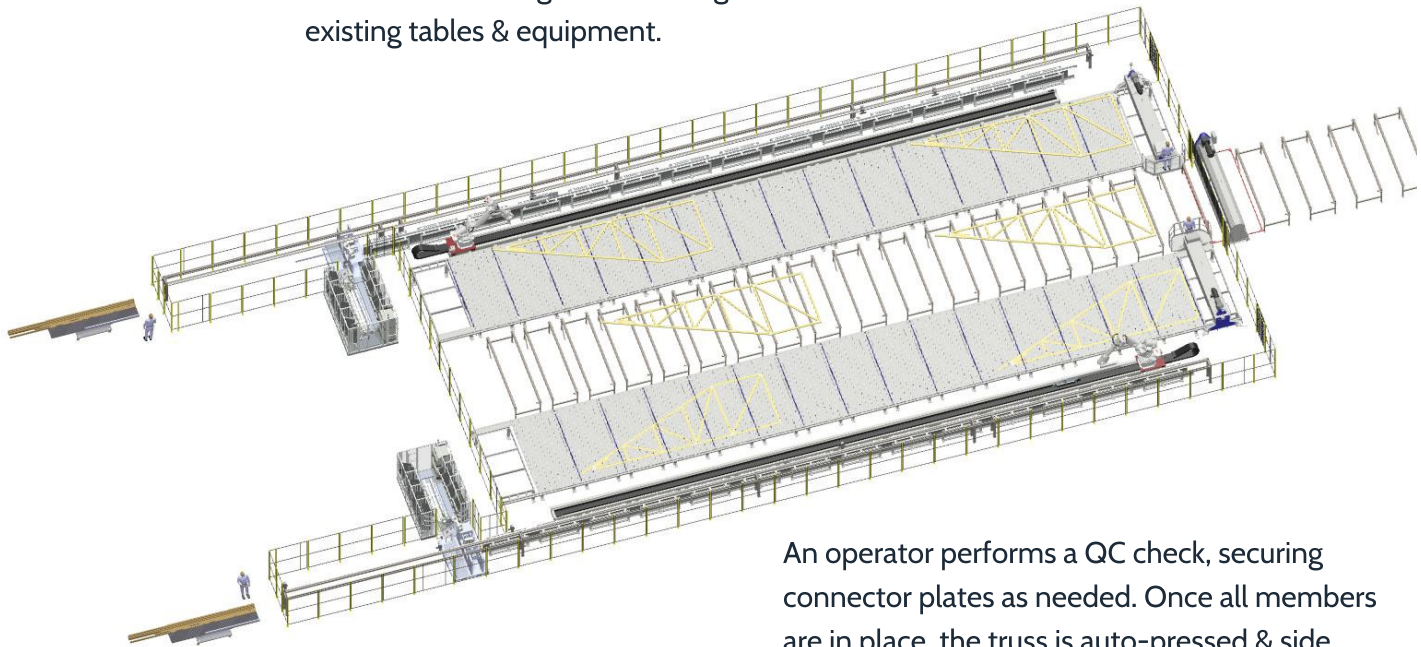
Our systems are collaborative to create an efficient use of manual & robotic labor. Automation does most of the heavy lifting & personnel ensure trusses meet internal specifications.

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.



Robo-Truss Automated Roof Truss System

The preplated member passes to the **assembly station** robot, the member is placed on the table in the correct position & orientation. Robots move along a rail allowing the use of existing tables & equipment.

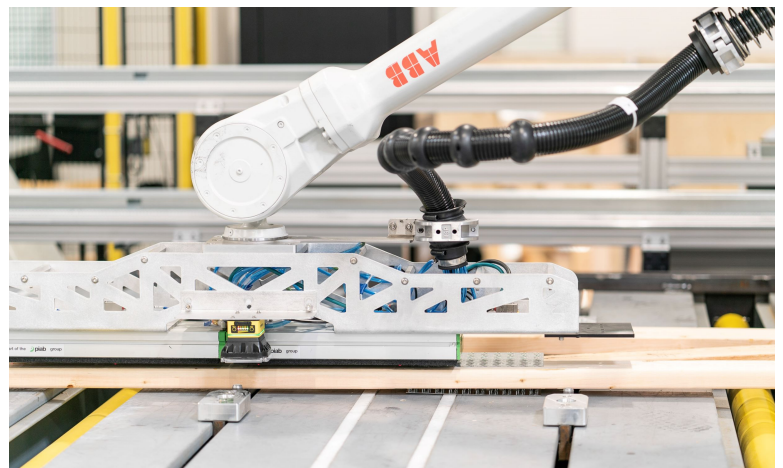


An operator performs a QC check, securing connector plates as needed. Once all members are in place, the truss is auto-pressed & side ejected to the finish press.

The system automatically loads each member into the **preplate station** where connector plates are pressed into the member.

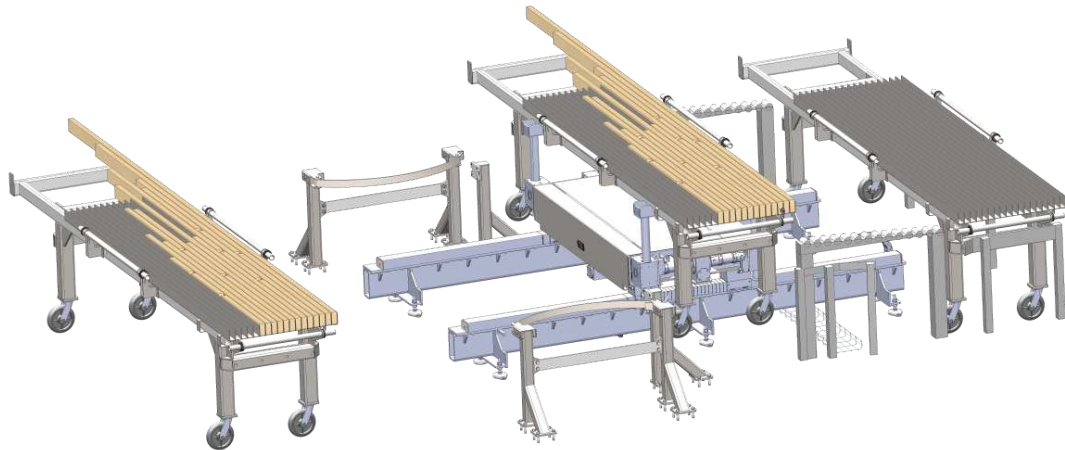


DIMENSIONS: 160' X 69'
Based on a 70' table.
Footprint may expand
depending on chosen table length.
Maximum truss size is determined
by table selection.



AUTOMATED CART INFEED

HoD software integrates with & enables the saw to optimize cutting & sequence the order & orientation of boards for loading onto the cart. The saw operator is the last to handle individual members as he places them onto the cart. Once the cart is loaded & docked, the system sequences the members in for preplating & assembly.



PREPLATE TECHNOLOGY - Standard flipping is a thing of the past!



Utilizing the preplate system combined with House of Design's TEd software, component manufacturers can be assured that the right connector plate will be placed at the right location every time. Preplate technology decreases interactions with plates which improves employee safety & reduces waste & lost production time.

House of Design's robotic components & automated member plating systems are compatible with most connector plate brands. Our TEd software integrates with most design suite file types (.ASD, .TRE, etc.). Please contact us if your design format is not listed.

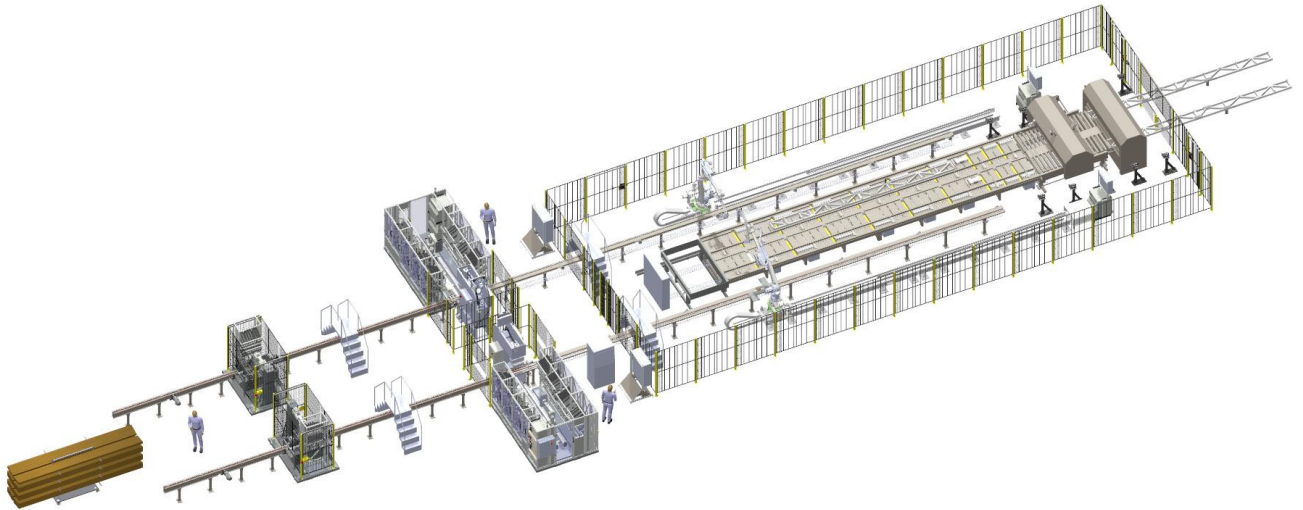


FLEXIBLE LAYOUTS AVAILABLE

Robo-Truss Automated Floor Truss System

Two robotic lines feeding one assembly table.

Two trusses ejected with each gantry press for 800+ Cp/Hr!



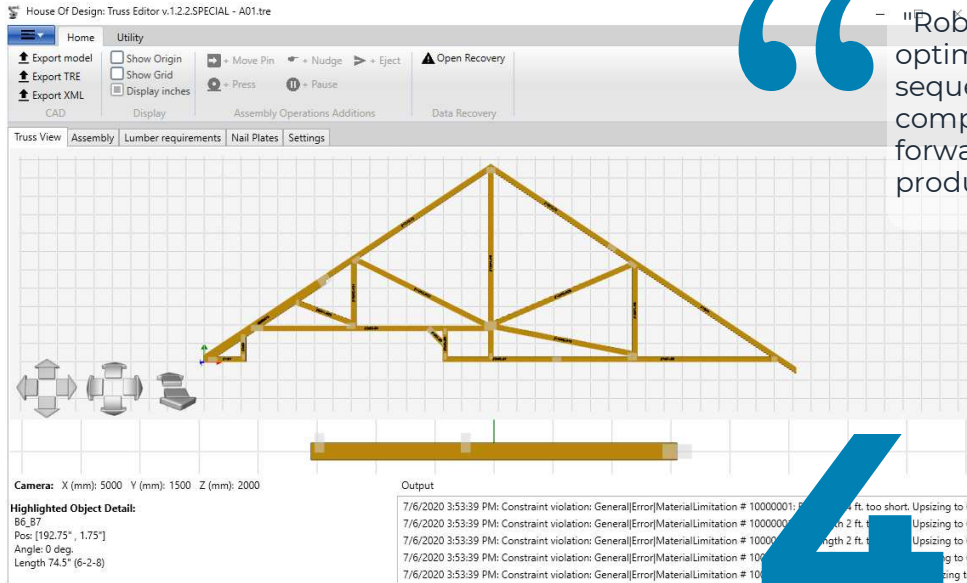
Available products support a range of existing floor systems.
Our robotic solutions integrate with most design suite file types.

The floor truss system is similar in nature to the roof truss assembly with the addition of a splicing station prior to preplating.



DIMENSIONS: 145' X 45'
Based on a 40' table.
Footprint may expand depending
on chosen table length.
Maximum truss size is
determined by table selection.

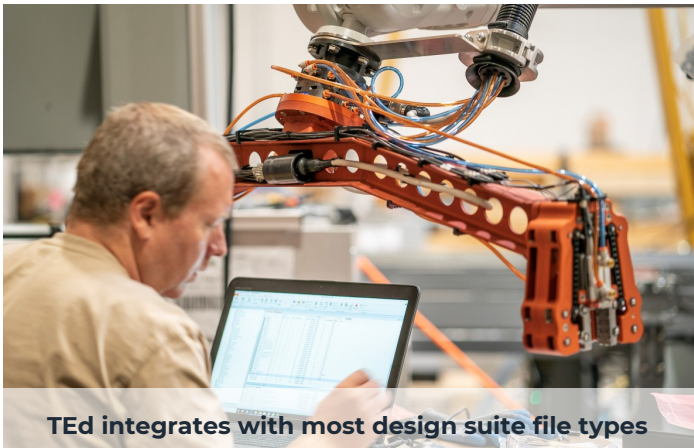
Our industry leading robotic truss systems are changing component manufacturing



“Robot technology optimized by computerized sequencing is moving component manufacturing forward in new & highly productive ways.”
- Industry Consultant

INDUSTRY 4.0

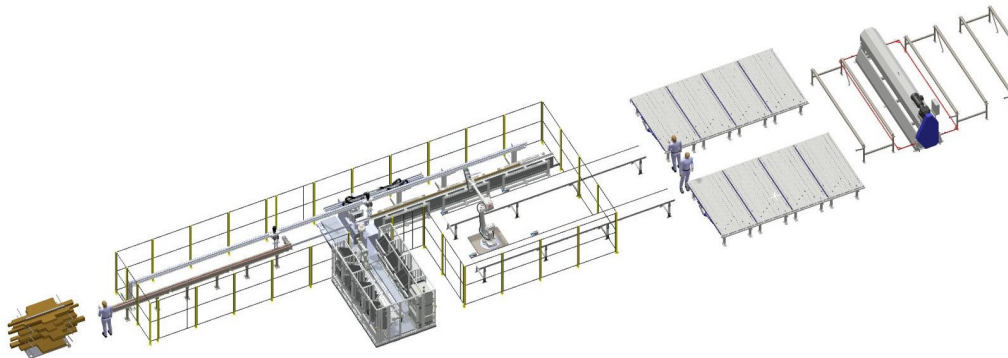
Dynamic Drag & Drop Programming



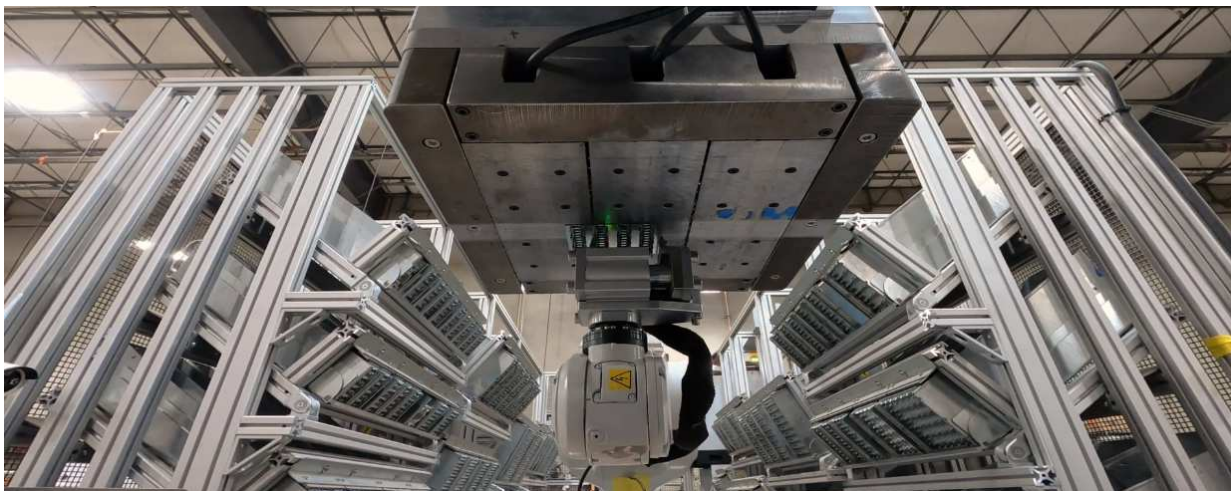
TED integrates with most design suite file types

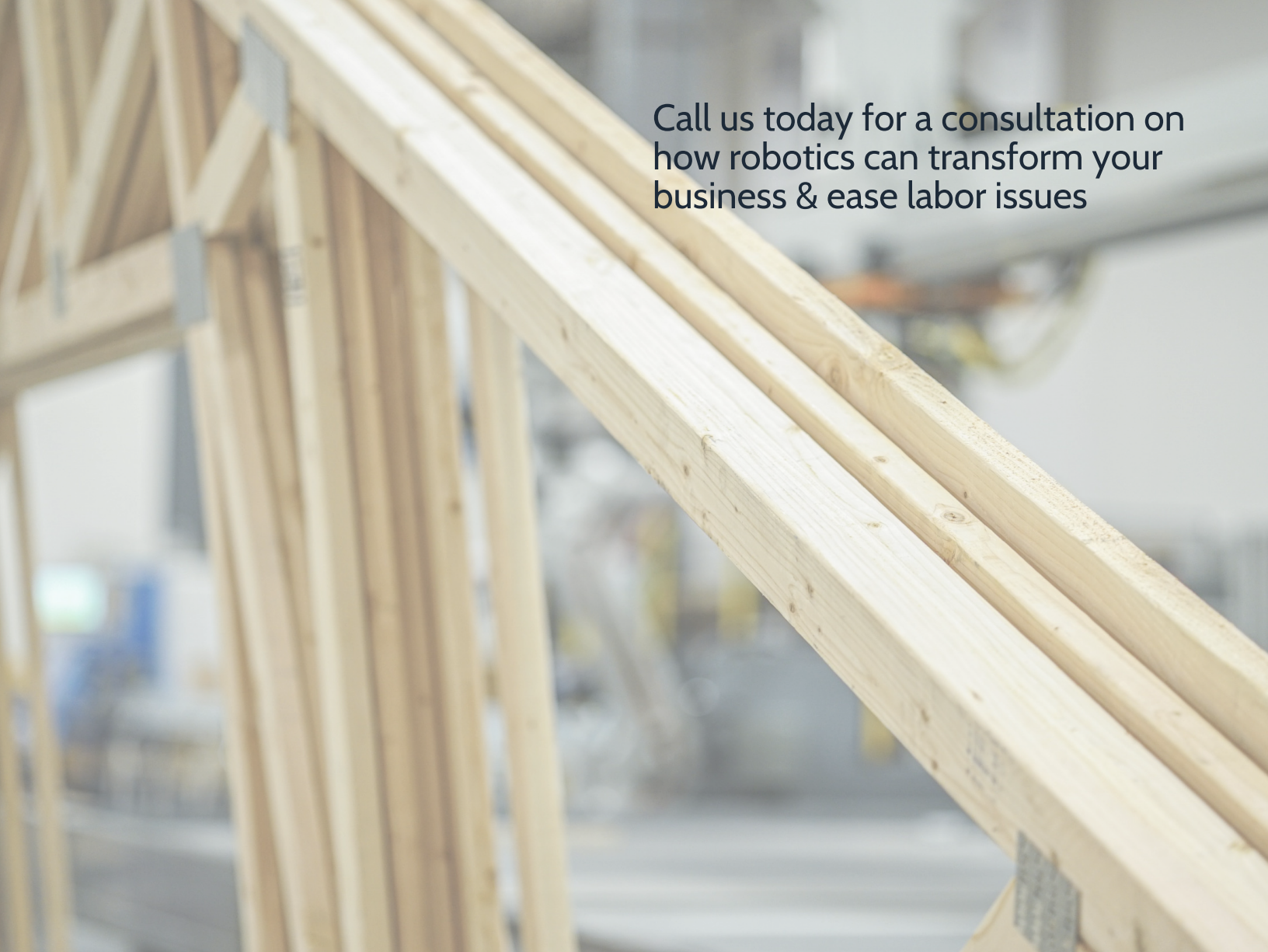
House of Design's TED (Truss Editor) Software sequences the order of trusses being built. Designers utilize the easy-to-use graphical interface to layout the desired truss design without the need to learn or perform coding. The software will re-sequence for optimal layout & cycle time while the robots are automatically reprogrammed in real time. TED allows customers flexibility in both the design & size of the product produced. Customers are not limited to a specific set of pre-programmed products.

CRUSH THE CUT-UP MARKET



Our roof member preplate station is our solution for jack, hipped roof & small specialty trusses. The system is fed with pre-cut members & preplates them in the correct sequence to be assembled on the table. The preplate station delivers to an operator working a smaller table. Automating the jack truss process removes the production & labor disruptions that one-off & specialty trusses can cause.





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

To best serve the components industry, House of Design & Alpine have partnered to bring state-of-the-art automated solutions to market, targeting common problems: lack of skilled labor, quality, & production capacity. House of Design & Alpine are both leaders in their respective industries & a partnership between the companies brings two very progressive companies together to the benefit of clients.



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