Tradition. Ambition. Vision.

Find out more about the future at **randek.com**

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BUILDING THE FUTURE

RANDEK™

TRADITION
AMBITION
VISION

WORLD-LEADING SUSTAINABLE PIONEER IN THE INDUSTRY WITH A GLOBAL MARKET PRESENCE.

Randek develops and produces innovative high-performance machines and complete systems for efficient prefab house manufacturing. With top technical skills and progressive thinking in automated solutions, Randek products and services are in demand on a global market.

THE COMPANY
Our machines are manufactured at our own modern plants in Falkenberg and Arvika, Sweden, and supplied to leading offsite house manufacturers worldwide. Production conditions and capacity demands are the cornerstones for layout and configuration. We install, commission and test every line with our own staff, wherever it is.

Since 1943, Randek has been a driving force in efficient processes and high quality. You get one responsive partner for the complete solution, from finance to start-up and support.



SUSTAINABILITY

AT RANDEK, WE STRIVE FOR A **RESPONSIBLE** AND **SUSTAINABLE** METHOD OF OPERATION.

We are aware that a balance between the welfare of our customers, our employees, society and the environment is the secret to success. Because of this, it's crucial that we take social responsibility, financial sustainability, and the environment into account.

DURABLE MACHINES
Our systems and machines are built to last for a very long time. They are also easy to maintain and repair. Quality is crucial to achieving sustainable development. Therefore, our products help reduce waste and the need for replacement. This benefits the environment at the same time as it means cost savings for our customers, resulting in a successful and efficient circular economy.

REDUCED ENVIRONMENTAL IMPACT
In our manufacturing, reusable and environmentally friendly materials are consistently given priority.

By making changes to our products and services, we can continue to meet the needs of our clients. We also try to leave as little of an environmental footprint as possible. We have invested in solar cells at our Falkenberg facility, which cover most of the plant's energy needs.

NATURAL MATERIAL
Our customers' choice to build their homes out of wood has several benefits. From an environmental point of view, wood is a sustainable and renewable resource, because harvested forest is replanted and grows again. At the same time, the carbon footprint of manufacturing can be reduced, as trees absorb carbon dioxide from the atmosphere as they grow. Wood has natural insulating properties, which results in reduced energy consumption for heating and cooling. Wood also has a lower footprint than building materials such as concrete and steel.





INNOVATION

AT RANDEK, **INNOVATION** IS NOT JUST A BUZZWORD. **IT'S A WAY OF LIFE.**

For Randek, innovation has always been an important part of success in prefabricated house manufacturing. At the heart of our innovation process is the collaboration with our customers, which helps us stay at the forefront. We collaborate closely with our customers so that we can identify their problems and quickly deliver solutions. Through continuous feedback, we can better understand the customers' challenges and how we can help in the best way.

GROUNDBREAKING SOLUTIONS
We provide cutting-edge solutions that are customized to meet the unique demands of our clients using the most recent methodologies and technologies. A common thread in our innovation process is to be first in the industry with new solutions. We have introduced several innovative and groundbreaking products throughout the years, including the AutoEye Truss System and the ZeroLabor Robotic System. These achievements have established Randek as a leader in the field and show our commitment to providing cutting-edge solutions that boost productivity and efficiency.

1943–1980

THE PAST

RANDEK DELIVERS
HIGH-PERFORMANCE WOODWORKING MACHINES
FOR EFFICIENT HOUSE MANUFACTURING TO FORTY COUNTRIES ON FOUR CONTINENTS.

THE SWEDISH FOREST

Half of Sweden is forest land, carefully managed to yield some of the world's finest quality timber. Sweden has a long tradition of building wooden houses and has always looked for ways to build excellent quality, well insulated houses using our slow growing timber. The dream of owning one's own home was made possible by our wood industry, which pioneered the methods of using machine production to produce affordable buildings assembled from prefabricated elements.

Randek was founded in 1943, as demand for factory production of wooden houses took off. We were the first to specialize in this part of the industry and we have constantly improved our machines to increase capacity and efficiency.

300,000 **HOUSES IN** 30 **YEARS**

During this time, we produced and delivered saws, milling and cutting equipment, as well as entire systems for automated manufacturing, for the Swedish house manufacturers.

Between 1950 and 1980, 300,000 wooden houses were manufactured by Randek customers in Sweden. Myresjöhus was one of the pioneers and a long-standing partner for our design team.

During the 1970s Denmark, Norway and Finland became interested in the clever Swedish prefab houses, so Randek machines were exported to our neighbouring countries, then to Russia and the rest of the world.



ANOTHER PIONEER

Another pioneer, Christopher Hultberg, became Production Engineering Manager at Myresjöhus in 1970 and oversaw the first automated house production system. He is one of Sweden's pioneers of prefabrication.

"Working together with Randek has been great, we've worked hard to develop automated machines and systems that were completely new to the industry at the time. Randek stood behind the construction of all the machines they built for us. As far as I know, there is still no other company that delivers the entire solution."

– Christopher Hultberg

Myresjöhus

TRADITIONS

Halvar Nordh was involved in constructing our first "småblockslinje" (small block system) in the 1950s. His great-granddaughter, Nicole Nordh, is carrying on the family tradition by continuously developing Randek and its business.





THE PRESENT

THE SWEDISH TRADITION OF BUILDING WITH HIGH LEVELS OF AUTOMATION HAS SPREAD. **TODAY RANDEK IS A WORLD-LEADING SUPPLIER OF HIGH-PERFORMANCE MACHINES** AND COMPLETE SYSTEMS FOR EFFICIENT HOUSE PRODUCTION.

90% OF OUR PRODUCTION IS EXPORTED.

ONE OF THE WORLD'S FASTEST WALL PRODUCTION LINES

In the 1990s we were challenged to automate wall production for a large US homebuilder. The customer requested improved production capacity, cost effectiveness and production flexibility, all within a system that is easy to operate. The solution was our AutoWall System, one of the world's fastest and most efficient. It was delivered and optimized for maximum efficiency, with a production rate of up to 150 meters (490 ft) of wall per hour.

AutoWall also came with one of the shortest pay-off times. According to the customer, the first two lines paid for themselves in under a year, thanks to reduced production costs. Today they run six Randek lines.

PIONEERS AT THE DRAWING TABLE

Randek AutoWall is a tailor-made system for mass production of wall elements. The construction is based on a common, advanced technical base platform and is built with original components which are standard throughout the world. We work in the same way with our entire range, which includes floor lines, wall lines, roof lines and truss systems.

The technical base platform can be adapted, working in collaboration with our customers, to suit their individual requirements depending on the degree of automation or special solutions that are required.

RANDEK ROBOTICS EXPERTISE

The secret behind easy to use, safe, improved quality and output involves innovative robotic solutions. In Arvika, Randek Robotics develops, builds and tests the ZeroLabor robotic systems that join the lines engineered in Falkenberg.

Together we develop custom-made high-performance solutions for the prefabricated house industry around the world.

METERS OF WALL PER HOUR

150m



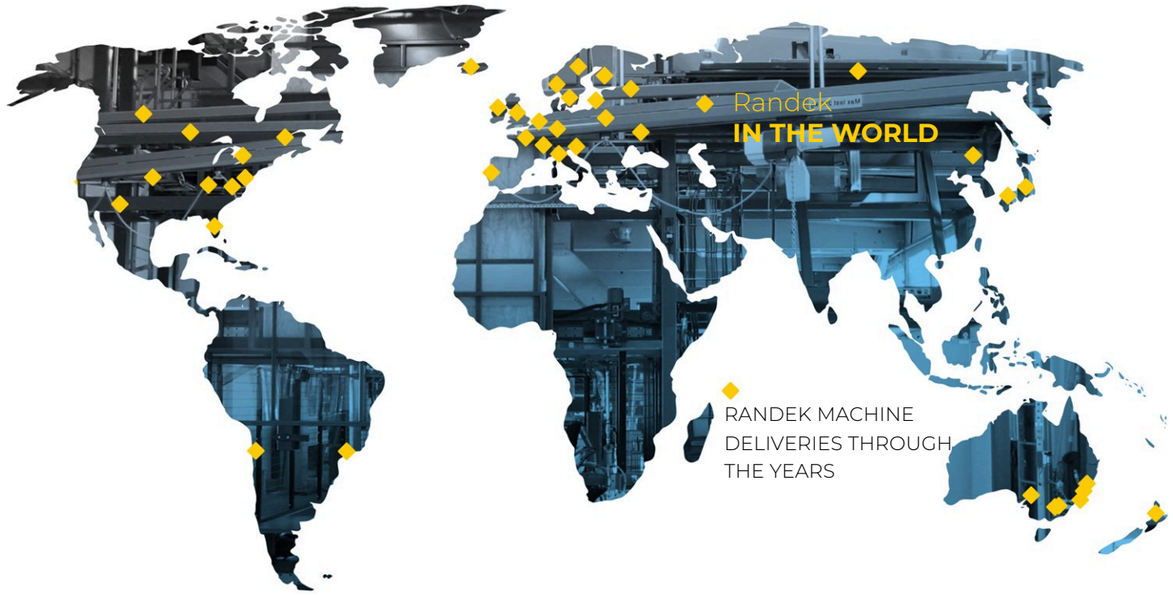
THE PRESENT

SWEDISH QUALITY THAT LASTS

RANDEK MACHINES AND SYSTEMS FOR PREFABRICATION OF WALL, FLOOR AND ROOF ELEMENTS HAVE SET PRODUCTION RECORDS AND KEPT RUNNING FOR DECADES.

THE NUMBER OF HOUSING PROJECTS AROUND THE WORLD WHERE RANDEK'S SYSTEM HAS BEEN USED IN THE PRODUCTION LINE:

>1,000,000



PATENTED
We are proud of our many great innovations which earned their patent. The butterfly table, invented in 1963, is manual yet ingenious with its many options, and is still used in many state-of-the-art production facilities.

In 1985 Randek became the first in the world to drive production machines directly from a CAD file. The first system was developed for the Swedish house manufacturer Myresjöhus, and the same principle has been upgraded numerous times since.

Since we are bragging, it's hard not to mention Randek AutoEye, which automated and revolutionized the roof truss industry. The system picks, places and precisely positions nail plates with an advanced vision system.

EXPECT PROFIT
Through the years we have become specialists in optimized material flow and production efficiency. We offer a pre-study which includes the technical specifications and layouts, capacity studies, staffing and how further automation affects results and outcome.

We often receive invitations to visit manufacturing facilities around the world, which we find interesting and rewarding.

GLOBAL SERVICE
Randek develops, sells, delivers and commissions its systems through its own companies in North America, the United Kingdom and Australia, and trusted distributors in eleven more countries. We deliver individual machines in a few months. A complete system takes between 6 and 18 months to develop, produce, test and commission.

SERVICES



PRESTUDY



MAINTENANCE



GLOBAL SUPPORT

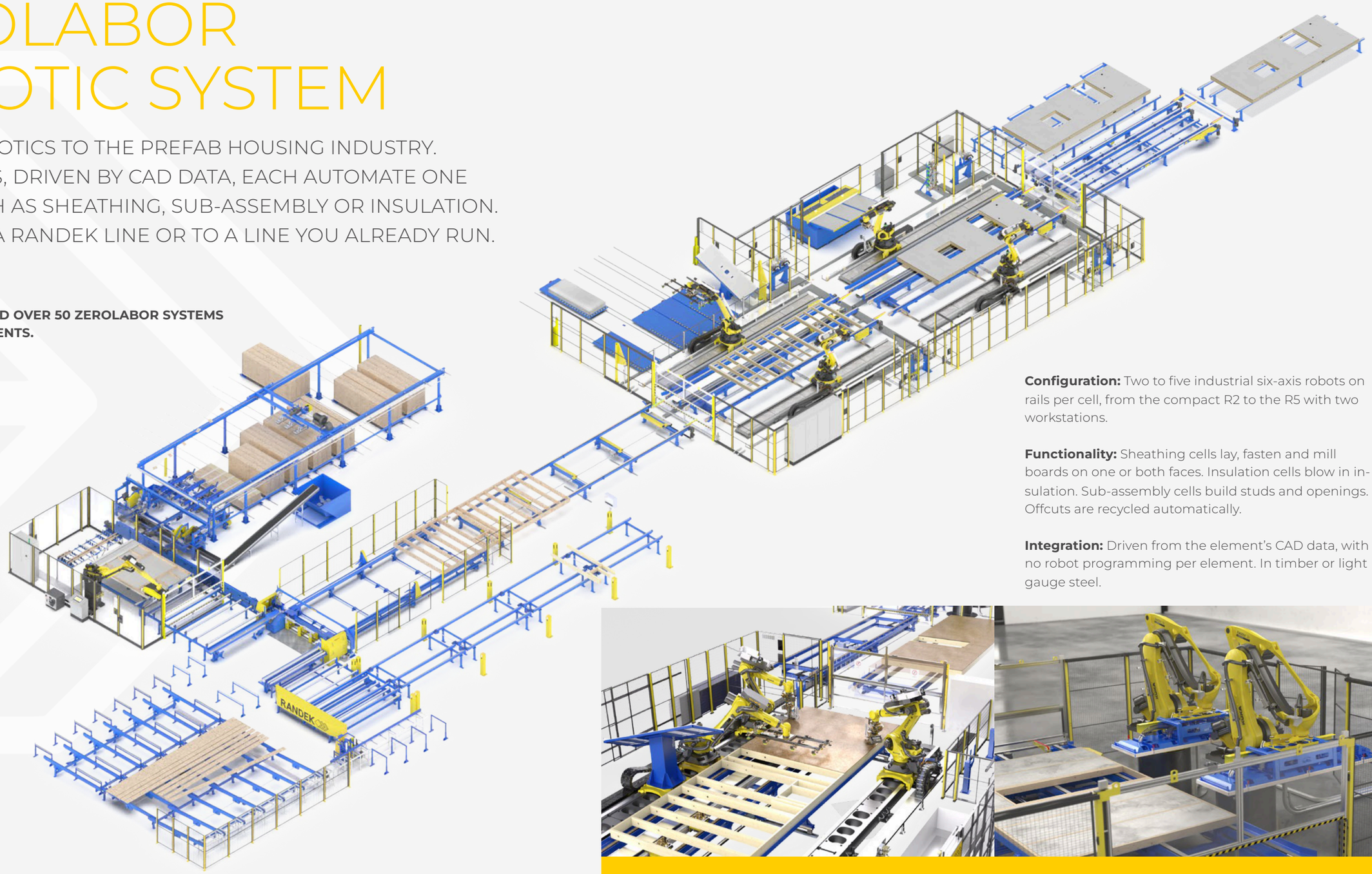


IIOT

ZEROLABOR ROBOTIC SYSTEM

BRINGING ROBOTICS TO THE PREFAB HOUSING INDUSTRY. ROBOTIC CELLS, DRIVEN BY CAD DATA, EACH AUTOMATE ONE PROCESS, SUCH AS SHEATHING, SUB-ASSEMBLY OR INSULATION. ADD THEM TO A RANDEK LINE OR TO A LINE YOU ALREADY RUN.

RANDEK HAS INSTALLED OVER 50 ZEROLABOR SYSTEMS ACROSS FOUR CONTINENTS.



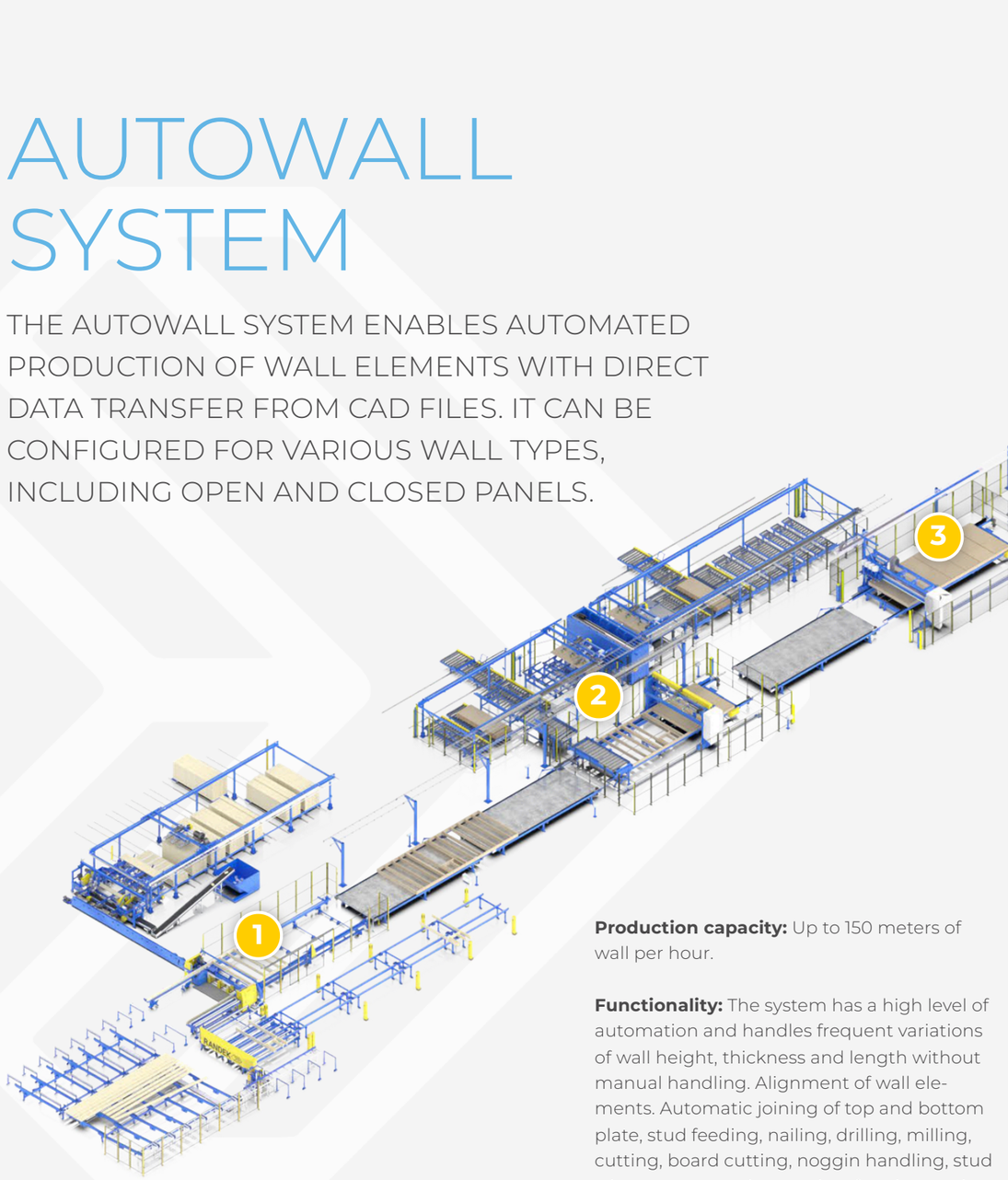
Configuration: Two to five industrial six-axis robots on rails per cell, from the compact R2 to the R5 with two workstations.

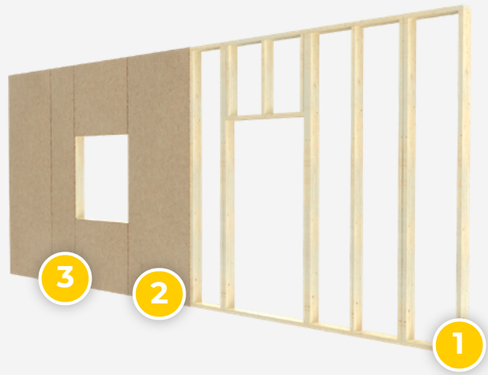
Functionality: Sheathing cells lay, fasten and mill boards on one or both faces. Insulation cells blow in insulation. Sub-assembly cells build studs and openings. Offcuts are recycled automatically.

Integration: Driven from the element's CAD data, with no robot programming per element. In timber or light gauge steel.

AUTOWALL SYSTEM

THE AUTOWALL SYSTEM ENABLES AUTOMATED PRODUCTION OF WALL ELEMENTS WITH DIRECT DATA TRANSFER FROM CAD FILES. IT CAN BE CONFIGURED FOR VARIOUS WALL TYPES, INCLUDING OPEN AND CLOSED PANELS.

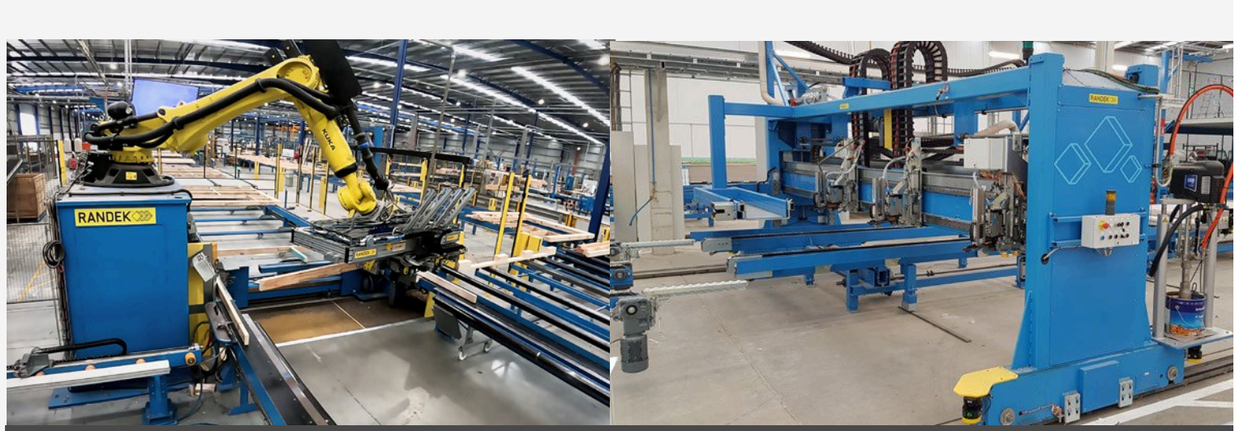




Production capacity: Up to 150 meters of wall per hour.

Functionality: The system has a high level of automation and handles frequent variations of wall height, thickness and length without manual handling. Alignment of wall elements. Automatic joining of top and bottom plate, stud feeding, nailing, drilling, milling, cutting, board cutting, noggin handling, stud alignment, robot integration, framing station, stacking, crown check, stud cutting, stud drilling and marking. Fast transport between stations through frequency-controlled drives.

Flexibility: Advanced technical base platform that can be configured and adapted to all production needs.



LINE TYPES

Turn your CAD files into perfectly finished walls with Randek Planner.

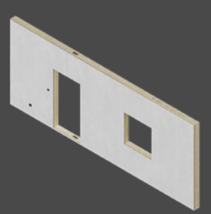
AUTOWALL FRAME



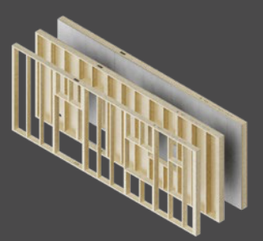
AUTOWALL OPEN PANELS



AUTOWALL CLOSED PANELS

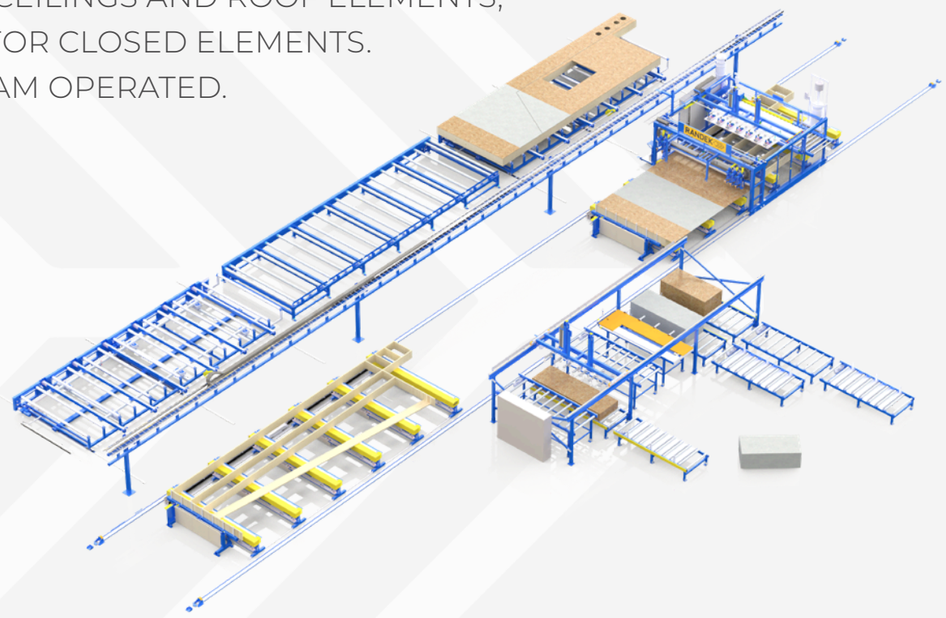


AUTOWALL MIXED PANELS



AUTOFLOOR SYSTEM

THE WORLD'S MOST AUTOMATIC SYSTEM FOR PRODUCTION OF FLOOR ELEMENTS, FLOOR CASSETTES, ROOF CEILINGS AND ROOF ELEMENTS, ALSO FOR CLOSED ELEMENTS. CAD/CAM OPERATED.





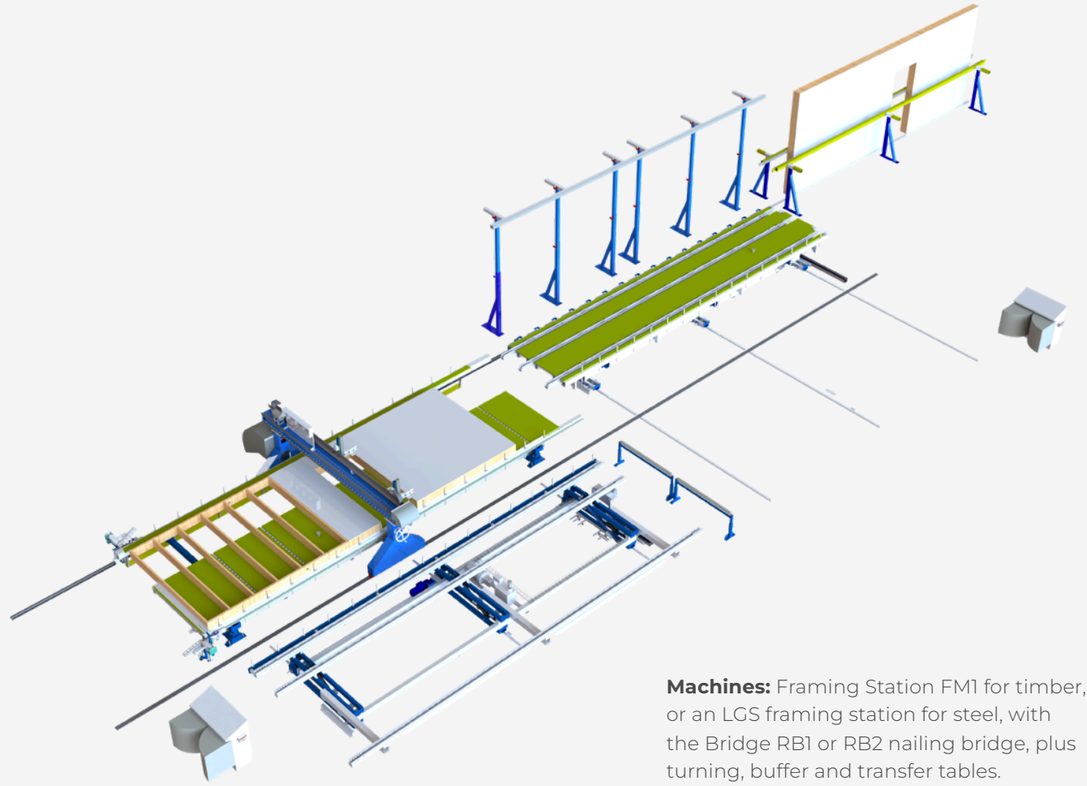
Production capacity: Up to 90 square meters of floor per hour.

Functionality: Sheets are added and fastened by ZeroLabor robots as standard, or by an automatic portal. Automatic cutting, gluing and milling for HVAC and electrical installations. Cutting for door and window frames. Automatic marking for placing of inside walls. Flexible and open CAD operated jig system for all types of element.

Flexibility: Advanced technical base platform that can be configured and adapted to all production needs.

EASYWALL

A MODULAR, SEMI-AUTOMATIC LINE FOR WALL ELEMENTS IN TIMBER OR LIGHT GAUGE STEEL. START WITH THE STATIONS YOU NEED, THEN BUILD ON IT.



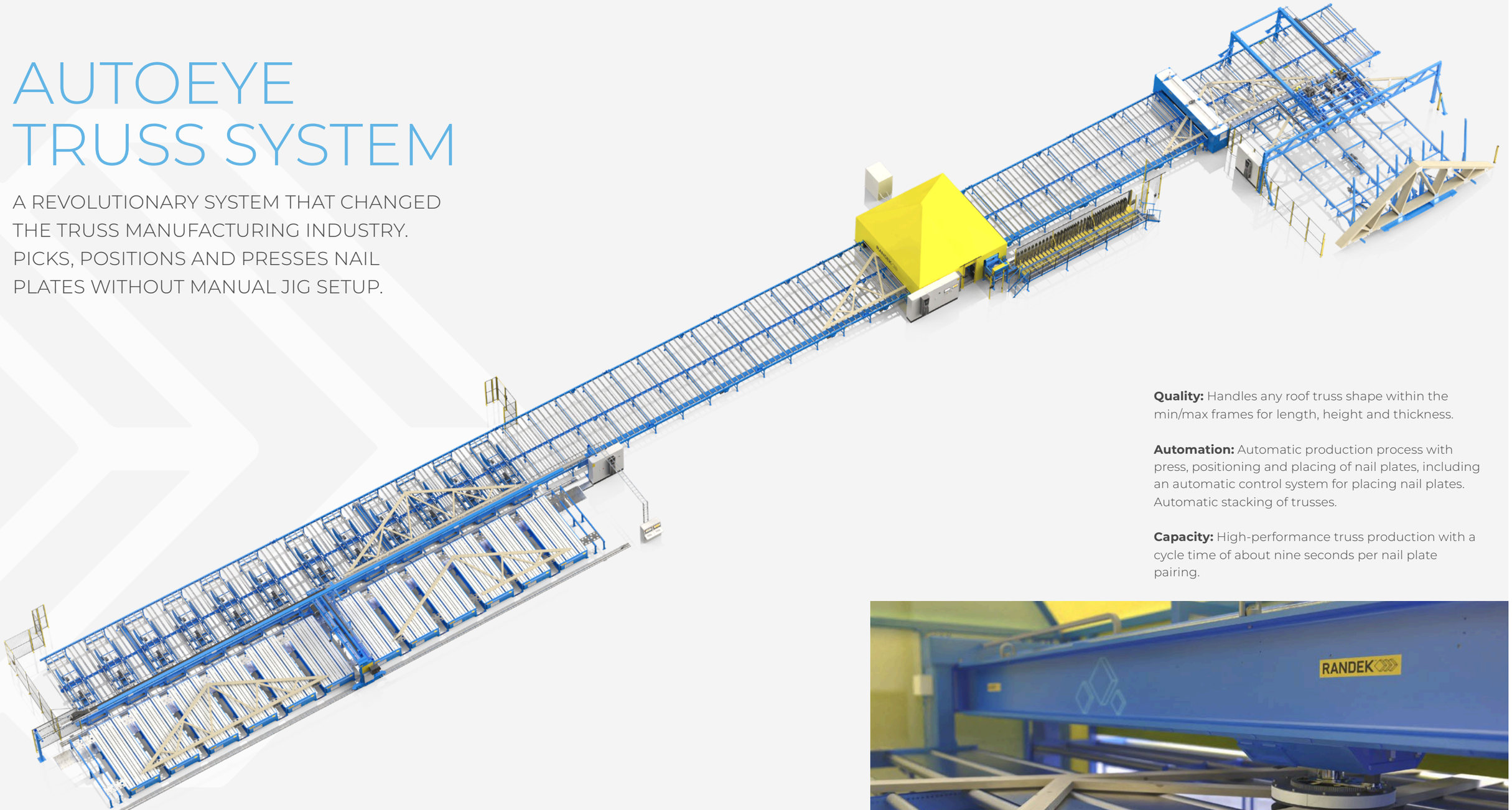
Machines: Framing Station FM1 for timber, or an LGS framing station for steel, with the Bridge RB1 or RB2 nailing bridge, plus turning, buffer and transfer tables.

Flexibility: Frames, open, closed and mixed panels. Fasten boards by hand, with the RB1 or the CAD/CAM-driven RB2.

Capacity: Wall elements 2400–3900 mm high and up to 12 m long. Add stations as volumes grow.

AUTOEYE TRUSS SYSTEM

A REVOLUTIONARY SYSTEM THAT CHANGED THE TRUSS MANUFACTURING INDUSTRY. PICKS, POSITIONS AND PRESSES NAIL PLATES WITHOUT MANUAL JIG SETUP.



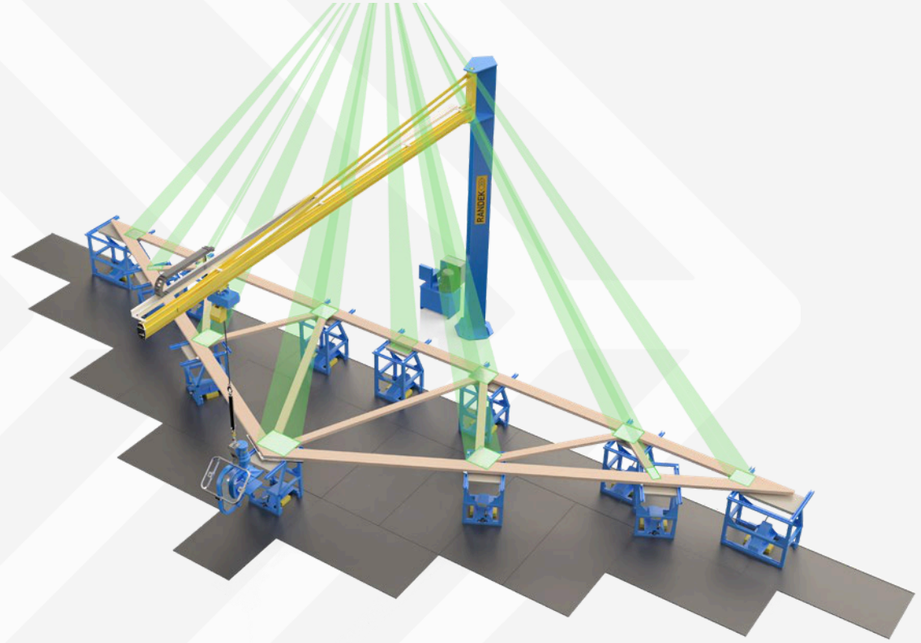
Quality: Handles any roof truss shape within the min/max frames for length, height and thickness.

Automation: Automatic production process with press, positioning and placing of nail plates, including an automatic control system for placing nail plates. Automatic stacking of trusses.

Capacity: High-performance truss production with a cycle time of about nine seconds per nail plate pairing.

TRUSS SYSTEM NT

FLEXIBLE PRESS PLANT FOR TRUSS PRODUCTION:
C-PRESS HEADS ON A CRANE, MAGNETIC FIXTURES
ON A STEEL FLOOR AND LASER PROJECTION.
A RELIABLE CLASSIC FOR EVERY TYPE OF ROOF TRUSS.



Capacity: Press heads from 23 to 50 tonnes (225–490 kN).

Flexibility: Hoist (e.g. wall mounted, column mounted, overhead, light overhead or counter-balanced crane) selected according to the design of the plant and the nail plates used. A robust hydraulic press with a C-formed construction gives a good work flow.

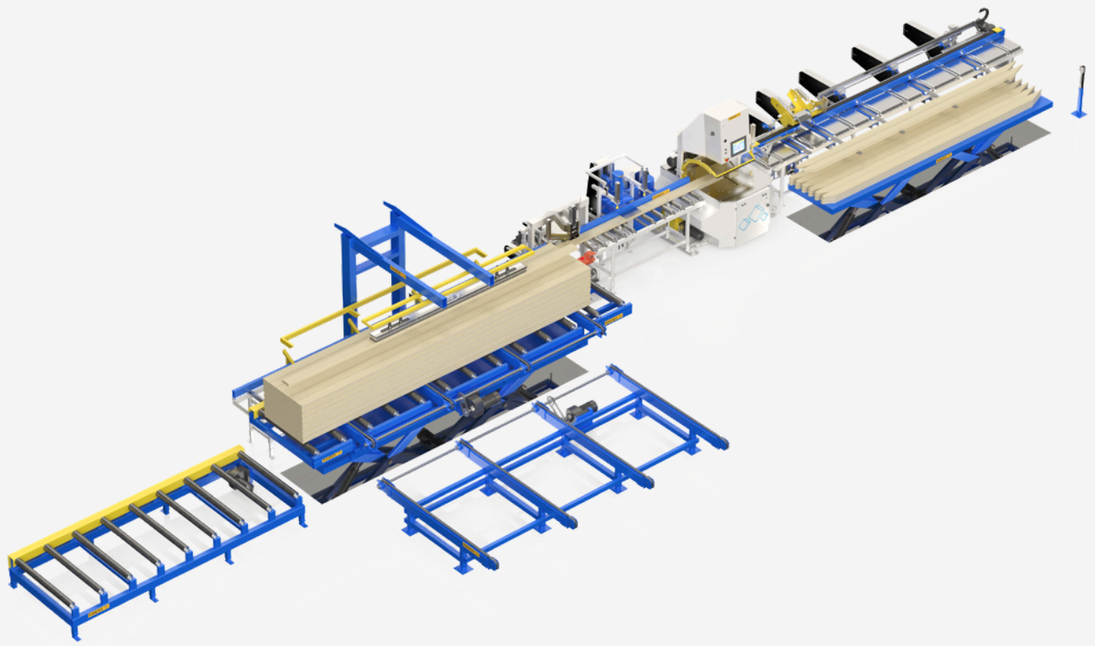
Accessories: Round, truss-top and long supports, quick-grip and eccentric fasteners that form and fix the truss to the correct design.





SP720 CUT SAWS

RELIABLE CUT SAWS, DELIVERED TO PREFAB
MANUFACTURERS IN MORE THAN 25 COUNTRIES.
ANGLED AND INCLINED CUTS IN ONE MACHINE,
WITH FLEXIBLE CONFIGURATION POSSIBILITIES.



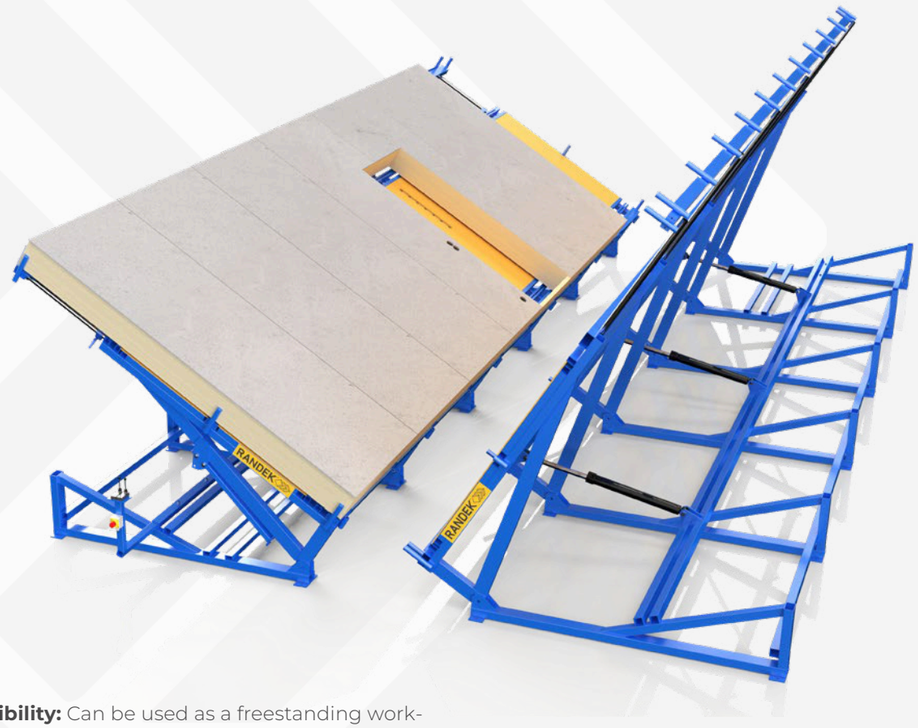
Functionality: Computer-controlled length stops position each cut and compensate for the cut angle. On the SPL728 the blade swivels 0°–360° and inclines 90°–28°. Stand-alone or part of a Randek line.

Capacity: Cuts up to three board layers at once, with a stack height of up to 250 mm.



BUTTERFLY TABLE BS20

OUR FIRST INVENTION FROM 1963 AND STILL GOING STRONG.
A CLASSIC FOR PREFAB MANUFACTURERS: A FLEXIBLE
SYSTEM FOR PRODUCTION OF WALLS, FLOORS AND GABLE ENDS.



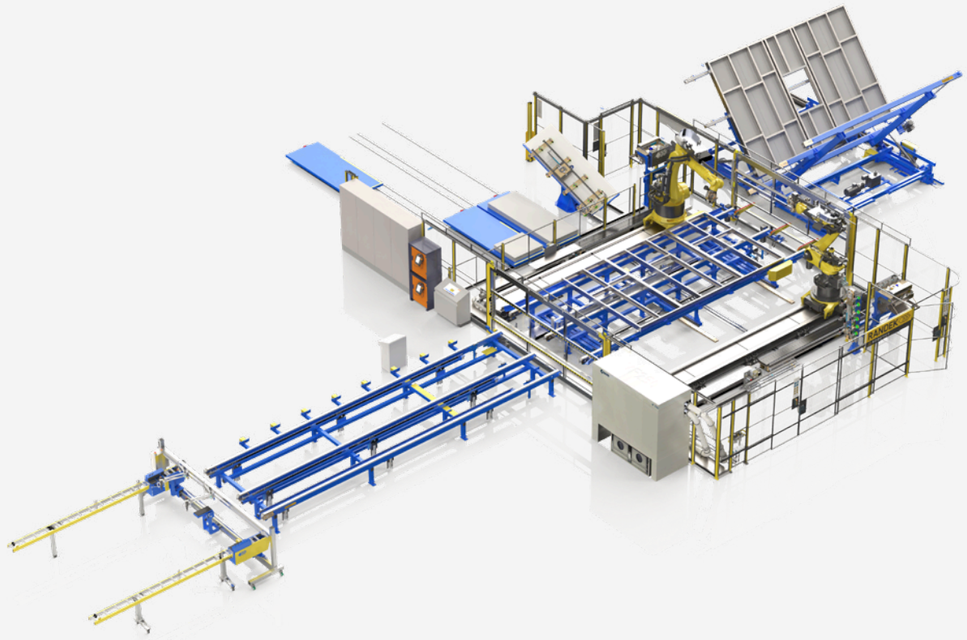
Flexibility: Can be used as a freestanding work-table as well as in a production line. Length from 6 to 12 m.

Functionality: Pneumatic or hydraulic alignment for straightening bent timber. Hydraulic turning for safe and efficient handling of elements. Upright position 90° (turning mode) and 80° (erection mode).

Additionals: Fittings and equipment.

LGS – LIGHT GAUGE STEEL FRAME SYSTEM

THE LIGHT GAUGE STEEL FRAME SYSTEM (LGS) HAS BEEN DEVELOPED FOR USE IN THE MANUFACTURE OF WALLS, FLOORS AND CEILINGS.



Here we have adapted our standard system for woodworking to manufacture steel frame components. The system can be configured to the highest level of automation, which gives our customers the same benefits in terms of quality, precision, high production rate and flexibility.

The core is the LGS Framing Station, manual or with up to six automatic screwing units driven from the CAD/CAM file. It is built into an AutoWall or EasyWall for light gauge steel, and ZeroLabor cells lay and fasten the sheets just as on timber.

OWN **SOFTWARE** DEVELOPMENT



RANDEK'S SOFTWARE DEVELOPMENT TEAM APPROACHES THE MACHINE LINE'S PROCESS FLOW FROM ALL ANGLES.

We guarantee a high degree of automation in data management from the design office to the factory floor, starting with the programming of PLC, HMI and robots and continuing through production planning and integration with the leading CAD providers on the market.

PLC programming forms an important basis for the control of machines in the production line. We develop software that enables customers to automate their production processes and increase the efficiency and quality of their production.

HMI programming allows users to interact with the machines and monitor production.

An intuitive and user-friendly HMI helps our customers optimize their production and reduce the risk of errors and interruptions.

Robot programming enables customers to integrate robots into their production and automate tasks that previously required manual handling. The technology increases production efficiency and at the same time reduces the risk of injury to employees.

Production planning is a function that everyone needs, but which can look very different depending on the factory. Randek Planner lets customers manage their planning between CAD and the production line. We also offer an open API, so that ERP or SCADA systems can control planning via API calls.

With an entire team of programmers within our organization, we can offer customers a comprehensive solution for their production process. With extensive knowledge and experience in software development, our team collaborates to provide clients with creative, effective solutions that are tailored to their needs.



MYRANDEK ADVANCED IIOT **PLATFORM**

MyRandek, delivered with every Randek system, is a comprehensive Industrial IoT (IIoT) platform for real-time monitoring and KPI tracking. It reads data straight from the machines: live output, stops and losses, and colour-coded timelines that make bottlenecks obvious. **MyRandek** enhances efficiency and maximizes productivity.

BUILDING THE FUTURE

THE TREND IS ENERGY-EFFICIENT TECHNOLOGY, MODERN INDUSTRIAL BUILDING METHODS, PREFABRICATED HOUSES, AUTOMATED PROCESSES AND ROBOTIC SOLUTIONS. RANDEK IS BUILDING THE FUTURE.

OUR VISION IS TO BE A WORLD-LEADING SUSTAINABLE PIONEER IN THE INDUSTRY WITH A GLOBAL MARKET PRESENCE

THE SWEDISH METHOD
Randek develops and delivers high-performance machines and systems to wooden house manufacturers across Sweden. The houses are delivered as fully prepared, closed, energy efficient wall, floor and roof elements. Everything is prebuilt off site and can then be assembled quickly on the construction site.

THE FUTURE IS PREFABRICATED
The concept “Swedish housing” is becoming well known around the world. The trend is energy efficient wooden multi-storey houses, built quicker than ever thanks to prefabricated modules lifted and mounted into place.

Exciting times lie ahead as new building techniques and offsite building give us the opportunity to develop in new markets.

AN AUTOMATED CRAFT
Fast, cost effective and excellent quality is the winning concept for the future. Randek Robotics is part of the solution, combined with traditional automation systems. For us it’s about standardizing in a flexible way. A good example of this is how we can now produce various types of roof trusses in one machine which earlier was only able to produce a single model. We have many years of experience yet remain motivated to continue to develop this innovation further.

RANDEK™
BUILDING THE FUTURE

THE PIONEERS

RANDEK IS A PIONEER IN CREATING INNOVATIVE AUTOMATION SOLUTIONS FOR CUSTOMERS WITHIN THE PREFABRICATED HOUSE MANUFACTURING INDUSTRY.



1943

Operations started in Sweden.



1960

Dream of one's own house. A million new homes were built in Sweden in the decade following 1965. Randek was an essential partner in the automation of the prefabricated house industry.

1963

The "Butterfly" turn table is invented: our first invention, and still the basic machine needed to build wall, floor and roof elements. Fischer Haus in Germany orders one of the first turn tables. They still use it.



1965

The Beatles release the hit single Help! Randek releases a crosscut saw for straight, oblique and tilted cuts. The saw is the first generation of the 720 series, which is still used in more than 25 countries worldwide.



1968

Tongue and groove panels are often replaced by different types of sheet materials. Increasingly large wall elements are manufactured and new types of insulation are introduced. Randek invents the fully automatic nailing bridge for wall elements to facilitate the work.



1972

The oil crisis was just around the corner, but house factories were still booming. A machine that sped up framing was needed. Randek invents a framing station which becomes the industry standard for production line wall elements.



1985

Apple released the Macintosh computer in 1984. The following year we were the first in the world to connect our machines directly to the CAD/CAM drawing system, which meant that the machines produced wall elements directly from the computer drawing. Myresjöhus was the client.



1992

The AutoWall System: one of the world's fastest wall production systems, developed for the US market. The first two lines paid for themselves in under a year. Perhaps also a record.

1960 1963 1965 1968 1972 1977 1985 1990 1992 1998 2008 2012 2016 2017 2018 2021 2022 2025



1998

After AutoWall's success and many deliveries of production systems for wall elements in the US market, we also developed a system for floor elements: AutoFloor!



2008

Individual preferences, such as custom wall heights, make the houses more tailored. To produce them efficiently, we developed a system which automatically picks studs from the correct timber packages and feeds the production lines.



2012

Revolution in the truss industry! The world's first system that picks, positions and presses nail plates automatically, with minimal setup time. Randek AutoEye is launched.



2017

Here come the robots!
ZeroLabor Robotic is the world's first robotic system for producing varying sizes of open and closed walls. A highly efficient, fully automated production process, including automated recycling and waste handling.



2018

Robots make their entry into framing stations. The robot's task is to pick the stud and noggin from the noggin handler and place it in the framing station, which nails the noggin into the frame. The system handles double, L and U studs automatically. Highly efficient.



2021

The world is being challenged by the Covid pandemic. The robotization of wall manufacturing has evolved. The latest iteration, ZeroLabor 3.0, has increased speed and greater functionality. The robotic system is configurable with 2–5 robots, and now available for light gauge steel wall frames.



2022

Introducing the world's first fully robotic blow-in insulation cell. The robots enable much higher output per wall length and provide off-table service positions for blow-in plates. Available in multiple configurations and for different insulation materials.



2025

ZeroLabor sub-assembly was launched at LIGNA 2025, making it possible, for the first time, to automate the production of complex sub-elements using robots.

CUSTOMER **REFERENCES**



BRITISH OFFSITE

After assessing four systems integrators, British Offsite chose Randek to co-develop a light gauge steel panel line for high-volume production, with capacity for 5,000–6,000 units a year across its factories.

"Together with Randek, we've created one of the most automated light gauge steel panel assembly lines in Europe – and one of the largest single production lines in the UK."

Shaun Weston
Managing Director, British Offsite

"Working together they have quadrupled our production capacity to 10,000 lm – the equivalent of 6,000 homes per year."

British Offsite



FOOTERS STRUCTURAL TIMBER

Footers Structural Timber is a third-generation, family-owned business in South Australia, selling prefabricated roof trusses and floor frames along with stick timber and ancillary hardware. It chose the AutoEye Truss System when relocating its truss plant. The system combines high industrial quality with exceptional capacity, and the reduced labour cost makes it easier to add a second shift when needed.



HOLZBAU POTTS

The family-run business Holzbau Potts produces roofs and timber constructions that are delivered throughout Germany. A move to a new site made room for an AutoEye Truss System, with a vertical stacker developed together with Randek for trusses up to 24.5 m. Productivity tripled, to 125 roof trusses per shift.

"With the Randek system we can guarantee a consistently high quality of nail-plate trusses. Every source of error is eliminated by the system." Richard Potts



BOKLOK

BoKlok, jointly owned by Skanska and IKEA, combines quality construction with smart living design. Around 14,000 homes have been built from energy-efficient, prefabricated wooden modules over 20 years, in Sweden, Finland, Norway and the United Kingdom. Its Randek ZeroLabor robotic wall line was chosen to double the production rate.



RIVERBEND BUILDING SUPPLY

As Canada's first supplier of components to the housing industry, Riverbend Building Supply in Manitoba chose a ZeroLabor robotic wall manufacturing system, reaching a higher level of productivity and precision. The compact cell handles sheets, fastening, cut-outs and waste in one place, with every automated process controlled directly from the CAD file.

SERVICES

RANDEK OFFERS SERVICES RELATED TO THE INDUSTRIALIZED HOUSE PRODUCTION CONCEPT. THE SERVICE OFFER IS BASED ON LONG EXPERIENCE AND KNOWLEDGE FROM THE BUSINESS.



RANDEK PRE-STUDY

Randek's pre-study identifies the ideal automation solution, guided by a dedicated project manager. It covers custom or existing systems tailored to your needs, and several functions now standard in our ranges were first developed in a customer's pre-study.



MAINTENANCE

Proactive maintenance extends the lifespan of your equipment and ensures high-quality results. Randek offers a proven method for maintaining prefab production equipment, divided into corrective and preventive maintenance. The level of service is based on your needs, and we provide a customized action plan.



SUPPORT FOR GLOBAL SERVICES

Contacting Randek gives you a Support ID and direct access to the right team. We offer support via phone, email, Ewon or TeamViewer, including remote troubleshooting and updates. A tailored SLA can include yearly maintenance and fast response to minimize downtime.



IIOT

MyRandek, delivered with every Randek system, is an Industrial IoT platform for real-time monitoring, KPI tracking and production analysis. It helps optimize workflows, identify bottlenecks and boost efficiency.

RANDEK™

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