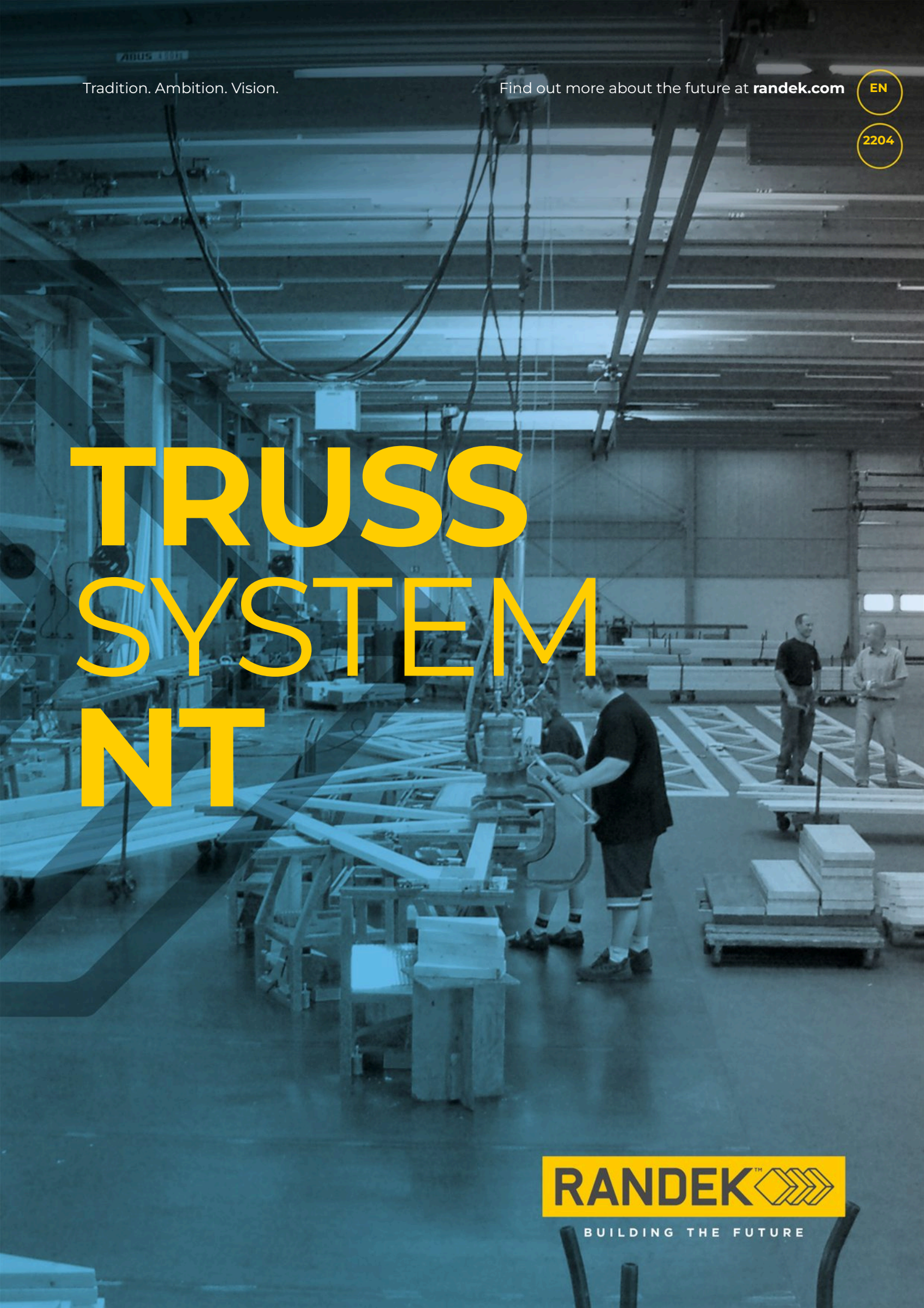
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TRUSS SYSTEM NT



RANDEK™

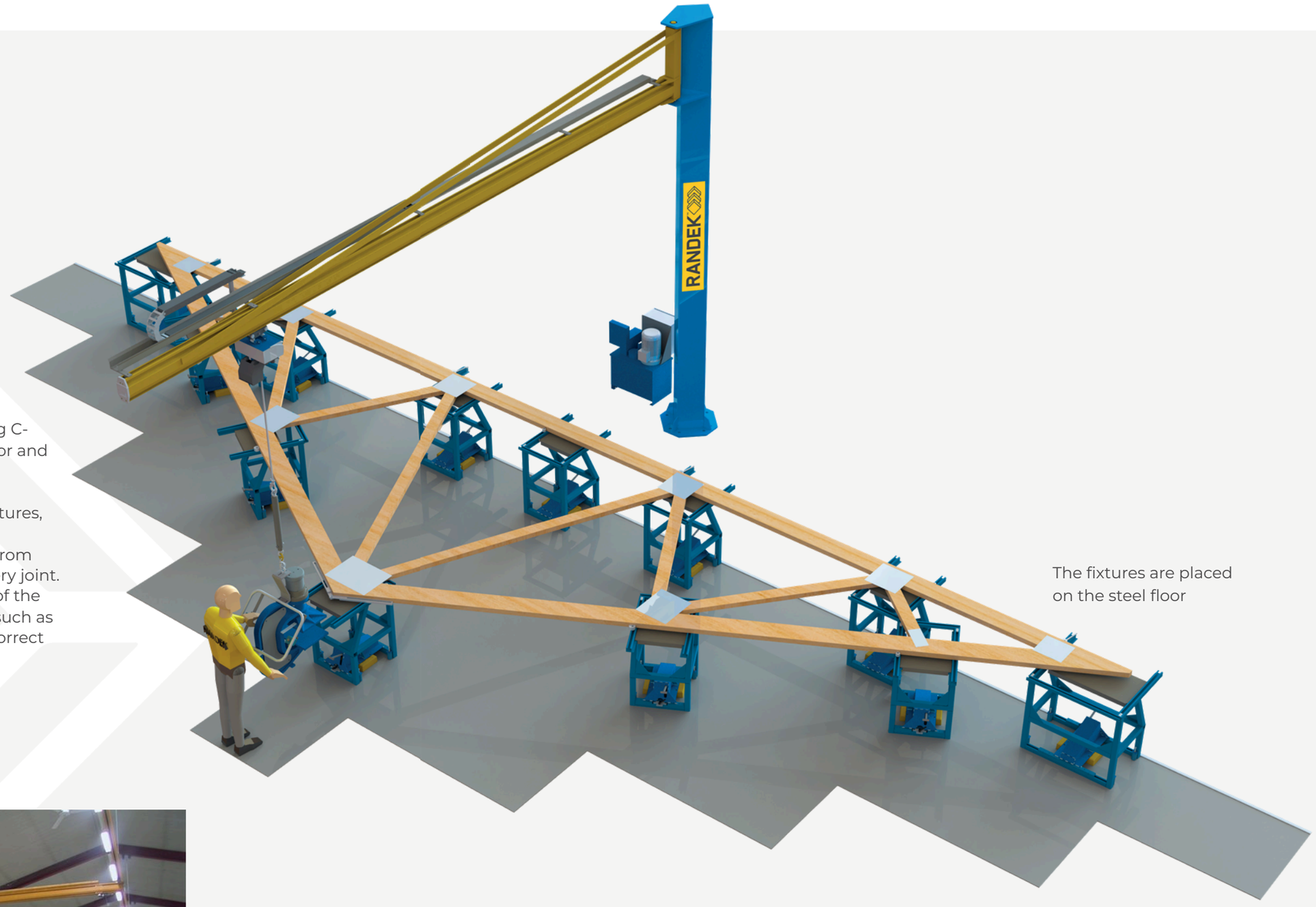
BUILDING THE FUTURE

TRUSS SYSTEM NT

INDUSTRIAL ROOF TRUSS MANUFACTURING

Randek Truss System NT produces roof trusses using C-press heads, movable magnetic fixtures on a steel floor and one of five crane systems.

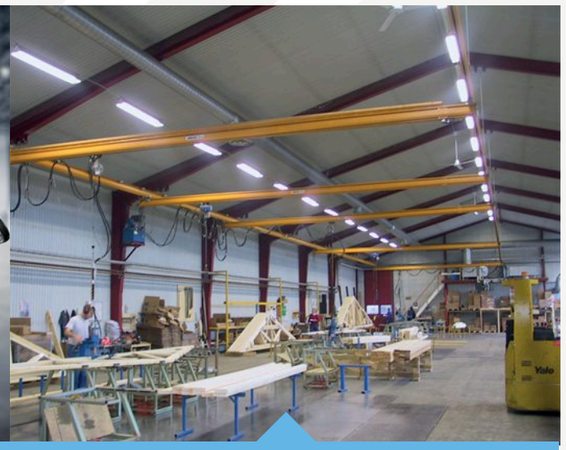
The truss frame is placed on permanent magnetic fixtures, positioned at each of the truss joints. The C-press, suspended from one of the crane systems, is moved from fixture to fixture by hand or by motor and presses every joint. The right press and crane depend on the conditions of the factory and the nail plates you use. With accessories such as supports and fasteners, the truss is shaped into the correct form before pressing.



The fixtures are placed on the steel floor



Press head 35 tonne



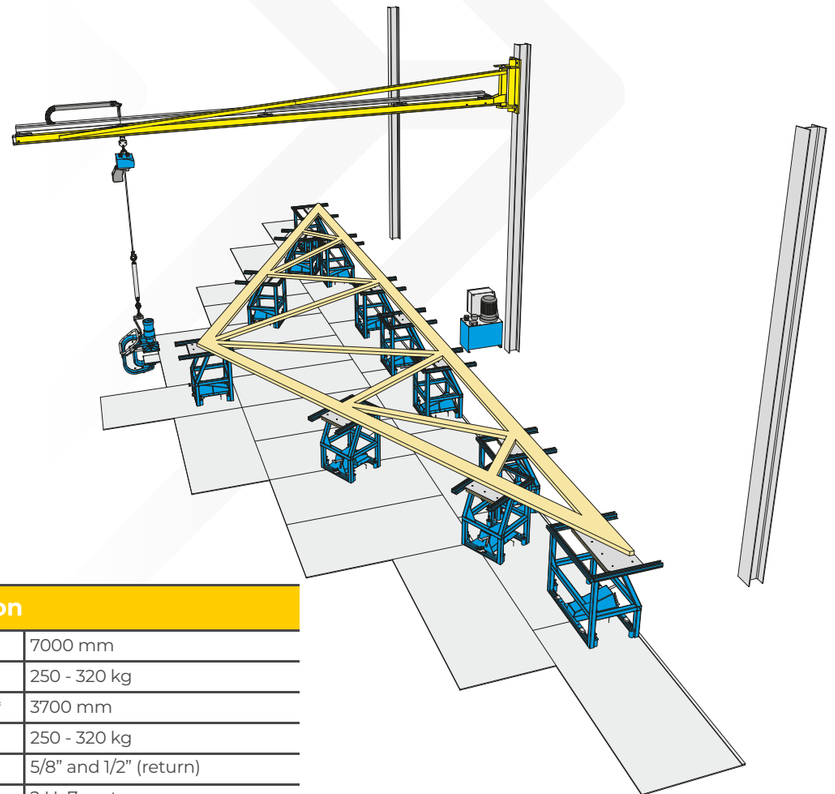
Press line with light overhead crane

- Press heads from 23 to 50 tonnes
- Wall-mounted, column-mounted, overhead, light overhead or counter-balanced crane
- Flexible system allows production of all types of trusses

PRESS LINE WITH WALL MOUNTED CRANE



The Randek press line with wall-mounted crane is a simple and functional solution for producing all types of trusses. The crane is clamped or bolted to existing wall columns at the desired height. The crane is 7 metres long and takes loads of up to 320 kg. It is equipped with cable chains in which the wires and hydraulic hoses run in a controlled manner. The working height of the press is adjusted with an electric chain hoist. A gas spring compensates the press stroke during the press cycle. The chain hoist makes it easy to lift the press over the truss, so you can press from the inside of the truss.



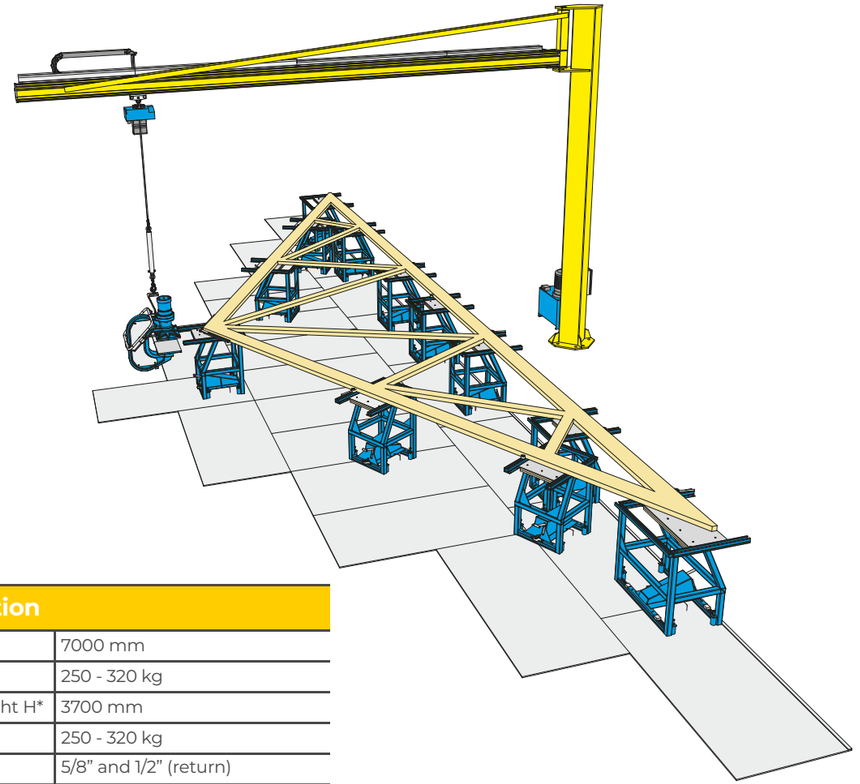
Technical Description	
Crane length	7000 mm
Crane - Max load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical chain hoist	250 - 320 kg
Hydraulic hose - Coupling	5/8” and 1/2” (return)
Hydraulic hose - Length*	2·H+7 metres
Consumption - Electrical	Configured to the destination market

* H = Distance between floor and the lower edge of the crane

PRESS LINE WITH COLUMN MOUNTED CRANE



The column-mounted crane is a good option when the existing wall columns are too weak or when you do not want to position the station along an existing wall. The column is cast and bolted into the concrete floor and can be ordered in the height required. The crane is 7 metres long and takes loads of up to 320 kg. It is equipped with cable chains in which the wires and hydraulic hoses run in a controlled manner. The working height of the press is adjusted with an electric chain hoist. A gas spring compensates the press stroke during the press cycle. The chain hoist makes it easy to lift the press over the truss, so you can press from the inside of the truss.



Technical Description	
Crane length	7000 mm
Crane - Max load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical chain hoist	250 - 320 kg
Hydraulic hose - Coupling	5/8” and 1/2” (return)
Hydraulic hose - Length*	2·H+7 metres
Consumption - Electrical	Configured to the destination market

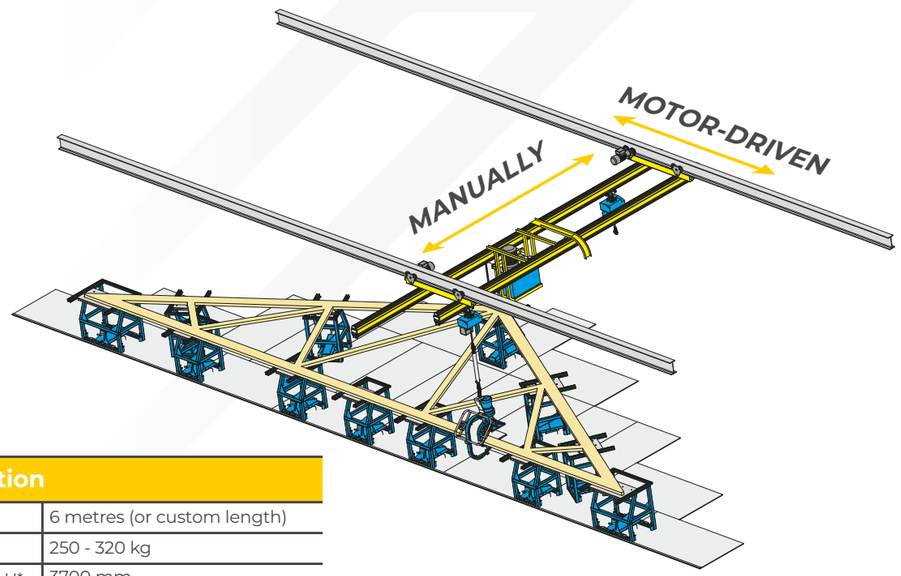
* H = Distance between floor and the lower edge of the crane

PRESS LINE WITH
OVERHEAD CRANE



The motorized overhead crane is a good option for the heavier press heads (27 and 35 tonnes), since the press is never dragged along the truss. The crane is operated with controls on the press head, and high or low speed frequency-controlled motors ensure smooth acceleration and deceleration. The overhead crane is mounted on an existing traverse path and is designed to the individual need. The hydraulic unit is mounted between the two beams, so it travels along the whole work area, which can include one or more press stations. The working height of the press is adjusted with an electric chain hoist.

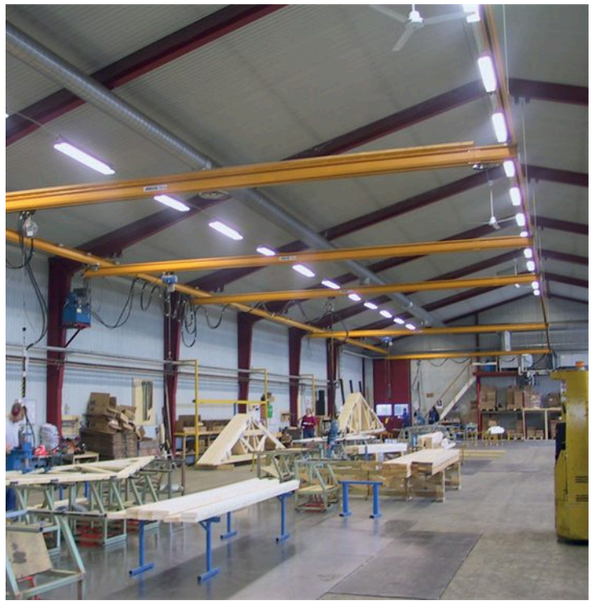
A gas spring compensates the press stroke during the press cycle. The chain hoist makes it easy to lift the press over the truss, so you can press from the inside of the truss.



Technical Description	
Crane length	6 metres (or custom length)
Crane - Max load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical chain hoist	250 - 320 kg
Hydraulic hose - Coupling	5/8” and 1/2” (return)
Hydraulic hose - Length*	H+B/2+2.5 metres
Consumption - Electrical	Configured to the destination market

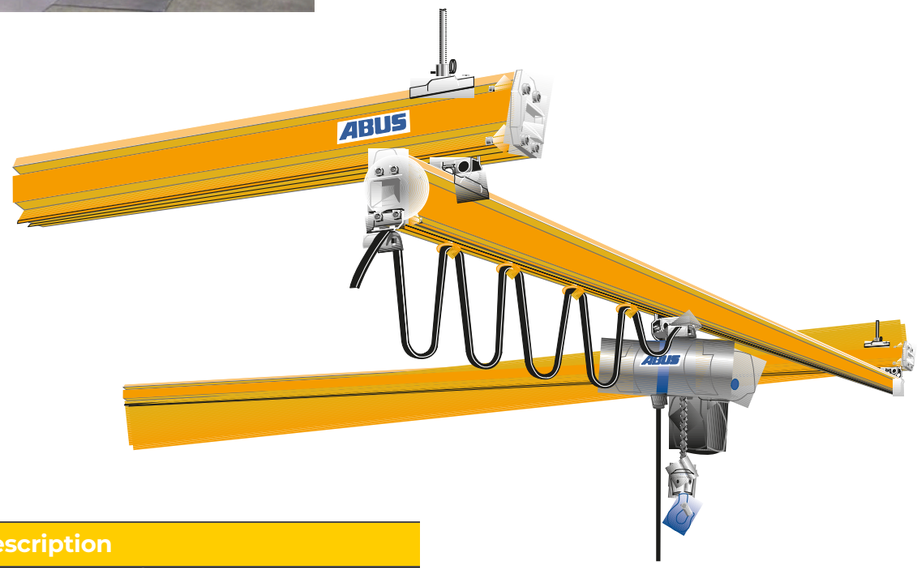
* H = Distance between floor and the lower edge of the crane
B = Width of crane (6 metres)

PRESS LINE WITH LIGHT
OVERHEAD CRANE



The light overhead crane is a good option for the lighter press heads (23 - 27 tonnes), as it has no motor drive. The light overhead crane has a low weight, which makes it easy to move by hand. Its low build height makes the crane ideal for production buildings with a low ceiling. The lengthwise beams are fixed in the existing trusses of the building.

The working height of the press is adjusted with an electric chain hoist. A gas spring compensates the press stroke during the press cycle. The chain hoist makes it easy to lift the press over the truss, so you can press from the inside of the truss.



Technical Description	
Crane length	6 metres (or custom length)
Crane - Max load	250 kg
Crane - Min assembly height H*	3700 mm
Electrical chain hoist	250 kg
Hydraulic hose - Coupling	3/4” and 5/8” (return)
Consumption - Electrical	Configured to the destination market

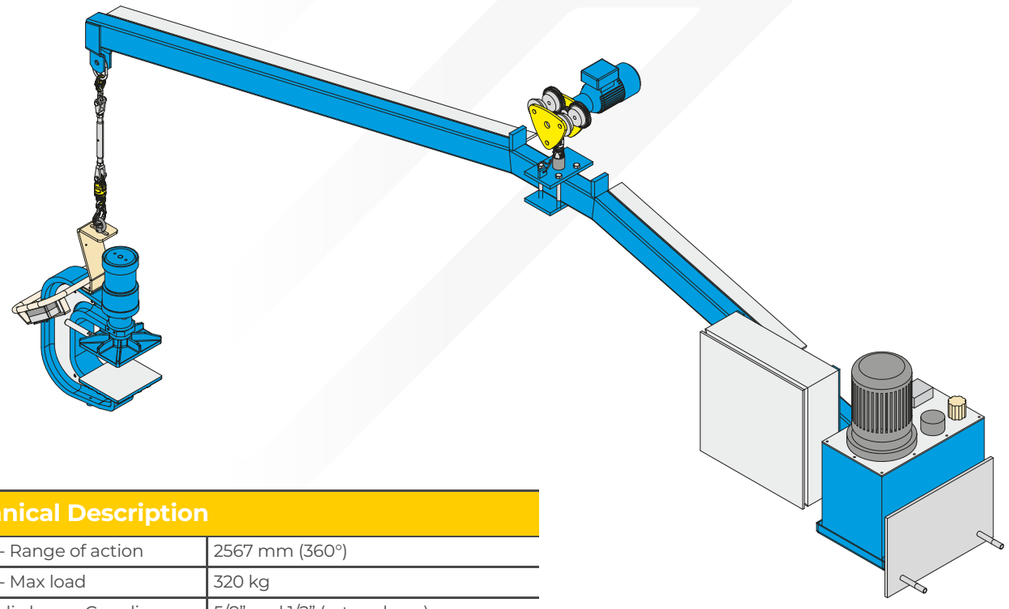
* H = Distance between floor and the lower edge of the crane

PRESS LINE WITH
COUNTER BALANCED CRANE



Just like the overhead crane, the counter-balanced crane is motor-driven and holds press heads from 23 to 35 tonnes. The crane is operated with controls on the press head, driving a frequency-controlled motor at high or low speed for smooth acceleration and deceleration.

The counter-balanced crane is mounted on an existing traverse path directly above the production area. The hydraulic unit is mounted on the rear of the crane, acting as the balance weight. Since the crane is mounted above the traverse path, the operating area spans the length of the traverse, so it can cover one or multiple press stations. Height adjustment is made with the chain and a turnbuckle.



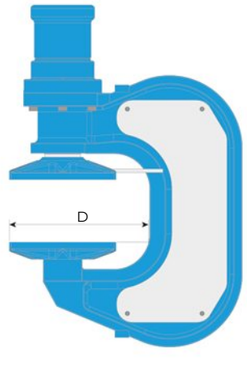
Technical Description	
Crane - Range of action	2567 mm (360°)
Crane - Max load	320 kg
Hydraulic hose - Couplings	5/8” and 1/2” (return hose)
Hydraulic hose - Length*	23 tonnes = H+B/2+2.5 metres 27 and 35 tonnes = H+B/2+2.5 metres
Consumption - Electrical	Configured to the destination market

* H = Distance between floor and the lower edge of the crane

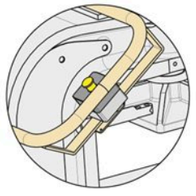
PRESS HEAD

A press used for manufacturing roof trusses is repeatedly exposed to high forces. For this reason, our hydraulic presses are built to be robust, while the C-shaped design makes them easy and flexible to use. The maximum press force is between 23 and 50 tonnes depending on the model. The presses are particularly suited for splicing timber.

The press is activated with a two-handed control to prevent risk of injury.







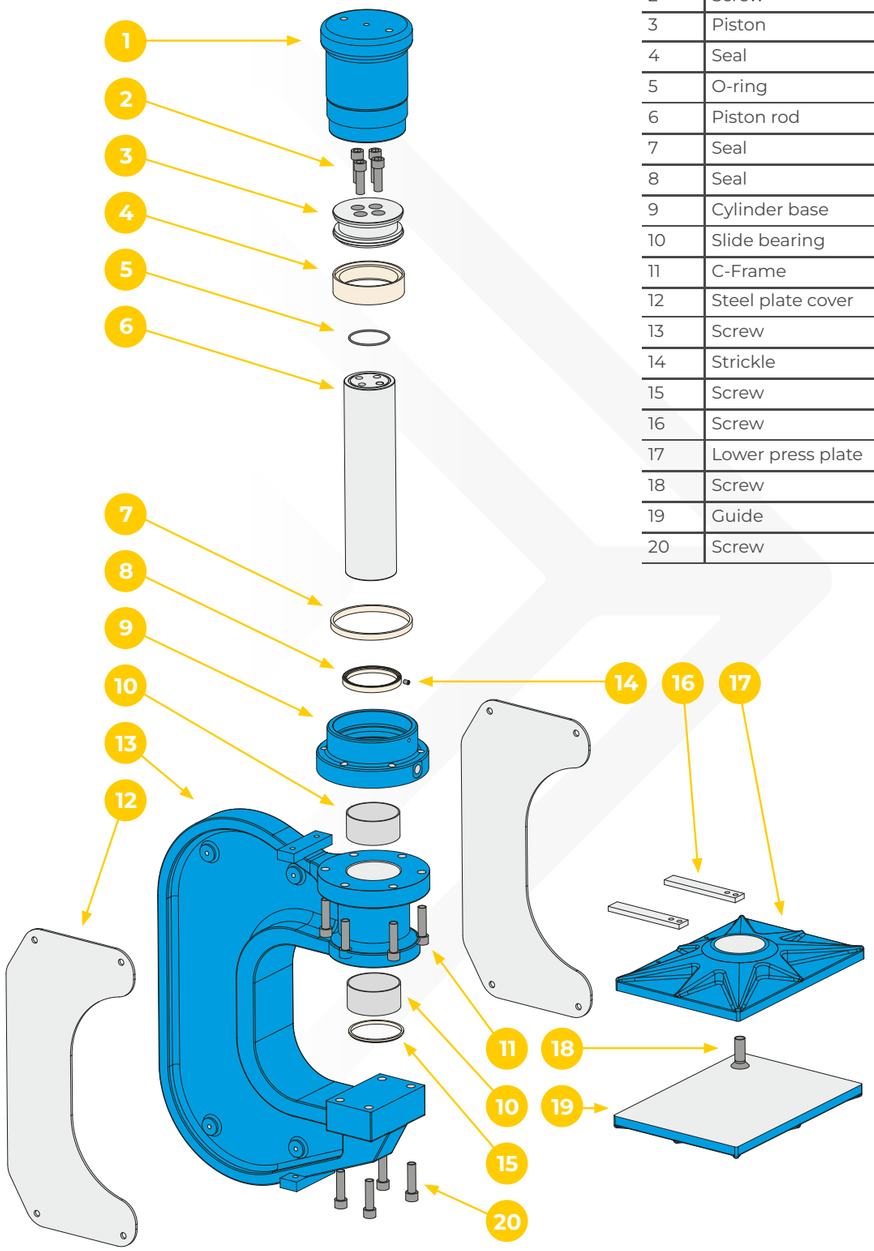
Push button activation



Pistol grip activation

Technical Description					
Press head	23 t	27 t	30 t	35 t	50 t
Max hydraulic pressure (bar)	242	175	195	227	196
Operation depth D (mm)	315	355	350	390	445
Operation height H (mm)	169	175	153	177	170
Nail plate width B (mm)	260	400	400	420	460
Weight (kg)	126	190	200	240	450

PRESS HEAD - SPARE PARTS

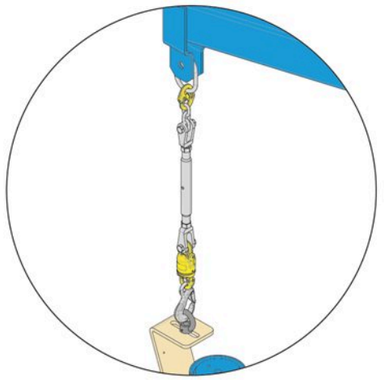


Pos	Part
1	Cylinder
2	Screw
3	Piston
4	Seal
5	O-ring
6	Piston rod
7	Seal
8	Seal
9	Cylinder base
10	Slide bearing
11	C-Frame
12	Steel plate cover
13	Screw
14	Strickle
15	Screw
16	Screw
17	Lower press plate
18	Screw
19	Guide
20	Screw

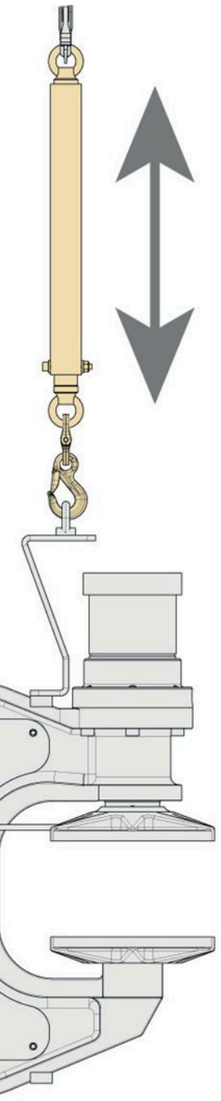
PRESS SUSPENSION

The gas spring is an upgrade from previous suspensions with spring balancers to compensate the press stroke. The more robust gas spring improves durability and the function of the press cycle. Depending on which press head you use, a different spring force counteracts the stroke. Together with the electric chain hoist, the press is safer and easier to handle.

Technical Description			
Press head	23 tonnes	27 tonnes	35 tonnes
Weight - Gas spring damper	9.2 kg	9.2 kg	9.2 kg
Gas spring	900 N	1400 N	1700 N
Chain hoist - Max lift force	320 kg	320 kg	320 kg



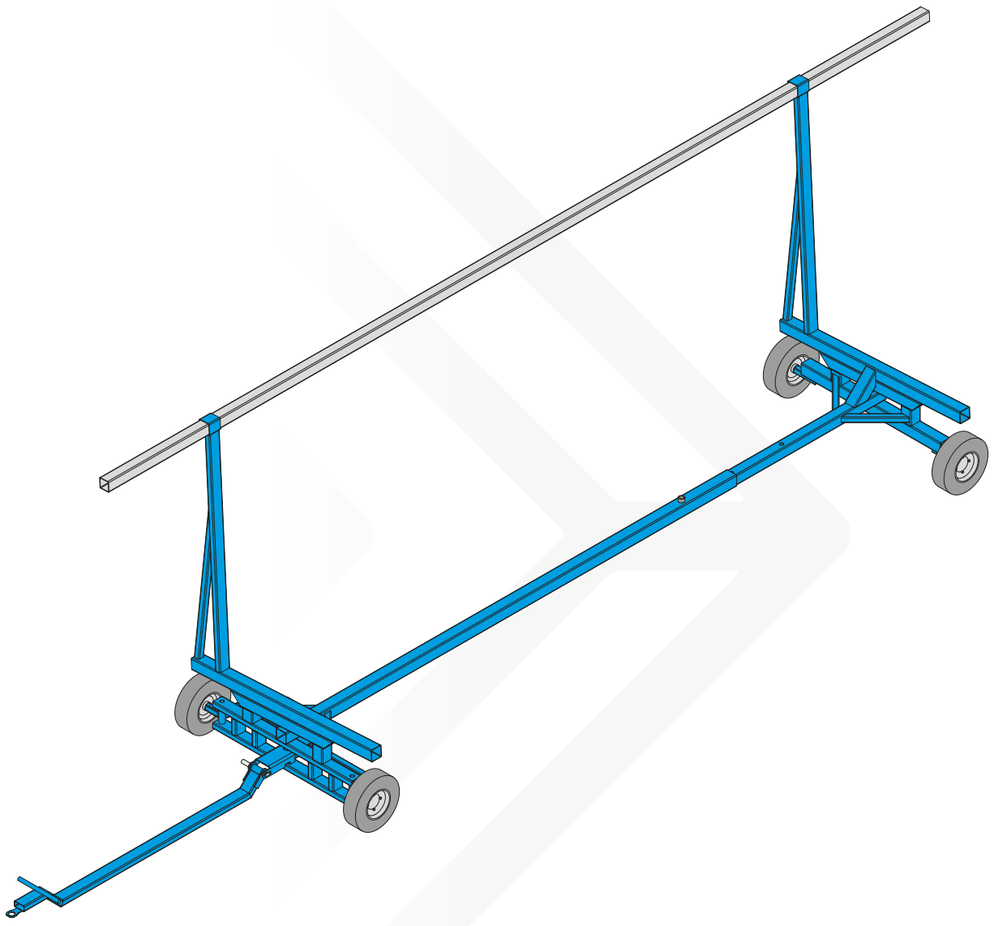
Turnbuckle



Gas spring

ROOF TRUSS WAGON

The Randek Roof Truss Wagon is a simple but flexible wagon with sturdy wheels and a forklift coupling. The trusses are loaded onto the wagon on tilted beams against a support. The distance between the beams can be adjusted from 5 to 8 metres to accommodate different truss sizes. Maximum stack width is 1500 mm.



Technical description		
Capacity	Min	Max
Stack length*	4980 mm	7980 mm
Stack width	1500 mm	

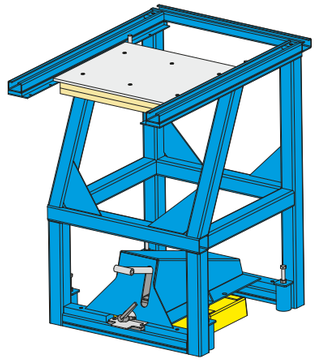
* Distance between beams

FIXTURES

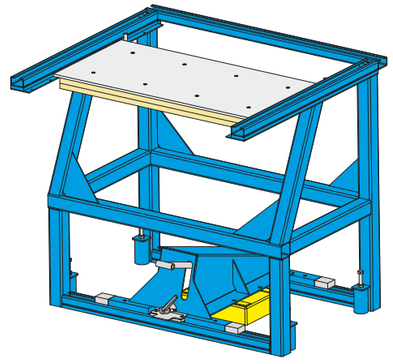
Randek fixtures are equipped with permanent magnets and are locked against a 10 mm thick steel floor. The fixtures come in different models and sizes and, when unlocked, are easy to move around the steel floor. The magnet is lifted from the floor with a hydraulic jack and is easily released with a foot pedal. The NTD fixture is available in two sizes, 550 mm and 900 mm. A normal press station has ten 550 mm fixtures and two 900 mm fixtures. The wider fixture is a good alternative at the foot of the truss, where the angles get shallow and long. On top of the fixtures you can place supports, quick-grip fasteners, eccentric fasteners and other tools to align and shape the timber before you press the truss.

Model	Width	Height
NTD	550 mm	832 mm
NTD	900 mm	832 mm
NTP	615 mm	890 mm
Round Support		
Truss-Top Support		
Long Support		
Quick-Grip Fastener		
Eccentric Fastener		

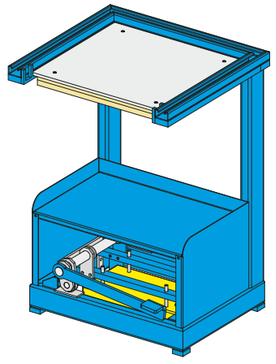
The fixtures are placed on a 10 mm thick welded and levelled steel floor.



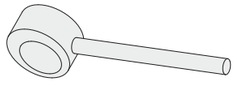
NTD550



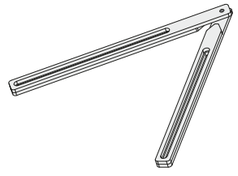
NTD900



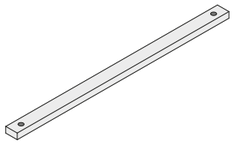
NTP615



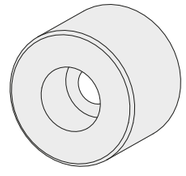
Eccentric Fastener



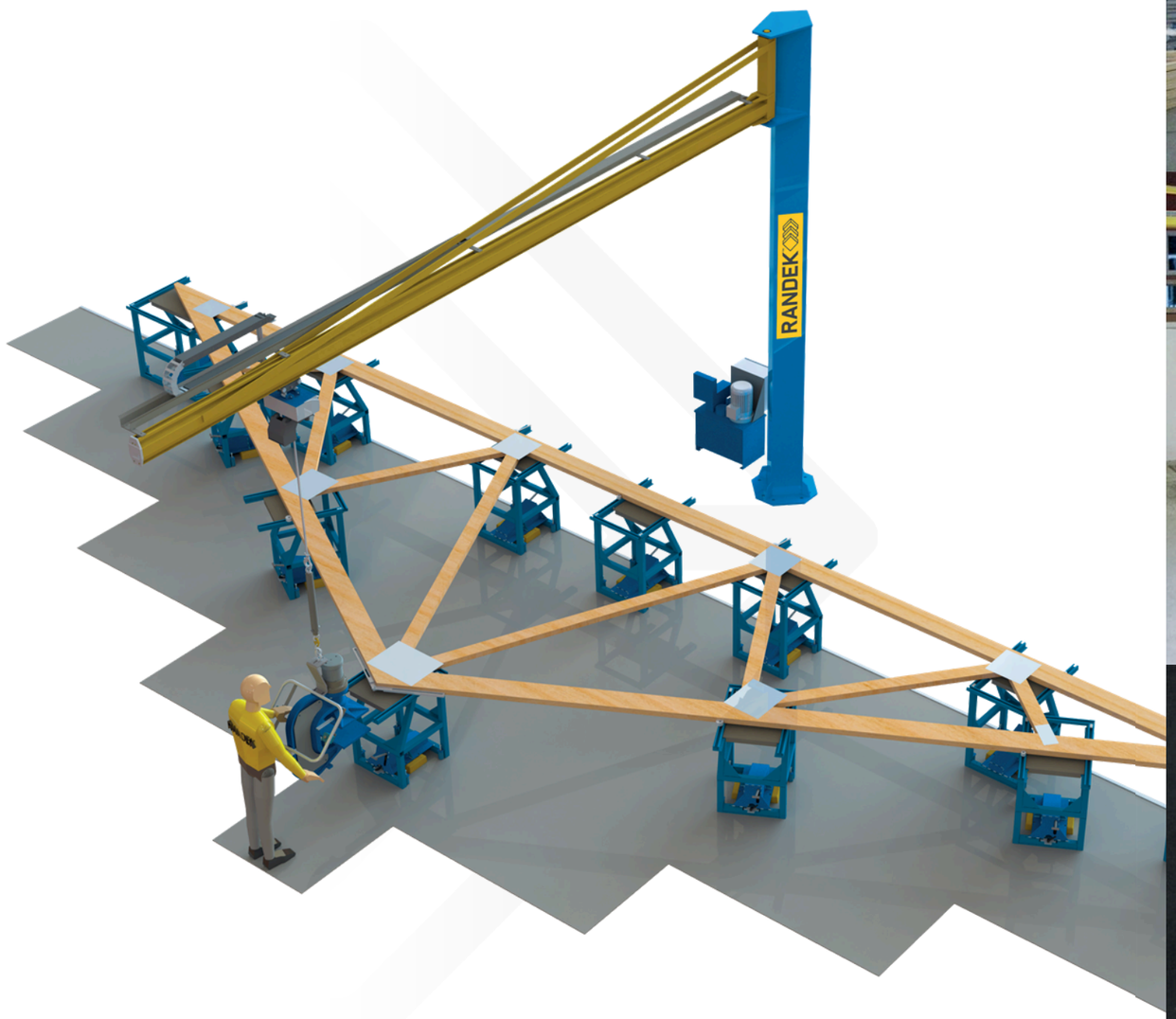
Truss-Top Support



Long Support



Round Support


RANDEK






RANDEK


RANDEK



SWEDISH QUALITY LASTS

Randek has developed automation for the prefabricated house manufacturing industry since 1943. Today Randek supplies high-performance machines, robotic solutions and complete production lines to house manufacturers in 40 countries on four continents.

PRODUCTS/SYSTEM



SP720 SERIES CUT SAWS

Sturdy, reliable cut saws for house and roof truss manufacturers, with computer-controlled length stops.



WALL, FLOOR AND ROOF LINES

Tailor-made systems for prefabricated walls, floors and roofs. From manual to fully automated.



ROBOTIC SYSTEMS

Randek Robotics develops the ZeroLabor Robotic System: robot cells for sheathing, sub-assembly and insulation.



ROOF TRUSS SYSTEMS

Randek Truss System NT for traditional truss production and the AutoEye System for automated pressing.



BUTTERFLY TABLES

Wall-turning tables, a Randek invention from 1963. From a single manual table to a full line.

RANDEK SERVICES



RANDEK PRE-STUDY



MAINTENANCE



GLOBAL SUPPORT



MYRANDEK

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