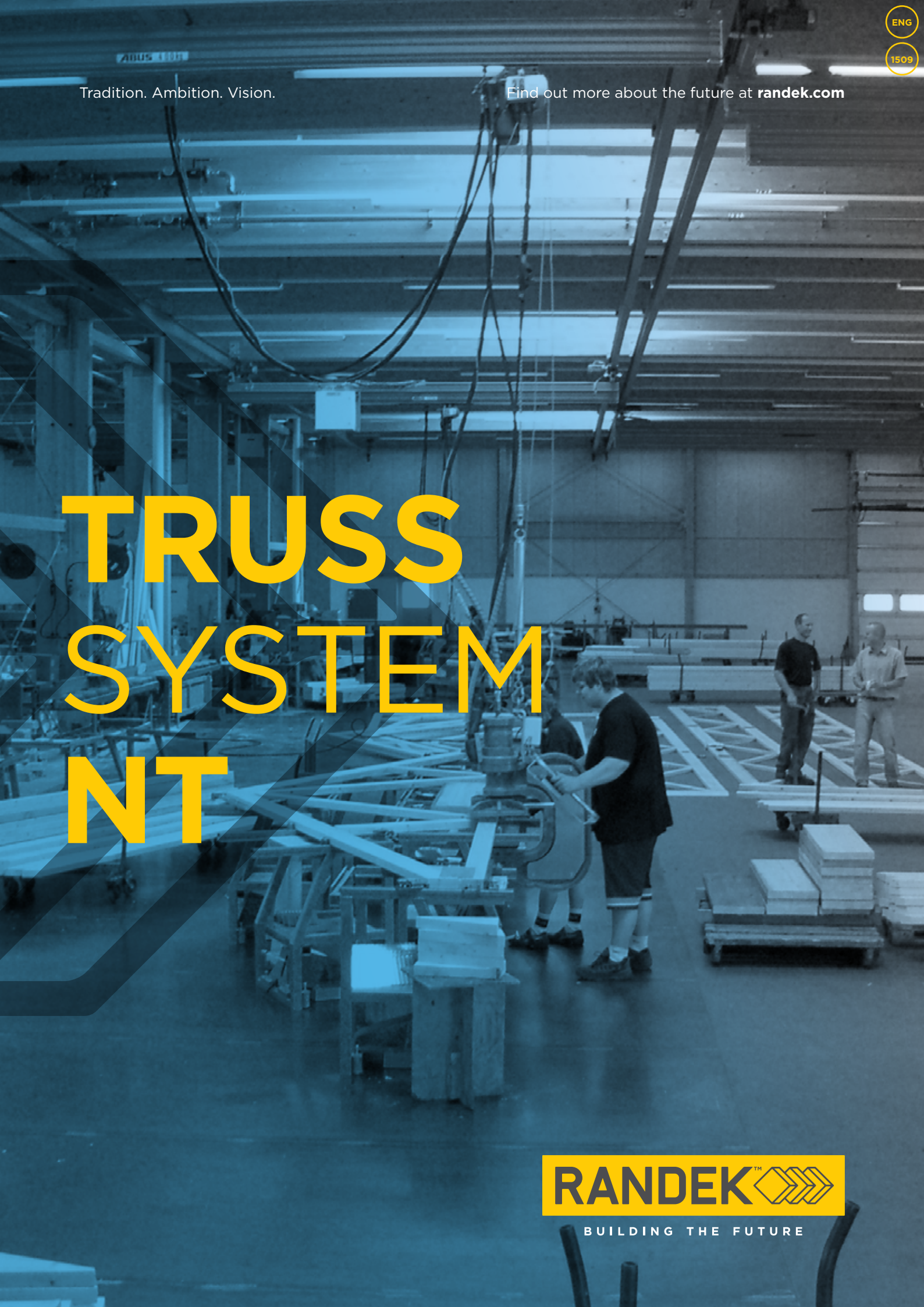
ENG

1509

Tradition. Ambition. Vision.

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



TRUSS SYSTEM NT

RANDEK™

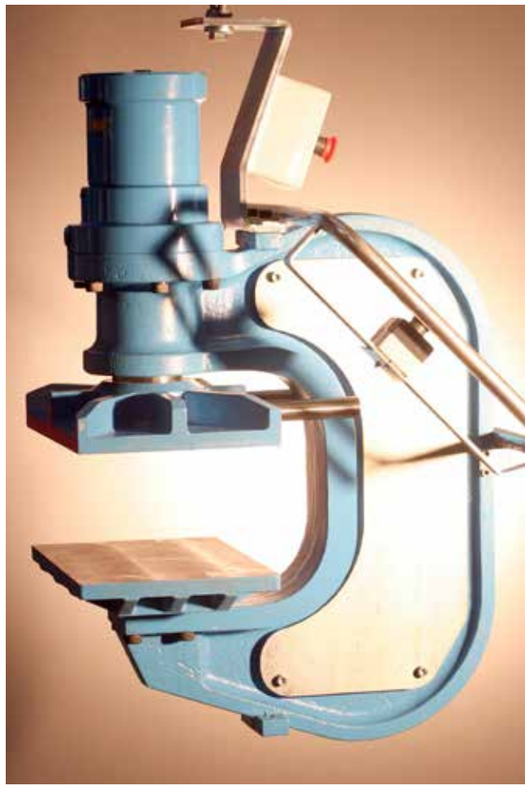
BUILDING THE FUTURE

INDUSTRIAL ROOF TRUSS MANUFACTURING WITH RANDEK TRUSS SYSTEM NT

Randek Truss System NT produces roof trusses with C-press heads, movable permanent magnet fixtures against a steel floor and one of our many crane systems.

The truss frame is placed on permanent magnet fixtures, positioned at all the truss joints. The C-press, suspended from one of the crane systems is moved by hand or with engines from fixture to fixture pressing all the joints. Optimal press and crane choice depends on the conditions of the factory conditions and what nail plates that are used. With accessories such as supports, excentric fasteners and truss top supports, the truss is shaped into correct form before pressing.

- Press heads from 23 - 50 tonne
- Wall mounted crane, Column mounted crane, Overhead crane, Light overhead crane and counter balanced crane
- Flexible system allows production of all kinds of trusses



Press head 35 tonne

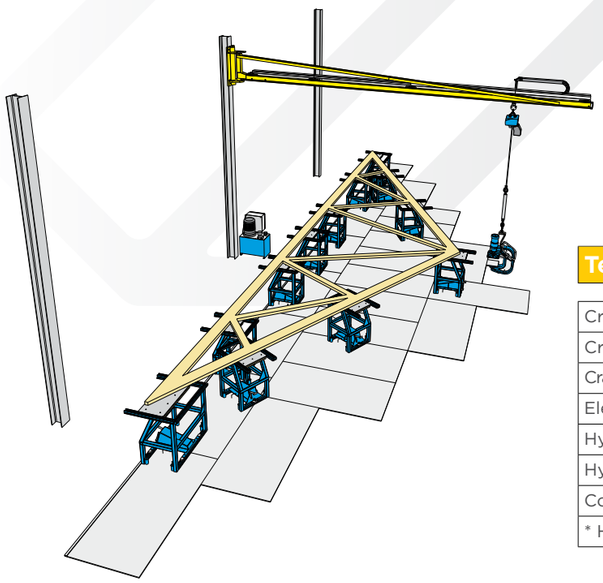
Press line in light overhead crane

The fixtures are placed on the steel floor

PRESS LINE WITH WALL MOUNTED CRANE

Randek press line with wall mounted crane is a simple and yet functional solution for production of all types of trusses. The crane is clamped or bolted on existing wall columns in desired height. The crane is 7 meter and can take loads up to 320 kg. It is equipped with cable chains where the wires and the 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 when you need to press from the inside of the truss.

Article number	Crane type	Press Force	Activation
112194AA	Wall mounted crane 7 meter	23 tonne	Push button activation
112194AB	Wall mounted crane 7 meter	23 tonne	Pistol grip activation
112232AA	Wall mounted crane 7 meter	27 tonne	Push button activation
112232AB	Wall mounted crane 7 meter	27 tonne	Pistol grip activation
112232AC	Wall mounted crane 7 meter	35 tonne	Push button activation
112232AD	Wall mounted crane 7 meter	35 tonne	Pistol grip activation
For a complete press line, the above needs to be supplemented with hydraulic hose and magnet fixtures.			

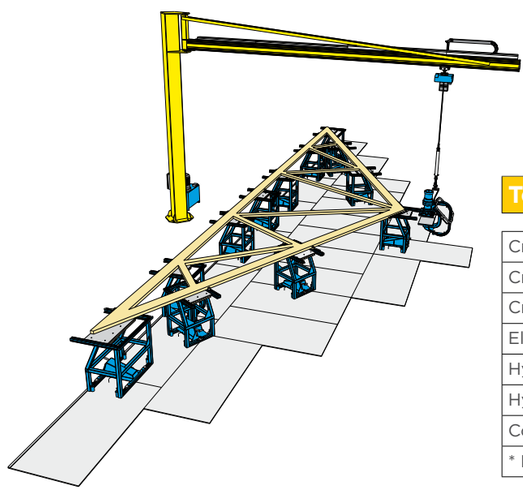


Technical Description	
Crane length	7000 mm
Crane - Max Load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical Chain Hoist	250 - 320 kg
Hydraulic Hose - Coupling	5/8” and 1/2” (return)
Hydraulic Hose - Length*	2·H+7 meter
Consumption - Electrical	3x400 VAC +N+PE 20A 50 Hz
* H = Distance between floor and cranes lower edge	

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 don’t want to position the station along an existing wall. The column is cast and bolted in the concrete floor and can be ordered in whichever height is suitable. The crane is 7 meter and can take loads up to 320 kg. It is equipped with cable chains where the wires and the 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 when you need to press from the inside of the truss.

Article number	Crane type	Press Force	Activation
114453AA	Column mounted crane 7 meter	23 tonne	Push button activation
114453AB	Column mounted crane 7 meter	23 tonne	Pistol grip activation
114451AA	Column mounted crane 7 meter	27 tonne	Push button activation
114451AB	Column mounted crane 7 meter	27 tonne	Pistol grip activation
114451AC	Column mounted crane 7 meter	35 tonne	Push button activation
114451AD	Column mounted crane 7 meter	35 tonne	Pistol grip activation
For a complete press line, the above needs to be supplemented with hydraulic hose and magnet fixtures.			

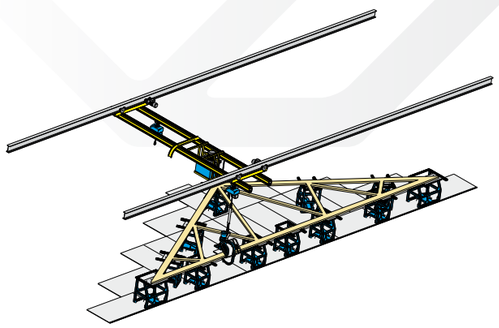


Technical Description	
Crane length	7000 mm
Crane - Max Load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical Chain Hoist	250 - 320 kg
Hydraulic Hose - Coupling	5/8” and 1/2” (return)
Hydraulic Hose - Length*	2·H+7 meter
Consumption - Electrical	3x400 VAC +N+PE 20A 50 Hz
* H = Distance between floor and cranes lower edge	

PRESS LINE WITH
OVERHEAD CRANE

The overhead crane operated with engines is a good option for the heavier press heads (27 and 35 tonnes) since you doesn't have to drag the crane along the truss. The crane is operated with controls on the press head and powers two frequency controlled motors in high or low speed. Acceleration and deceleration happens very smoothly due to the frequency controlled motors. The overhead crane is mounted on existing traverse path and is designed according to the individual need. The hydraulic aggregate is mounted between the two beams, hence it will travel along the whole work area. This could involve 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 when you need to press from the inside of the truss.

Article number	Crane type	Press Force	Activation
112318AA	Overhead crane 6 meter	23 tonne	Push button activation
112318AB	Overhead crane 6 meter	23 tonne	Pistol grip activation
112318AC	Overhead crane 6 meter	27 tonne	Push button activation
112318AD	Overhead crane 6 meter	27 tonne	Pistol grip activation
112318AE	Overhead crane 6 meter	35 tonne	Push button activation
112318AF	Overhead crane 6 meter	35 tonne	Pistol grip activation
For a complete press line, the above needs to be supplemented with hydraulic hose and magnet fixtures.			

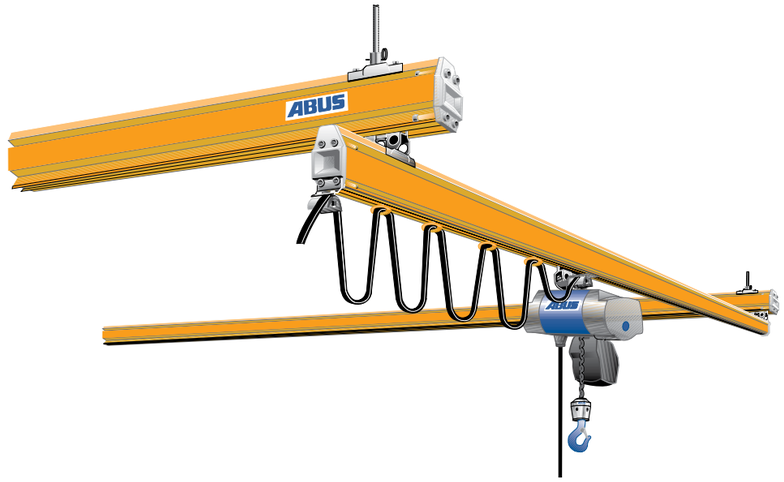


Technical Description	
Crane length	6 meter (or custom length)
Crane - Max Load	250 - 320 kg
Crane - Min assembly height H*	3700 mm
Electrical Chain Hoist	250 - 320 kg
Hydraulic Hose - Coupling	5/8" and 1/2" (return)
Hydraulic Hose - Length*	H+B/2+2,5 meter
Consumption - Electrical	3x400 VAC +N+PE 20A 50 Hz
* H = Distance between floor and cranes lower edge B = Width of crane (6 meter).	

PRESS LINE WITH LIGHT
OVERHEAD CRANE

The light overhead crane is a good option for the lighter press heads (23 - 27 tonne) as it lacks motor driven functionality. The light overhead crane has a very low weight, thus making it very easy to move around. The low build height of the system makes the crane ideal for production halls with low ceiling height. The lengthwise beams are fixed in the existing trusses of the hall.

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 when you need to press from the inside of the truss.



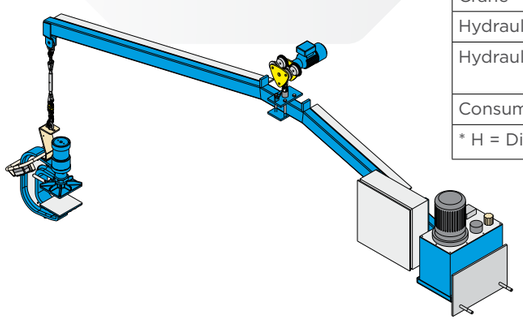
Technical Description	
Crane length	6 meter (or custom length)
Crane - Max Load	250 kg
Crane - Min assembly height H*	3700 mm
Electrical Chain Hoist	250 kg
Hydraulic Hose - Coupling	3/4" and 5/8" (return)
Consumption - Electrical	3x400 VAC +N+PE 20A 50 Hz
* H = Distance between floor and cranes lower edge	

PRESS LINE WITH
COUNTER BALANCED CRANE

Just like the overhead crane, the counter balanced crane is a motor driven crane and fits press heads from 23 to 35 tonnes. The crane is operated with controls on the press head and powers a frequency controlled motor in high or low speed. Acceleration and deceleration happens very smoothly due to the frequency controlled motors.

The counter balanced crane is mounted on a existing traverse path right above the production area. The hydraulic aggregate is mounted on the back of the crane, acting as balance. Since the crane is mounted in the above traverse path, the operating length is only limited to the length of the traverse and can easily span one or multiple press stations. Height adjustment is made with the help of the chain and a turnbuckle.

Article Number	Crane type	Press force	Activation
112488AE	Counter balanced crane	23 tonne	Push button activation
112488AF	Counter balanced crane	23 tonne	Pistol grip activation
112488AA	Counter balanced crane	27 tonne	Push button activation
112488AB	Counter balanced crane	27 tonne	Pistol grip activation
112488AC	Counter balanced crane	35 tonne	Push button activation
112488AD	Counter balanced crane	35 tonne	Pistol grip activation
For a complete press line, the above needs to be supplemented with hydraulic hose and magnet fixtures.			



Technical Description

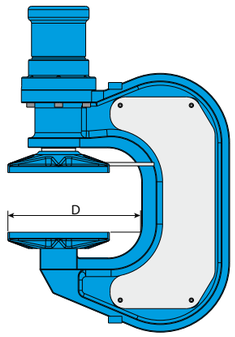
Crane - Range of action	2567 mm (360°)
Crane - Max load	320 kg
Hydraulic hose - Couplings	5/8” and 1/2” (return hose)
Hydraulic hose - Length*	23 tonne = H+B/2+2,5 meter 27 and 35 tonne = H+B/2+2,5 meter
Consumption - Electrical	3x400 VAC +N+PE 20A 50 Hz
* H = Distance between floor and cranes lower edge	

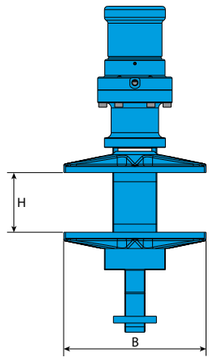
PRESS HEAD

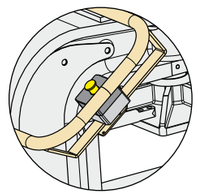
A press that is used for manufacturing roof trusses is repeatedly exposed to enormous forces. For this reason, our hydraulic presses are extremely robust, while the C shaped design makes them easy and flexible to use. The maximum press power is between 23 and 50 tonnes depending on the model. The presses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

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

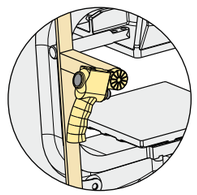
Article Number				
23 tonne	27 tonne	35 tonne	Model	Buttons for movement*
101092AA	100991AA	101080AA	Without handle or buttons	No
101190AA	101040AA	101136AA	With handle and push button activation	No
101190AB	101040AB	101136AB	With handle and push button activation	Yes
101190AC	101040AC	101136AC	With handle and pistol grip activation	No
101190AD	101040AD	101136AD	With handle and pistol grip activation	Yes
* Some press heads needs to be equipped with extra buttons to control the motor drive for overhead cranes and counter balanced cranes.				







Push button activation



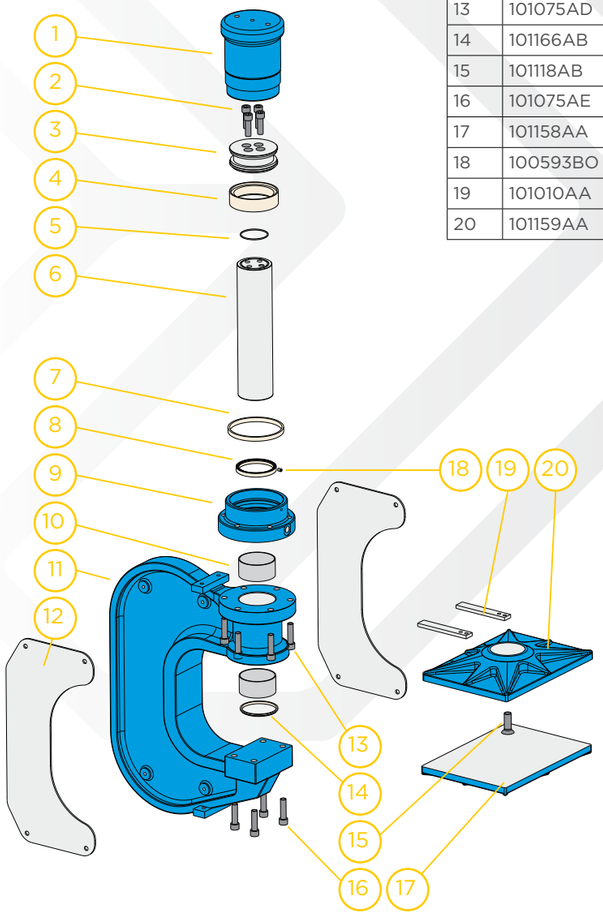
Pistol grip activation

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

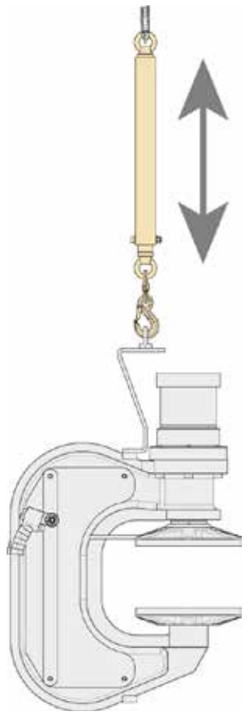
	Article number			
Pos	**23 tonne**	**27 tonne**	**35 tonne**	**Part**
1	101094AA	115617AA	115617AA	Cylinder
2	100723GW	101075AA	101075AA	Screw
3	101161AA	100999AA	100999AA	Piston
4	101004AB	101004AA	101004AA	Seal
5	101002AB	101002AA	101002AA	O-ring
6	101163AA	101001AA	101001AB	Piston rod
7	101003AB	101003AA	101003AA	Seal
8	101003AD	101032AA	101032AA	Seal
9	101162AA	101000AA	101000AA	Cylinder base
10	101012AN	101012AA	101012AA	Slide bearing
11	101093AA	100992AA	101081AA	C-Frame
12	101005AA	101005AA	101082AA	Steel plate cover
13	101075AD	101075AA	101075AC	Screw
14	101166AB	101011AA	101011AA	Strickle
15	101118AB	101118AA	101118AA	Screw
16	101075AE	101075AA	101075AC	Screw
17	101158AA	107304AB	107304AB	Lower press plate
18	100593BO	100593BO	100593BO	Screw
19	101010AA	110431AA	110431AA	Guide
20	101159AA	107304AA	107304AC	Upper press plate



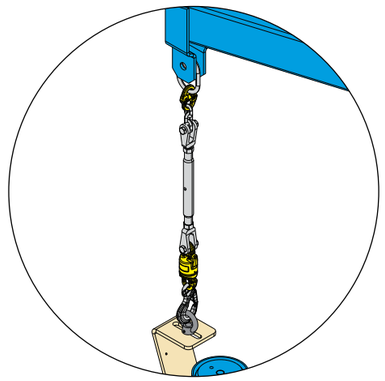
PRESS SUSPENSION

The gas spring is an upgrade from previous suspensions with spring balancers to compensate the press stroke. The much more robust gas spring improves sustainability and the function of the press cycle. Depending on what press head you use, different spring force is used to counteract the stroke. Together with the electric chain hoist a safer and easier handling of the press is accomplished.

Article Number	Suspension	Press head	Including chain hoist
GP3088	Gas spring	23 tonne	Yes
GP3089	Gas spring	27 tonne	Yes
GP3085	Gas spring	35 tonne	Yes
GP3101	Chain and turnbuckle*	23 - 35 tonne	No
112181AA	Electric chain hoist	23 - 35 tonne	-
* Only applicable for counter balanced crane			



Gas spring



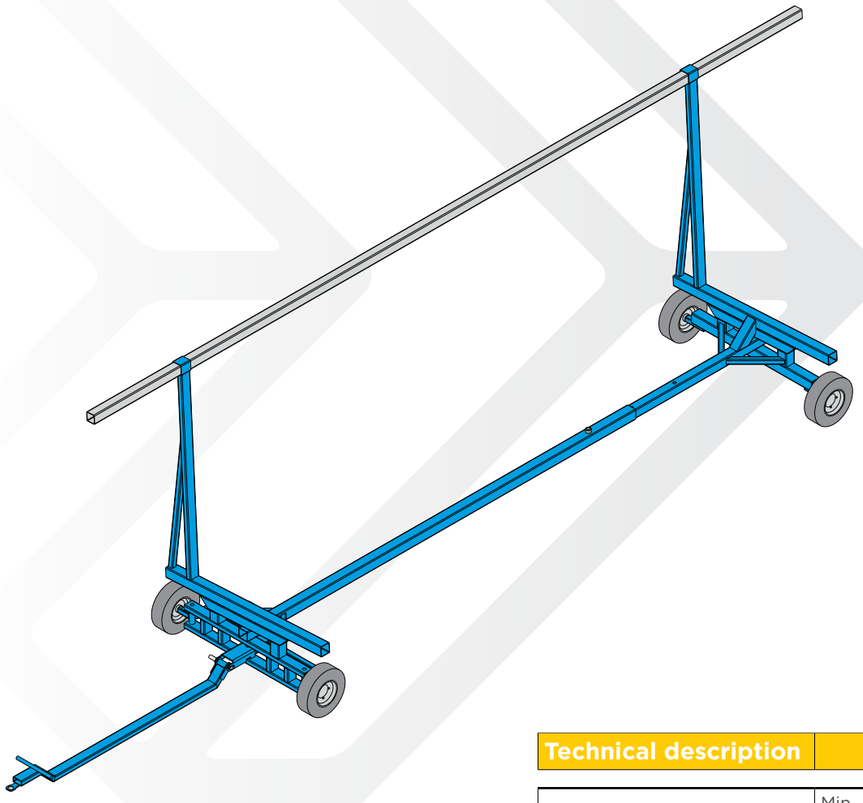
Turnbuckle

Technical Description			
Press head	23 tonne	27 tonne	35 tonne
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

TRUSS TROLLEY

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

Article Number
114860AA

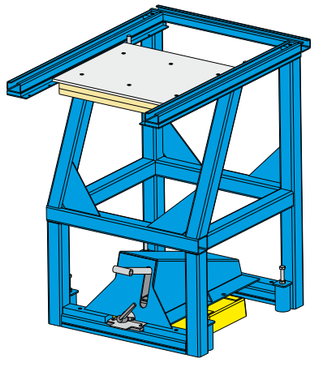


Technical description		
	Min	Max
Stack length*	4980 mm	7980 mm
Stack Width	1500 mm	
* Distance between beams		

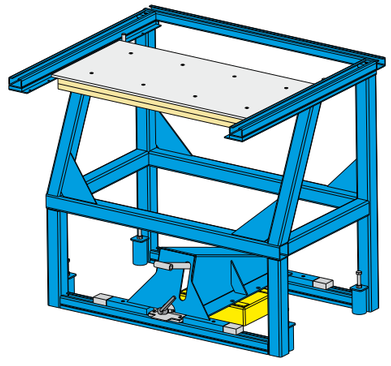
FIXTURES

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 while unlocked, very 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 setup of a press station consists of 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, excentric fasteners and other tools to align and mould the timber to the correct shape before you press the truss.

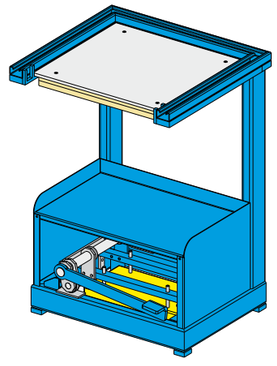
Article Number	Model	Width	Height
105675AA	NTD	550 mm	832 mm
105675AB	NTD	900 mm	832 mm
111252AA	NTP	615 mm	890 mm
GP3092	Round Support		
GP3093	Truss-Top Support		
GP3094	Long Support		
GP3095	Quick Grip Fastener		
GP3096	Excentric Fastener		
The fixtures are placed on a 10 mm thick welded steel floor.			



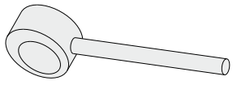
NTD550



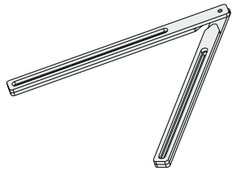
NTD900



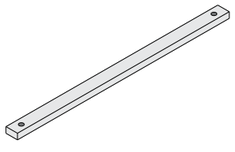
NTP615



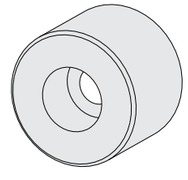
Excentric Fastener



Truss-Top Support



Long Support



Round Support

RANDEK IN BRIEF

Randek develops, manufactures and markets high-performance machines and systems for prefabricated house manufacturing. The product range consist of: cut saws, wall-, floor- and roof lines, roof truss system, butterfly tables and special machines. The automation level stretches from fully automated to manual.

The company history goes back to the 1940s and began working in close cooperation with the first prefabricating house producers. Today leading house producers in 38 countries are using Randek machines and system.

CUT SAWS

High quality and well tested saws with different automation levels. Also specialized saws for custom applications.

WALL-, ROOF- AND FLOOR LINES

Complete product program for manufacturing of walls, floors and roofs. From manual to fully automatic systems.

ROOF TRUSS SYSTEMS

Adapted equipment for rational manufacturing of roof trusses. From traditional systems to fully automatic.

BUTTERFLY TABLES

Flexible and well tested butterfly tables. Simple or advanced with a wide range of options.

SPECIALIZED MACHINERY

Customized machinery developed for specific applications, Automatic stucco machine, Beam insulating machine, Roof board machine and Window frame machine.

SERVICES

A wide range of services such as Factory Layout designs, Machine maintenance, House building systems and Financing.

RANDEK
BUILDING THE FUTURE

Randek AB, Tångvägen 24, SE-311 32 Falkenberg, Sweden
Phone: +46 346 55 700, Fax: +46 346 55 701, www.randek.com, E-mail: info@randek.com