

FECKEN **FK** KIRFEL

Always a cut above – since 1870

Bandknife Splitting Machines with Conveyor System

Type | **H 42 A**



Helmut Tönnies

Head of the Engineering Department

Michael Pascher

Group leader Electrical Construction

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Fecken-Kirfel produces precise and efficient cutting machines to process a wide variety of different plastics, rubber and similar materials. Founded in 1870, this family-owned company today leads the way on technology and quality in its field worldwide. Using its large pool of engineering knowledge and expertise, Fecken-Kirfel works together with customers to keep on developing its range of machines further. We produce 100 % of our cutting machines at our main base in Aachen, Germany.

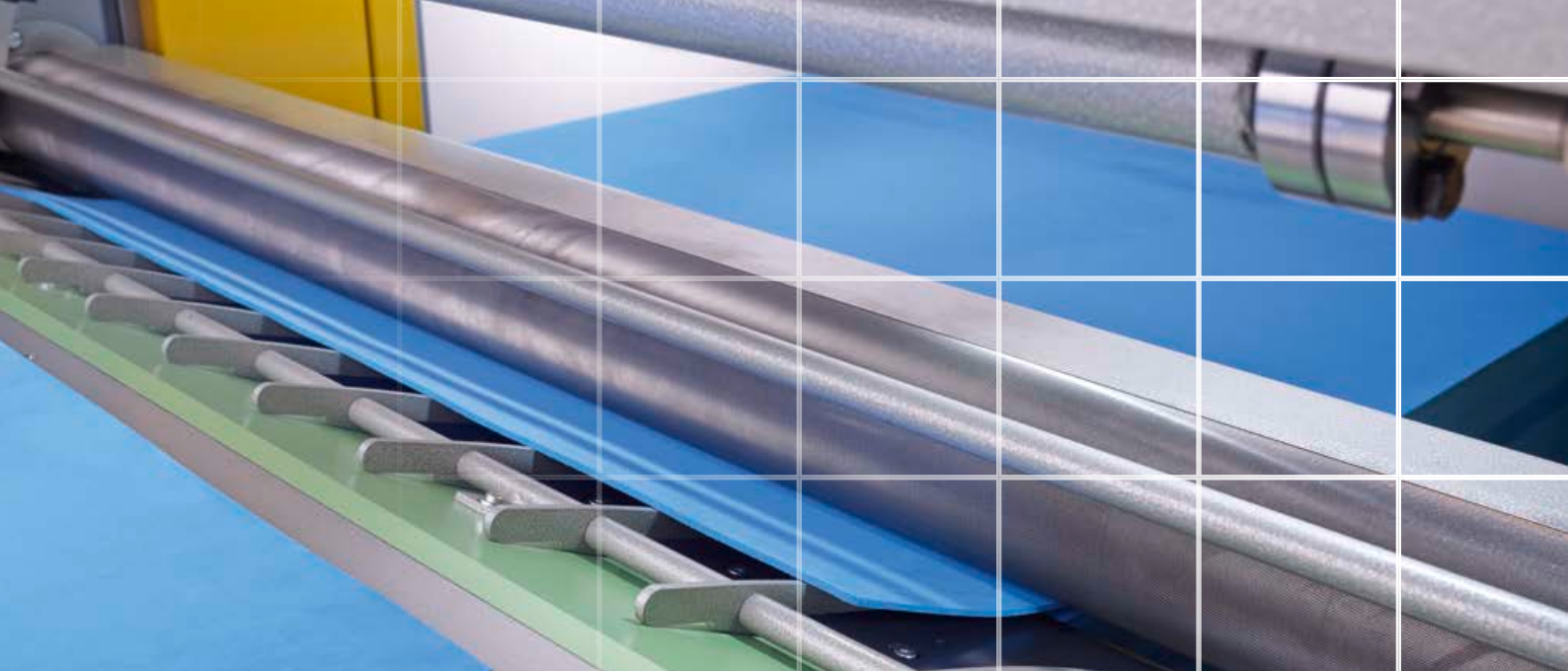
Founded in 1870

Independent
family-owned business

Cutting machines
“Made in Germany”

Machines process wide
variety of materials

Leading the way on technology
and quality worldwide



HELLO AND WELCOME!

With the H 42 A, Fecken-Kirfel is proud to present its bandknife splitting machines with conveyor system, designed to split blocks, slabs, and endless long slabs of cellular rubber, PE foams, and other similar materials. The machine is available in three different designs. This model is ideal for working with particularly thin sheets and even roll goods.

The cutting quality of the H 42 A is as consistently high as ever thanks to its automatic bandknife adjustment. Additionally, during the splitting process itself, a vacuum system ensures that the material being processed is reliably hold down on the conveyor. What's more, this system is available in various working widths and designs to suit your individual requirements:

- Basic model (forward and reverse motion)
- Model with return conveyor
- Model with return conveyor and two rotary loop attachments.

The H 42 A is a particularly popular choice in the packaging and automotive industries as well as in construction sectors, and can also be found in the footwear and leisure industries (where it is used for sports bandages and wetsuits, to name just a couple of examples).

Very low tolerances
+/- 0.1 mm

Vacuum system

Automatic bandknife adjustment

Consistent cutting quality

Simple operation with minimal personnel costs



Dipl.-Ing. Francis Pinckers
Vice President



Our customers truly value the H 42 A system for its exceptional splitting accuracy and uniform cutting quality.

THE BASIC MODEL – PERFECT FOR SPLITTING BLOCKS AND SLABS

The H 42 A bandknife splitting machine is as close to perfect when it comes to splitting blocks and slabs. The easy-to-operate basic model uses a forward and reverse motion, and is controlled simply and securely via an industrial PC with a separate control panel.

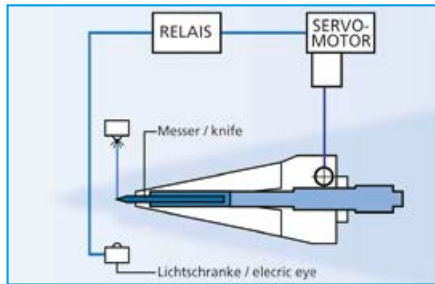
Areas of application: Packaging industry, automotive industry, construction sector, leisure industry (sports bandages, wetsuits), footwear industry.

Materials: Cellular rubber (neoprene), expanded rubber, sponge rubber, EVA, PE foam, PVC foam, bonded foam, foam products, and other similar materials up to a Shore hardness of around 45° (based on scale A), depending on the material properties.

Equipment: The automatic bandknife adjustment guarantees the H 42 A's consistent cutting quality. Additionally, during the splitting process itself, a vacuum system ensures that the material being processed is reliably held down on the conveyor.

Automatic bandknife adjustment: In the case of all H types, the bandknife is automatically adjusted with the aid of a light barrier and a servomotor. The ratio between the material to be cut, the knife tip, and the knife guide remains constant. This means that a consistent cutting quality is achieved over the entire lifespan of the bandknife.

Type | **H 42 A**

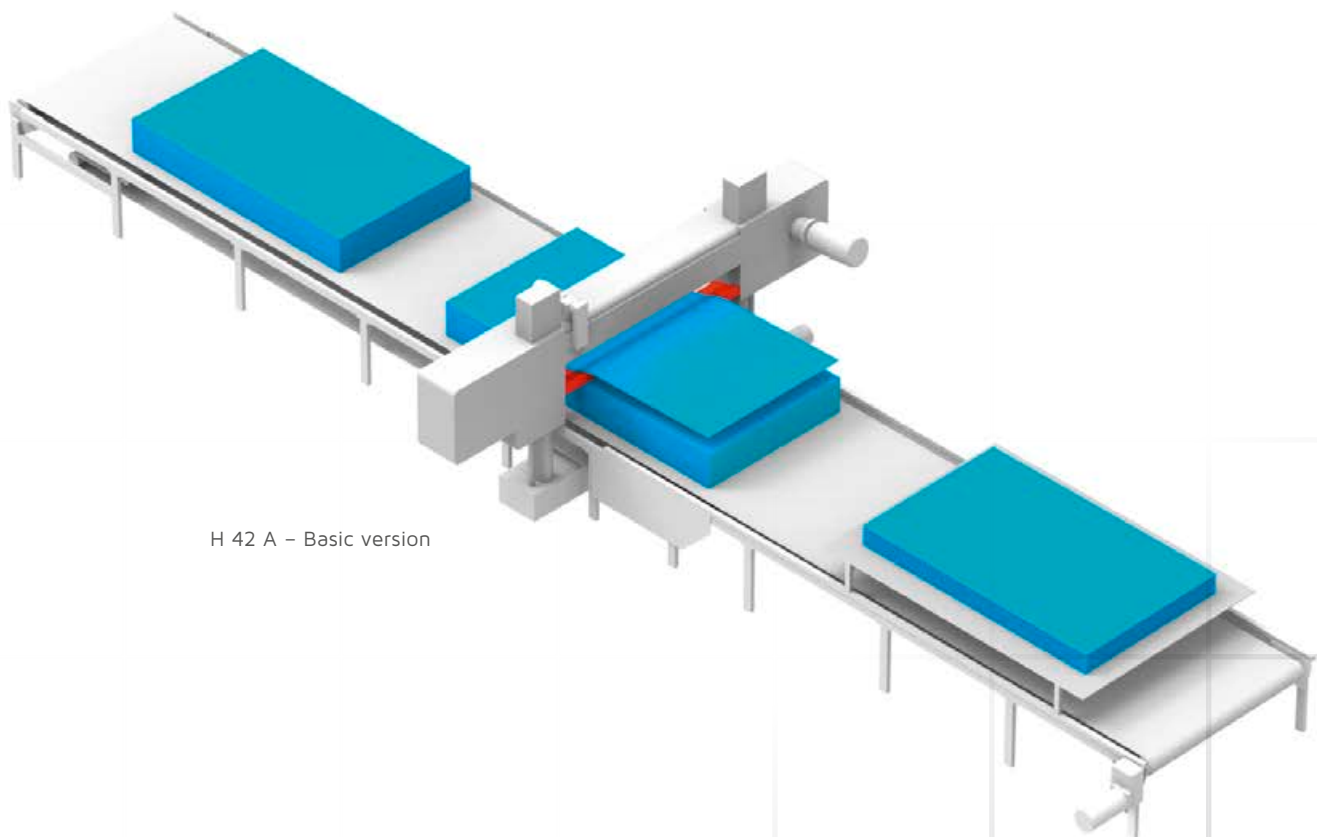


Conveyor belt length (7 m)
individually extendable

Various working widths

Adjustable feed speed of 4–50 m/min

Layer thicknesses: 0.5–100 mm



H 42 A – Basic version



Martin Ring
Assembly/service technician

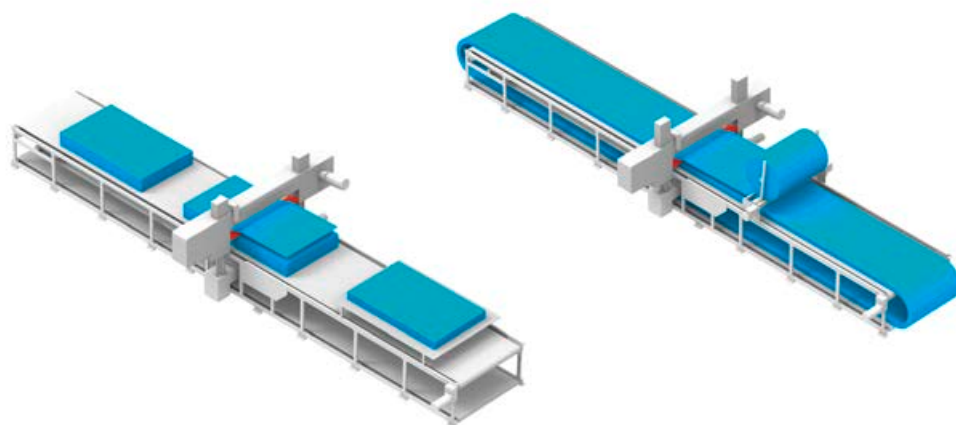


Just like all the other H 42 A models, I can operate this machine myself without any problem.

RETURN CONVEYOR – THE IDEAL CHOICE FOR ENDLESS LONG SLABS

In addition to its forward and reverse motion, this H 42 A model with added return conveyor makes it possible to split endlessly glued long slabs in a looping around process. Once split, the slabs can then be wind up into continuous rolls. This system is suitable for one-man operation.

Model with added return conveyor

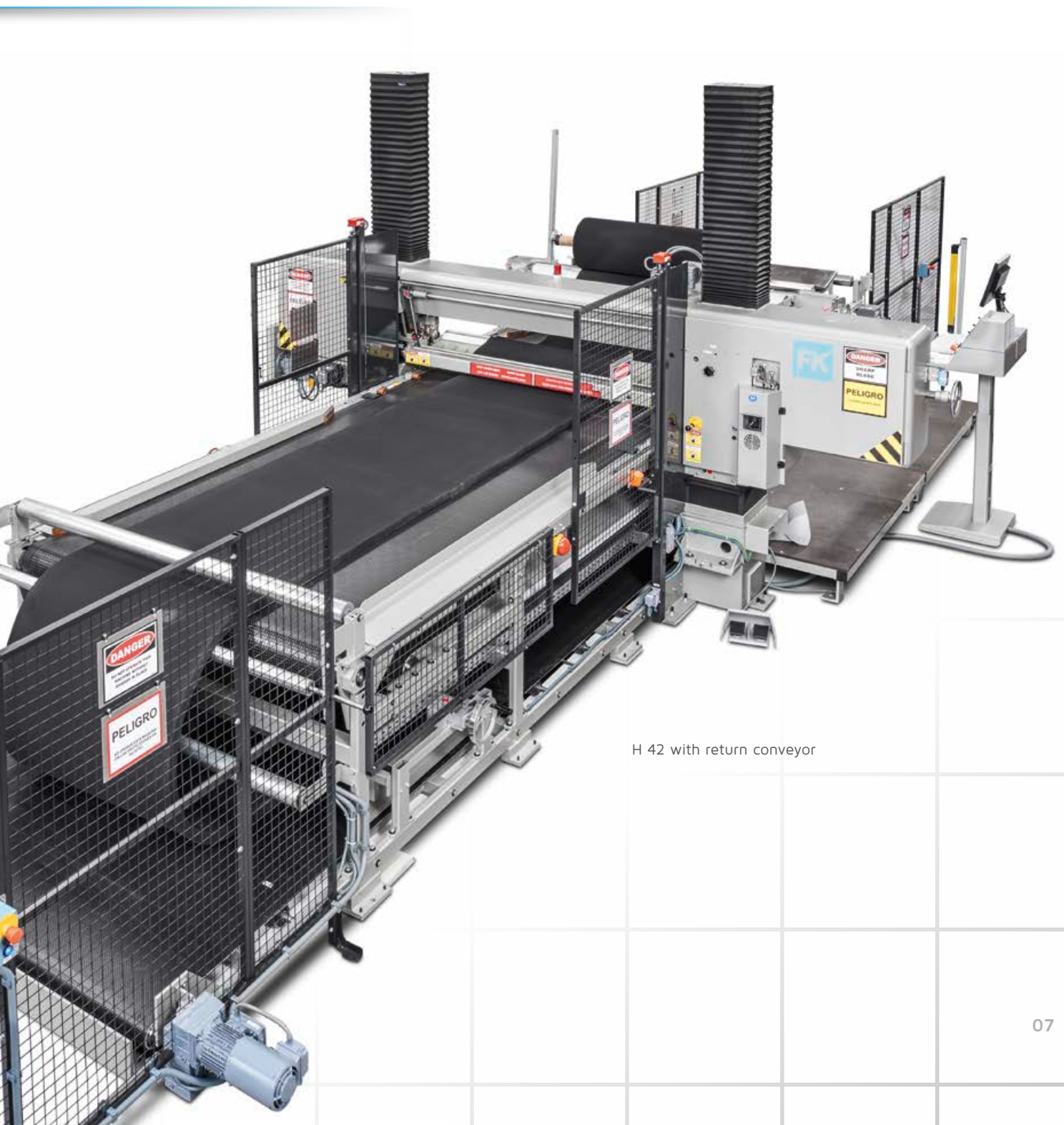


H 42 A with forward and reverse motion



Type | **H 42 A**

Precise and variable for
endlessly glued long slabs



H 42 with return conveyor



Lars Nelles
Area Sales Manager



This model really has got it all!
Thanks to the additional modules, your production
processes can become even more efficient.

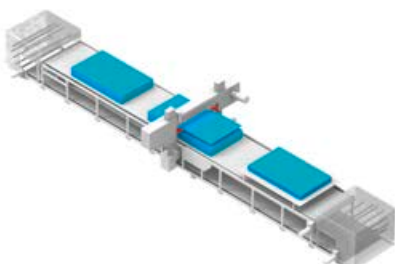
THE ALL-ROUNDER OF THE H 42 A MODELS

If you're looking for something that can do everything, then look no further than the full version with return conveyor and two loops. This version includes the functions of the two „little sisters“. Thanks to the two additional rotary loop attachments, it's just as easy to split a long, finite glued slab or several slabs back to back as part of the looping around process. What's more, as the splitting process itself is fully automatic, the system runs perfectly well with the help of just a few operators.

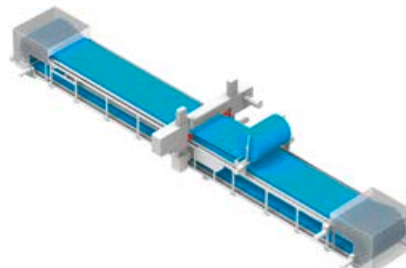


4 POSSIBILITIES TO SUIT YOUR NEEDS PERFECTLY

1. Splitting slabs and blocks in forward and reverse motion up to a maximum height of 1000 mm:



2. Splitting 21.6 m long endlessly glued slabs in a looping around process:



Type | H 42 A

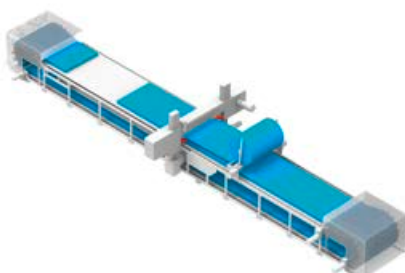
For splitting single slabs and finite long slabs in a looping around process

Including return conveyor and two loops

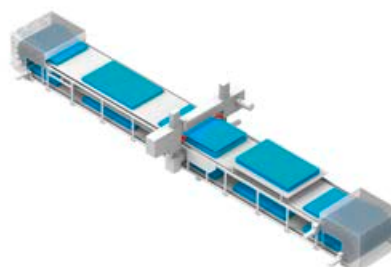
H 42 A – model with return conveyor and two loops for manufacturing roll goods.



3. Splitting of 20 m long finite slabs in a looping around process:



4. Splitting several slabs back to back in a looping around process:





Michael Frings
Parts Production
Michael Bürger
Foreman, Parts Production



The H 42 A offers an efficient model to suit any requirements.

THE POSSIBILITIES AT A GLANCE

Technical Data	H 42 A
Working widths	1200 mm, 1400 mm, 1600 mm, 2200 mm
Conveyor belt lengths	7000 mm, + multiples of 2000 mm
Material clearance under the bandknife	250 mm (optional: 1000 mm)
Material clearance above the bandknife	100 mm
Vacuum power	300 mm WC at 50 Hz
Knife beam	12° reinforced
Bandknife width	60 mm
Bandknife thickness	1.0 mm
Bandknife lifespan	Approx. 150-200 hours, depending on the material
Bandknife speed	1.6 and 3.2 m/s (optional: 1.5–4.2 m/s)
Feeding speed	4-50 m/min
Driven pressure roller	Yes

Type | **H 42 A**

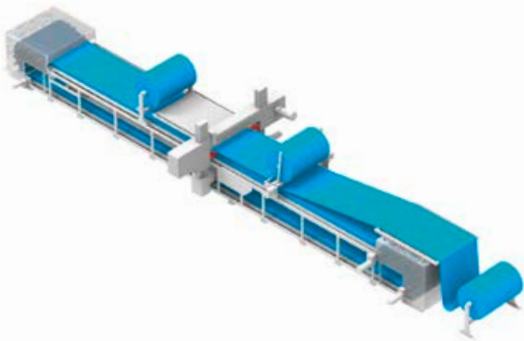
Flexible for soft and sticky materials

Roll goods easy to produce

Even greater precision

Easy roller removal

ADDITIONAL OPTIONS FOR EVEN GREATER FLEXIBILITY



1. Wind-up devices

The H 42 A allows splitting extremely thin layers and winding them up wrinkle-free. The trick is the new developed deflection with optimized material guidance, a more specialized winding system and a lot of technical know-how.

This wind-up device for those extremely thin layer thicknesses is executed as a center winder. Combined with the special material guidance for sticky and very soft cellular rubber qualities – which are frequently used in the electronic and automotive industry – layer thicknesses from 0.5 mm upwards can be produced extremely precisely.

2. Gluing and welding machine

The gluing and welding machine is an exceptional choice for manufacturing long slabs from individual slabs.



3. Thickness measuring device

If you're looking for absolute precision and consistent quality, Fecken-Kirfel offers an optional thickness measuring device for roll goods.

4. Lifting device

The optional lifting device makes the whole process of removing rollers so much easier, optimizing your workflows in a way that suits you best.



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