

FECKEN **FK** KIRFEL

Always a cut above – since 1870

Fully Automatic Bandknife Splitting Machine

Type | **H 32 LF Loop**



Monika Marcinkowski

Purchase

René Matt

Purchase Manager

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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

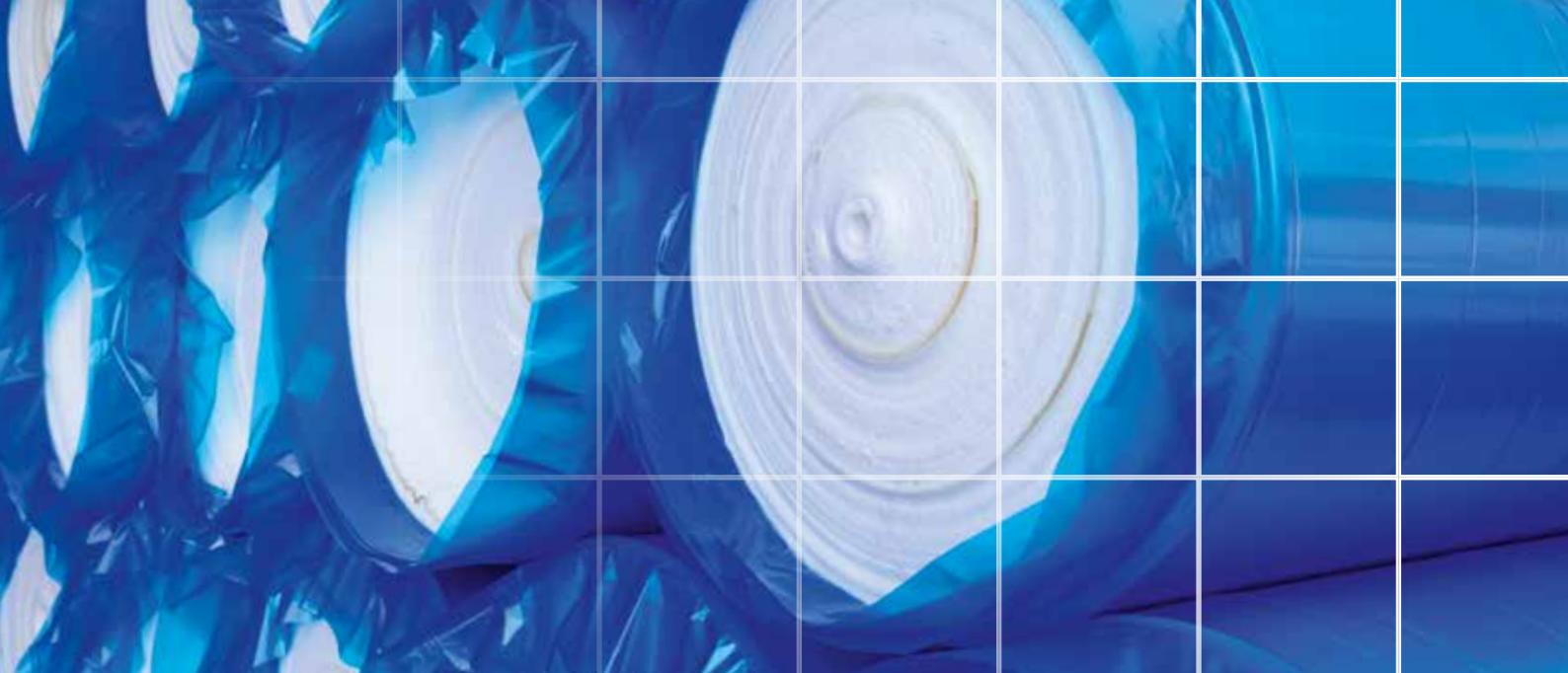
Independent
family-owned business

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 32 LF Loop, Fecken-Kirfel offers a bandknife splitting machine for the most varied of materials and uses. The cutting unit is integrated into a Loop frame, meaning the machine offers an even more efficient and economical way of splitting flexible PU foams (polyester, polyeter, visco and HR foams) and turning them into roll goods.

The H 32 LF Loop ensures an extremely even cut throughout the entire lifespan of the bandknife. It has a robust construction – with a cast-iron machine body – and is used in areas including the automotive sector, mattress production, and the shoe industry.

Fecken-Kirfel offers numerous additional options to adapt the Loop to customer requirements and applications.

**Customer-specific
designs**

**Highly robust
construction**

**Cast-iron
machine body**

**For block
lengths ranging
from 30–120 m**



Rudi Johnen
Plant Manager



Blocks of 30 m, 60 m, or even up to 120 m in length can be turned into roll goods quickly and efficiently with the Loop.

SPLITTING ROLL GOODS EASILY AND EFFICIENTLY WITH THE LOOP

The H 32 LF Loop bandknife cutting machine combines a cutting unit and Loop frame to make it incredibly easy to split large blocks measuring 30 m, 60 m, or even 120 m long.

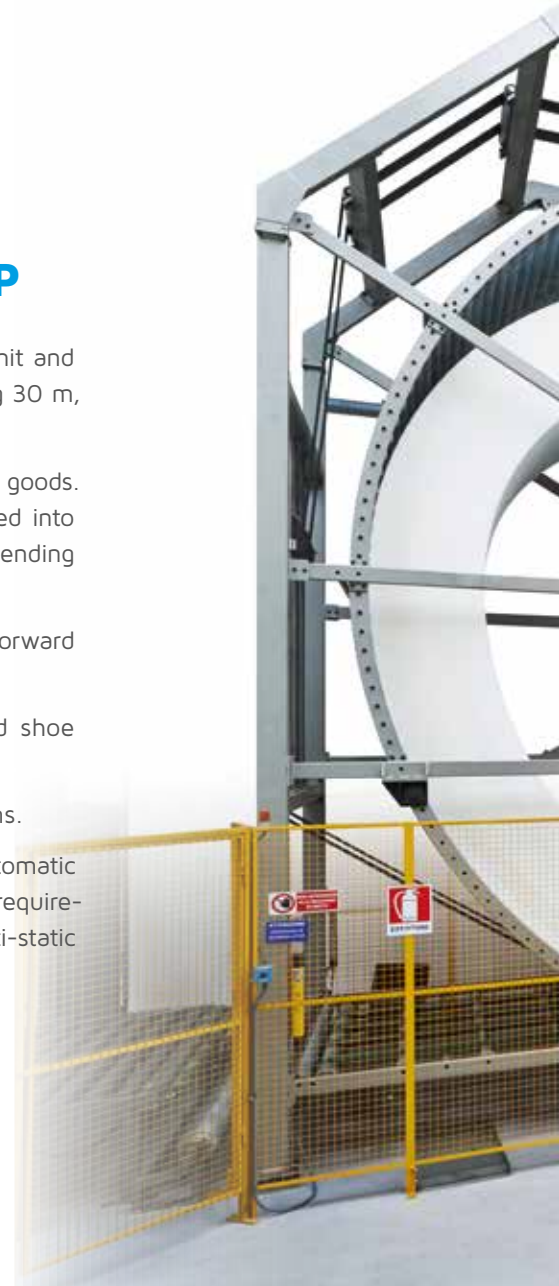
The machine is ideally suited for the fully-automated production of roll goods. The blocks are moved into the Loop, glued, and then split and rolled into layer thicknesses of 1.2 mm to 35 mm in circulating operation, depending on the material.

If necessary for the material, the blocks can also be flattened with forward and reverse motion.

Area of application: Automotive sector, mattress production, and shoe industry.

Material: Flexible PU foam, polyester, polyeter, visco and HR foams.

Equipment: Robust machine construction made from cast iron, automatic bandknife adjustment, loop equipment (towers) tailored to customer requirements (rolls or strips), alternative winding-up device variants, anti-static system.



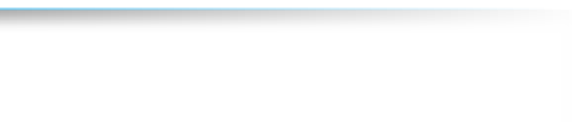
Type | **H 32 LF Loop**

Layer thicknesses of 1.5 mm to 35 mm

No empty running

Large production volumes

100 % tailored to customer requirements



H 32 LF Loop machine.



Dipl.-Ing. Francis Pinckers
Vice President



The automatic bandknife adjustment ensures that the cut quality remains consistent.

ROBUST AND PRECISE – THE CUTTING UNIT

The cast-iron cutting unit makes the machine particularly robust and long-lasting, and guarantees extremely tight tolerances. For endlessly glued blocks, the system lowers in line with the cutting speed to a defined area during splitting. A pressure roller and a vacuum (optional) fix the block in place for the cutting process. The bandknife is continuously resharpened during operation. An automatic bandknife adjustment ensures that the cut quality remains consistent throughout the entire lifespan of the bandknife. There is no need for any additional adjustment, e.g. to the knife beam or pressure roller. The system also has an anti-static system, which discharges the electrostatic charge created in the split layers and ensures perfect winding.

Type | **H 32 LF Loop cutting unit**

Bandknife automatically adjusted

Consistent cutting quality

Fast cutting speeds



Cutting unit of the H 32 LF.

The H 32 LF Loop also has a reinforced lateral guide. The 2 m-long rollers on the side feed the block directly in front of the machine for the cutting process and hold it in a stable position. They therefore guarantee a highly precise cut and excellent winding results.



Michael Schmidt
Construction/Service technician



The winding-up device can also be positioned at the side of the machine. This makes winding very easy and reduces the input required by staff.

H 32 LF Loop with A1/90 winding-up device.





Type | H 32 LF Loop winding-up device

Foil length easy to pre-select

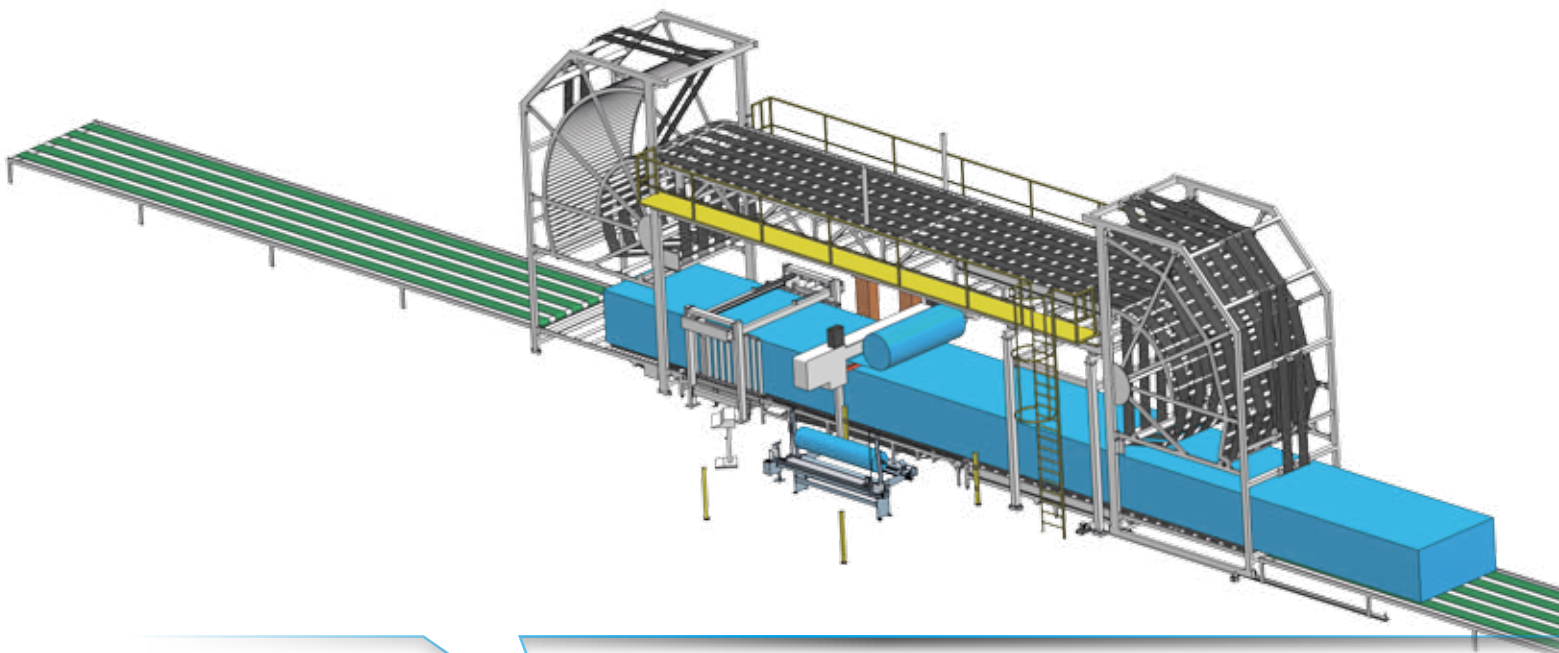
Fully automatic cutting to size

Anti-static system

RANGE OF WINDING-UP DEVICE VARIANTS FOR EASY HANDLING

Fecken-Kirfel offers two different winding-up device positions for the Loop – either behind the cutting unit (A1) or at ground level at a 90° angle to the machine (A1/90). The separate motor for the winding-up device is synchronized with the main conveyor belt. The winding-up device speed can be set independently and you can also pre-select your desired foil length. Cutting is then carried out entirely automatically. The axis along which the material is wound can be tightened at the press of a button using pneumatic clamps. With the A1/90 winding-up device, you can also change the rolls without stopping the material.

Technical data	A1	A1/90
Position	behind the cutting unit	90° to machine
Min. layer thickness	1.2 mm	1.2 mm
Max. layer thickness	35 mm	35 mm
Machine operator(s)	2	1
Position of operator(s)	directly on the cutting unit	ergonomic position at ground level
Time taken to change rolls	30 sec.	30 sec.
Roll change		
• Material feed uninterrupted	no	yes
• Without marking	no	yes
Forward and reverse motion	yes	possible



THE LOOP – SMOOTH RUNNING FOR PRECISE CUTS

Drives that can be set separately for each transport unit in the Loop make the running of the block exceptionally smooth and even. Depending on the application, the material can be directed along driven conveyor belts or free-running, ball-bearing-mounted, galvanized rollers. Both variants guarantee particularly smooth running.

During the splitting process, one Loop tower moves automatically and ensures that the length is adjusted as the material block becomes increasingly thinner.

Forward and Reverse Motion possible

The H 32 LF can also use forward and reverse motion to process long blocks. In this case, the block does not run over the loop equipment, but instead is guided through a second gate and fed horizontally. This processing method is ideal for special material qualities.



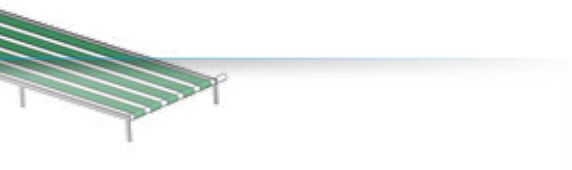
During the splitting process, one Loop tower moves automatically and ensures that the length is adjusted as the material block becomes increasingly thinner. In addition to endlessly glued blocks, this means that the machine can also split blocks without glue as well as single blocks.

Type | H 32 LF Loop

Highly precise cuts

Automatic length adjustment

Reinforced lateral guide



Further Options for Customization to Your Requirements

- Extension: Alternative processing of various block lengths, around 60 and 120 m, with a third tower.
- Stationary cross-cutter T1: Used inside or outside the Loop to cut off and/or trim long blocks.
- Side trimming for straight-edged winding: Available either as a cutting unit along the entire height of the machine (trimming unit V 116) or with lateral circular knife for foils that have already been split.
- FKOpti-Sheet: Developed in-house, this software optimizes layer thickness and residual layers, ensuring higher material usage by up to 4 %.

Technical data	H 32 LF Loop
Working widths	2200 mm, 2400 mm
Block lengths	30 m, 40 m, 50 m, 60 m, (120 m)
Block heights	1000 mm, 1300 mm (optional: for 40 m, 50 m and 60 m block length) 1500 mm (optional: for 50 m and 60 m block length)
Feed speed	adjustable between 12 m/min and 150 m/min

Dimensions	Length	Height + design reserve	Block length tolerance	Special block length tolerance
30 m	approx. 17 m	5820 mm + 1000 mm	± 0.5 m	–
40 m	approx. 21 m	7650 mm + 1000 mm	± 0.5 m	depending on configuration
50 m	approx. 27 m	7650 mm + 1000 mm	± 0.5 m	± 3 m, depending on configuration
60 m	approx. 32 m	7650 mm + 1000 mm	± 0.5 m	± 3 m



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