

Cutting machines
Splitting machines
Peeling machines

FLEXIBLE FOAM COLLECTOR

Flexible foams
Standard foams
HR foam
Visco foam
Bonded foams
Latex



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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!

It is impossible to imagine modern-day industry without flexible foams such as PU foam (polyether and polyester), open cellular PVC foam, latex, bonded foam, melamine-filled PU foams, and similar materials. Precision is key here: The foam blocks must be cut to length and trimmed on cutting machines before the material is split, contour cut or peeled. We provide a comprehensive range of cutting machines for the precise, rapid and efficient processing of flexible foams, allowing us to meet your most stringent quality requirements, and those of your customers.

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Markus Frings
Head of Parts Production

TRAVELING AND STATIONARY CUT-OFF MACHINES

Materials: The machines are used to cut flexible foams, HR foam, visco foam, bonded foams and latex. All of the machines are able to process long and short blocks.

Machine design: The T 1 is a cross cutter with a stationary cutting unit, which is used to split long blocks into short blocks. During the cutting process, the cutting unit of the T 2 and T 4 machines is synchronized with the foam block. This means that these two types of machine can be used behind a continuous foaming line.

Equipment: The T 1 and T 2 work with a rotating bandknife, cutting from top to bottom. The T 4 uses an oscillating knife, and cuts transversely to the foaming direction.



T 2 traveling cut-off machine.



T 4 traveling cut-off machine.

Cut-off machines | **T 1, T 2, T 4**

Bandknife sharpened on one side:
T 1 stationary cross cutter

Rotating bandknife:
T 2 traveling cut-off machine

Oscillating knife:
T 4 traveling cut-off machine

Technical data	T 1	T 2	T 4
Distance from the foaming head		45 m	30 m
Bandknife	Rotating	Rotating	Oscillating
Cutting principle	Stationary	Traveling	Traveling
Grinding device	x	x	
Long/short blocks	x	x	x



T 1 stationary cross cutter
with alignment station.



Michael Greven
Customer Service Manager

CUT-OFF AND TRIMMING MACHINES

Materials: The machines are used to cut and trim flexible foams (polyether and polyester), HR foam, visco foam, bonded foams and latex.

Machine design: The material is fed into the V 111 via a manual sliding table. The V 51 and T 8 have a cutting unit that moves automatically.

Equipment: All our cut-off and trimming machines can also be supplied with a saw. The knife fitted to the T 8 can be rotated beyond the material to be cut by +/- 90 degrees in both directions. The T 8 can be positioned at the start of a cutting line.

Technical data	V 111	V 51	T 8
Movement of the unit	Stationary	Automatic	Automatic
Cutting angle	0°	0°	+/- 90°
Cutting directions	Two	Two	Four
Saws (optional)	x	x	x

Vertical cutting | **V 111, V 51, T 8**

Stationary cutting unit:
V 111 manual vertical cutting machine

Movable cutting unit:
V 51 automatic vertical cutting machine

Knife rotatable by +/- 90 degrees:
T 8 cut-off and trimming machine



T 8 cut-off and
trimming machine with
alignmentstation.



Leon Mohnen
Sales

AUTOMATIC HORIZONTAL SPLITTING AND STACKING MACHINES

Materials: The machines belonging to the W series are ideal for splitting and stacking PU foam blocks, open-cellular PVC foam, and bonded foam up to a maximum of 120 kg/m³.

Machine design: The W 21 has an aluminum oxide-coated sliding table with a vacuum, while the W 22 has an adhesive conveyor belt with a vacuum. Both machines cut blocks using a forward and reverse motion.

Equipment: The sliding table on the W 21 can be extended by 1000 mm in both directions. It is possible to extend the conveyor belt on the W 22 by 2000 mm in both directions. The high band tension of approximately 10 t guarantees small tolerances.



Technical data	W 21	W 22
Feed	Table	Belt
System operation		x
Long blocks (roll goods)		x

Horizontal splitting | **W 21, W 22**

Tabletop machine:
W 21 automatic splitting and stacking machine

Adhesive conveyor belt:
W 22 splitting and stacking machine



W 22 horizontal splitting and stacking machine with take-away conveyor.



W 21 automatic horizontal splitting and stacking machine with sliding table.



Three W 22 splitting and stacking machines in production.

H 51/H 52, H 24 E | Horizontal splitting

HORIZONTAL SPLITTING MACHINES

H 51/H 52

Materials: The H 51 is used for the horizontal splitting of PU foams (polyether and polyester), including those with high densities. It can also process filled foams (CMHR), bonded foams of up to 150 kg/m³ and technical foams.

Machine design: The H 51 uses an automatic table-feed system to convey the material placed on the sliding table to the rotating bandknife. During the reverse movement of the table, the knife guidance fitted to the H 51 enters the kerf, allowing the next stage to begin. This means that the H 51 can run fully automatically and unmanned. Alternatively, the H 52 is fitted with a conveyor belt for automatic loading and unloading.

H 24 E

Materials: The H 24 E splits blocks and slabs made from bonded foam and polyester, as well as semi-rigid PU foams (Baynat®), and similar materials.



H 24 E
with semi-rigid foam
(Baynat®).

Technical data	H 51	H 52	H 24 E
Working widths	2200 mm	2200 mm	1400 mm, 1600 mm, 2000 mm, 2200 mm, 2600 mm
Max. block height	1300 mm, 1500 mm	1300 mm, 1500 mm	800 mm, optional: 1000 mm, 1300 mm
Material	150 kg/m ³	150 kg/m ³	200 kg/m ³
Unit	Reinforced welded construction	Reinforced welded construction	Cast iron body
Feed	Table	Belt	Table

AUTOMATIC CIRCULAR SPLITTING AND STACKING MACHINE

S 2x

Materials: The S series machines are ideal for splitting PU foams (polyether and polyester), latex and similar materials, and bonded foams of up to approximately 120 kg/m².

Machine design: The blocks are placed on the aluminum oxide-coated table. The rotational speed is continuously adjustable.

S 24 with PU foam.



Technical data	S 20	S 22	S 24
Working widths	1800 mm	2200 mm	2600 mm
Exterior table diameter	4800 mm	5600 mm	6400 mm
Usable table area	Approx. 17 m ²	Approx. 24 m ²	Approx. 32 m ²
Cutting speed continuously adjustable between	10-85 m/min	10-100 m/min	10-100 m/min
Table rotations	Max. 5.7 Upm	Max. 5.7 Upm	Max. 5 Upm
Cut-off and stacking height	1300/1600 mm	1300/1600 mm	1300/1600 mm
Block dimensions	Number of blocks	Number of blocks	Number of blocks
1.00 x 2.00 m	4	7	9
1.25 x 2.00 m	3	5	7
1.40 x 2.00 m	3	5	6
1.60 x 2.00 m	2	4	5
2.00 x 2.00 m	-	2	4
2.00 x 2.20 m	-	2	3
2.15 x 2.15 m	-	-	3



Michael Schmidt
Assembly/Service Technician

PRODUCTION OF ROLL GOODS

R 21/88

Materials: The R 21/88 peeling machine processes cylinders made from PU foam, and similar soft materials.

Application: The R 21/88 peels long, thin films from soft PU cylinders. These films are then processed by the R 88 wind-up machine.

Equipment: Our R 7 boring machine or our R 17 boring and mandrel inserting machine work alongside the R 21/88 by boring a hole through the cylinder or block.



R 21/88 bandknife peeling machine.

W 22 + A 2/A 4

Materials: The W 22 processes PU foams (polyether and polyester), bonded foam up to a maximum of 120 kg/m³, and similar materials.

Machine design: When working in combination with the A 2 wind-up machine or the A 4 gluing and wind-up machine, the W 22 automatic splitting machine is able to produce roll goods. The machine unit comprises an adhesive conveyor belt with a vacuum and a cutting unit. Conveyor belts that match the length of the block to be processed (10–60 m) can also be fitted. In the W 22 + A 2, the length of the roll always corresponds to the length of the block. The A 4 gluing and wind-up machine is able to extend the length of the roll to multiple times that of the block. Both types of machine are suitable for one-man operation.



Production of roll goods | **R 21/88,** **W 22 + A 2/4, H 32 LF**

Small volumes:
R 21/88 peeling machine

Small to medium-sized volumes:
W 22 + A 2/A 4 automatic splitting and stacking machine

Large volumes:
H 32 LF loop

H 32 LF

Materials: The H 32 LF loop processes long blocks made from PU foam such as polyether and polyester.

Operation: The H 32 LF splits long blocks into thin sheets before winding them into roll goods. Using the machine within a loop allows endlessly glued blocks to be split in a circulating process and limited long blocks to be split in a forward and reverse motion. For ease of operation, the A 1 wind-up machine may optionally be placed on the ground.

H 32 LF loop machine.



C 6x | Contour cutting



HORIZONTAL CONTOUR CUTTING CENTERS

C 6x

Materials: The C 6 x contour cutting center processes blocks made from PU foam (polyether and polyester), latex, bonded foam, Basotect (melamine), PE foam, and similar materials.

Equipment: The C 67 CNC-controlled contour cutting center has an operating speed of 40 m/min, which can be increased to a maximum of 70 m/min. The contour cutting center can be fitted with an optional rotating table, a job queue feature and automatic loading and unloading devices. The central knife guidance can move automatically and is equipped with a slab hold-down device, allowing the machine to be used for a flexible and versatile range of operations.

C 67 horizontal contour cutting center.

Technical data	C 66	C 67	C 68	C 69
Working range (L x W)	2300 x 2300 mm	2300 x 2300 mm	2300 x 2300 mm	2300 x 2300 mm
	2500 x 2500 mm	2500 x 2500 mm	2500 x 2500 mm	2500 x 2500 mm
	(optional)	(optional)	(optional)	(optional)
Cutting speed	2900 x 2900 mm	2900 x 2900 mm		
	(optional)	(optional)		
Cutting speed	40 m/min	40 m/min	15 m/min	15 m/min
	70 m/min (optional)	70 m/min (optional)		
Bandknife	Rotating	Rotating	Oscillating	Oscillating
Twist angle	+/- 360°	+/- 360°	∞	∞
Grinding unit	Yes	Yes	No	No
Central knife guidance	Yes	Yes	Yes	Yes
Slab hold-down device	Yes	Yes	Yes	Yes
Automatic rotating table	optional	Yes	Optional	Yes

Contour cutting | **F 62**

C 6x horizontal
contour cutting centers

F 62 vertical
contour cutting center

VERTICAL CONTOUR CUTTING CENTER

F 62

Materials: The F 62 contour cutting center is ideal for processing a variety of materials: Blocks and slab goods made from PU foam, PE foam, EVA, fleece/wadding, bonded foam, materials coated with textiles, slabs laminated with self-adhesive film, felts, and similar materials.

Equipment: The F 62 CNC-controlled contour cutting center has a cutting speed of 70 m/min, which can optionally be increased to 100 m/min. The space-saving design coupled with the patented movement of the knife enable a cutting angle of $\pm 360^\circ$ to be achieved.



F 62 vertical contour
cutting center.



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