

## Split Tile Cutter

### Sizes

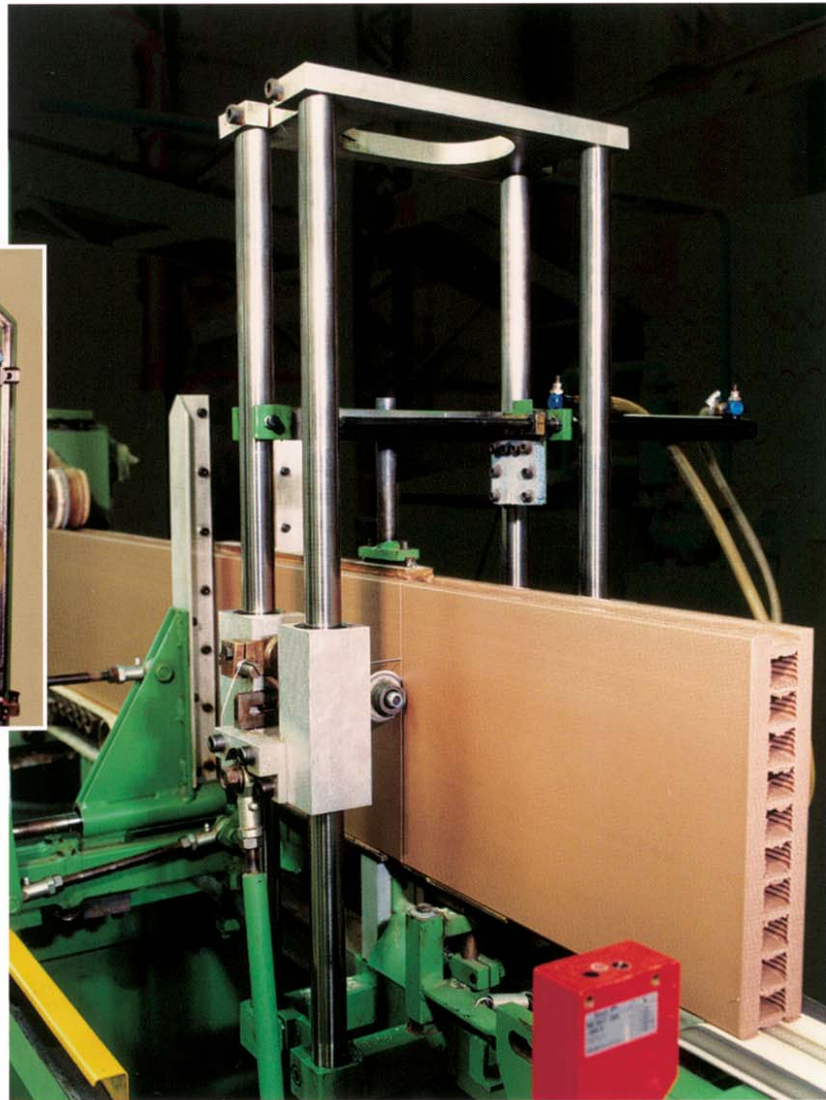
Type 4163	<b>Wire cut</b> TB max. 80 mm TH max. 330 mm TS min/max. 160 / 330 mm
Type 4163-S	<b>Wire cut – special size</b> TB max. 120 mm TH max. 450 mm TS min/max. 160 / 450 mm
Type 4164	<b>Knife cut</b> TB max. 50 mm TH max. 330 mm TS min/max. 160 / 330 mm

### Technical characteristics

- 1..... Base frame of solid welded steel construction.
- 2..... The driving elements are maintenance-free running in ball bearings and linear bearing systems.
- 3..... The clay column speed is measured by means of a measuring roller/measuring belt with pulser.
- 4..... The high cutting accuracy is achieved by electronic control.
- 5..... The cutter is driven by two servo-drives with electronic cam discs.

Because of the electronic cam disc larger cutting lengths can also be achieved.

The determination of the suitable cutter depends on the output, the number of sizes and whether the material could be cut better by wire or by knife.



### Operation

Type 4163, 4163-S and 4164 operate continuously.

The wire cutters type 4163 and 4163 create a small gap between product and clay column after cutting through which the wire returns to its initial position.

The knives of the knife cutter type 4164 turn to the outside and return along the advancing clay column to their starting position. After their return to the top the knives turn back to the inside.

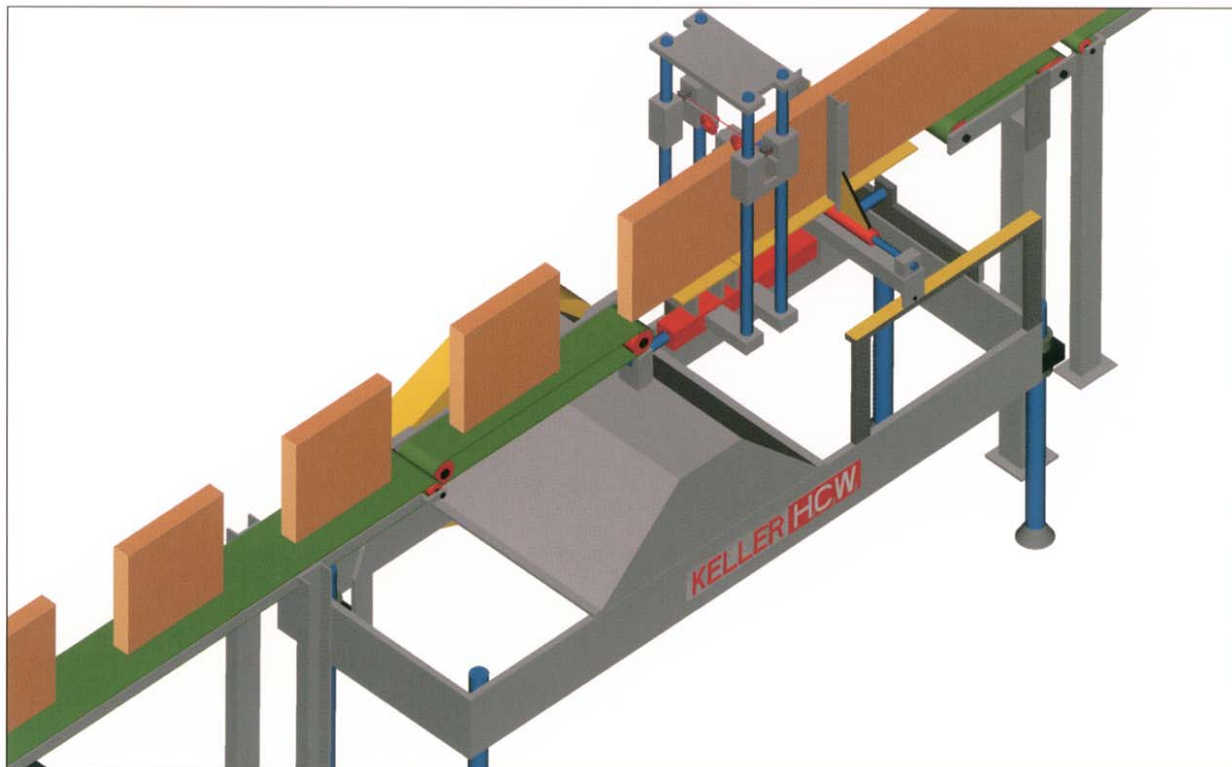
### KELLER HCW offers innovative technologies for the production of:

- Bricks, hollow bricks and roof tiles
- Facing bricks and pavers
- Split and floor tiles
- Refractory products as well as
- Measuring and control system
- Automation

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### Additional equipment

The cutters type 4163, 4163-S and 4164 cut vertically.  
The types 4163 and 4163-S operate with a pre-cutting roller.

### Additional equipment

Equipment for "cut suppression" for TS exceeding 330 mm or 450 mm resp. up to any length whatever – electronic / pneumatic, lateral chamfering.

Bottom chamfering with sizes up to 260 mm (for special sizes)

Top chamfering with sizes up to 260 mm (for special sizes)

Pre-grooving tools for the production of special sizes (hexagon, octagon etc.)

### Pallet loading

Roller conveyor setting on laths/pallets (decrease of output due to free end of laths)

Transport of products to auxiliary pallets. Subsequently the groups of products are lifted and set down on laths/pallets.

Transport of products to a grouping belt driven by a servo-motor. By means of a transfer device the grouped rows are set down on laths/pallets or directly on kiln cars.

In case of transfer transverse to the transport direction of the grouping belt, pneumatic or motorized transverse push for gripper and driving gear resp. is provided.

The lifting gear is to be equipped with a floating position so that the products are set down without pressure.

### Additional equipment

The types 4163, 4163-S and 4164 can be equipped with a downstream turn-over device for the turning-over of the individual products on to their cutting face.

Output of the cutter when used with the turn-over device: 25 cuts/min.

The knife cutter type 4164 can be provided for single, double and triple cut.

Distributing shunt for extremely high outputs which cannot be grouped on one line.

### Cutting tables

In general the cutting outputs depend on the clay column height and the cutting length.

#### Cutting length – type 4163

TH in mm	TS in mm	max.cuts/min.	effect. cuts/min
120	260	60	50
150	150	60	50
211	211	50	40
260	260	40	35
330	330	35	30

Compressed air requirement: approx. 2.5 NI/cut

Working pressure: 6 bars Drawing No. 4.87.1283-1

#### Cutting length – type 4163 S

TH in mm	TS in mm	max.cuts/min.	effect. cuts/min.
120/260	60	50	
211	211	50	40
260	260	40	35
330	330	35	30
450	450	25	20

Compressed air requirement: approx. 3.5 NI/cut

Working pressure: 6 bars Drawing No. 4.87.1284

#### Additional equipment – type 4163 and 4163-S

Wire cleaner, wire tightening device, change cutting inserts

#### Cutting length – type 4164

TH in mm	TS in mm	max.cuts/min.	effect. cuts/min.
120	260	80	65
150	150	80	65
211	211	60	50
260	260	48	40
330	330	40	35

Compressed air requirement: approx. 2.5 NI/cut

Working pressure: 6 bars Drawing No. 4.87.1285-1

#### Additional equipment – type 4164

change cutting inserts

### Operating examples

The split tile cutters type 4163, 4163-S and 4164 can work together with the following machinery:

- Automatic lath loader ("old" design), drawing No. 4.87.1284
- Auxiliary pallet circulation system (previous design), drawing No. 9968/ 4.82.0600
- Transfer device with product grouping conveyor (current design), drawing No. 2.88.0891, and
- Robot with product grouping conveyor.