

## **Throughfeed multi rip saws for dividing raw boards**



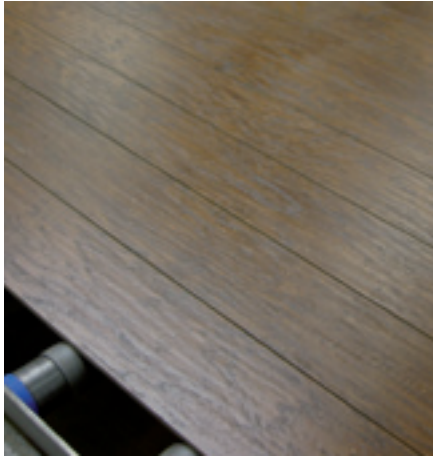
# First-class saw cut quality with HOMAG machines for challenging applications

As the levels of automation of modern production plants increase, the demands for a continuous material flow intensify. To this HOMAG has successfully further developed its existing throughfeed rip saw concepts. The principle of throughfeed dividing enables a quick and efficient dividing as well as grooving of large-sized board materials.

For more information, go to:

[www.homag.com](http://www.homag.com)





Longitudinal divided board



Crosscut divided board

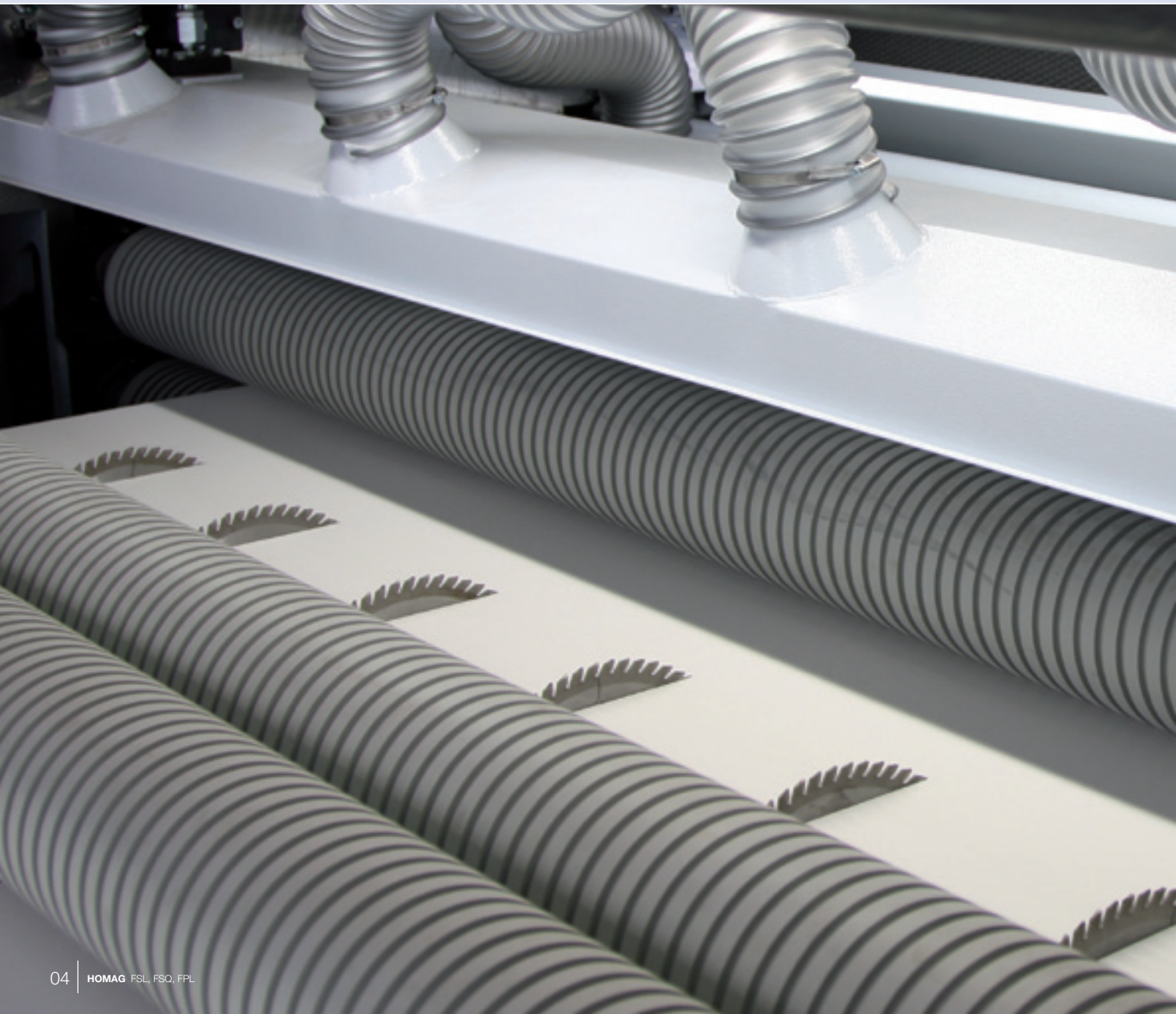


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# Versatile – Application range of throughfeed multi rip saws

Whether in the furniture industry or in the production of flooring, wall and ceiling panels, lightweight boards or strips as well as semi-finished part production for doors and door frames – Throughfeed rip saws from HOMAG are fully versatile. For large production batches and high output, high performance is guaranteed by the principle of throughfeed dividing.



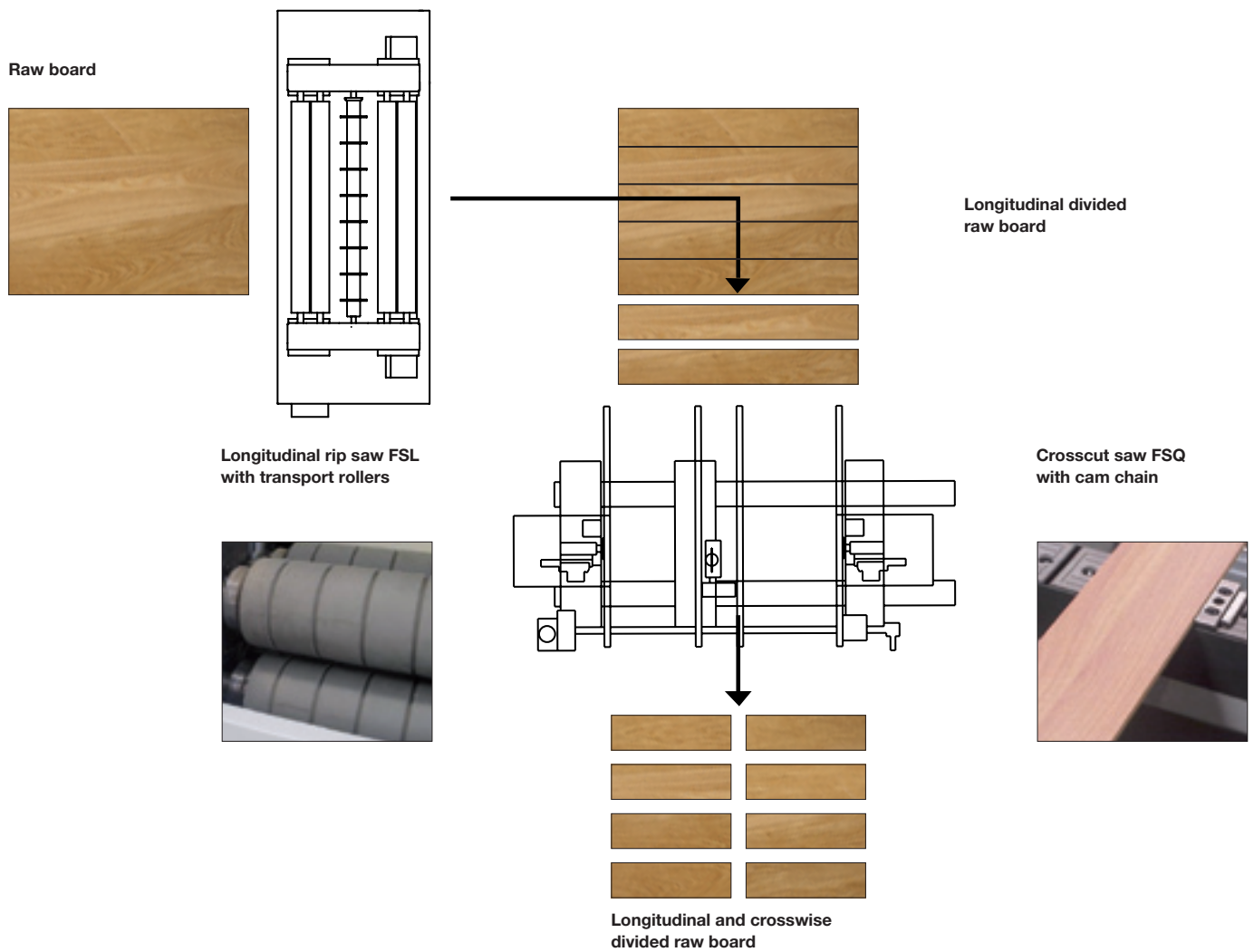


Longitudinal ripping



Crosscut dividing

### Function principle of longitudinal ripping and crosscut dividing



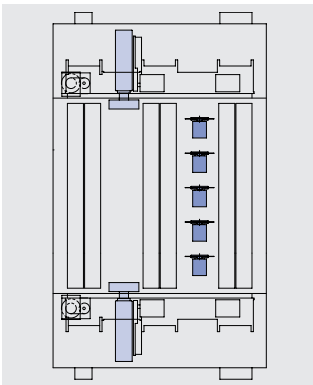
# Throughfeed multi rip saw concepts

For each task the appropriate solution: Several criteria will define the configuration of the saw, raw board dividing and cutting width will influence the design. HOMAG offers a wide range of saw concepts and actively pursues a process of continual improvement.

## Longitudinal sawing concepts

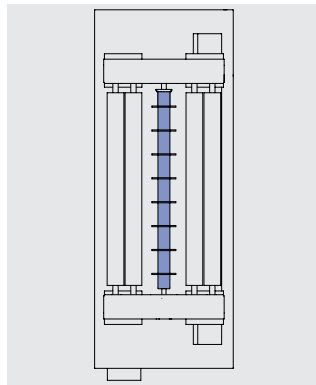
### Concept 1

Individually adjustable saw units  
FSL 310, 320, 330



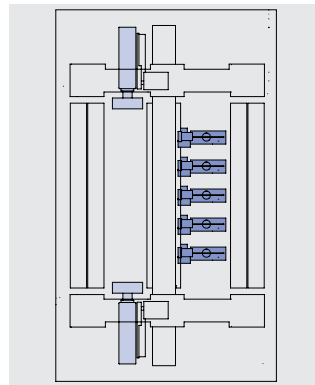
### Concept 2

Saw blades on one arbor  
FSL 360



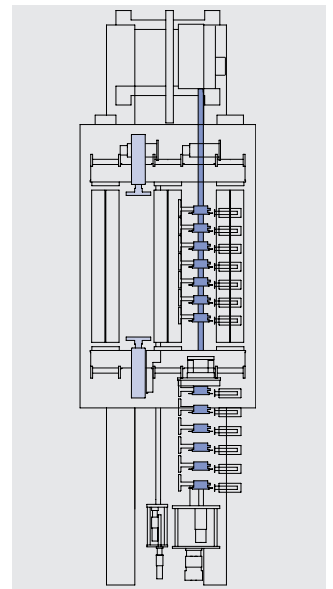
### Concept 3

Disc motors  
FSL 324



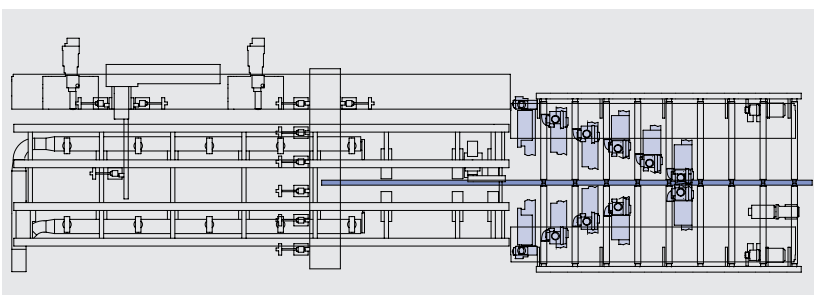
### Concept 4

Polygon shaft technology  
FSL 420



### Concept 5

High precision transport system  
FSL 480



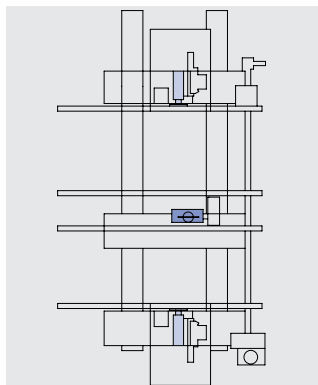
## Your advantages with HOMAG throughfeed rip saws

- Individually adjustable saw units
- Optional fully automated changeover
- Highest performance due to the throughfeed cutting concept
- Solid and low vibration constructed machine frame
- Perfectly adjusted suction hoods for each saw blade
- Automatic pattern adjustment when in combination with optical alignment station

## Crosscut sawing concepts

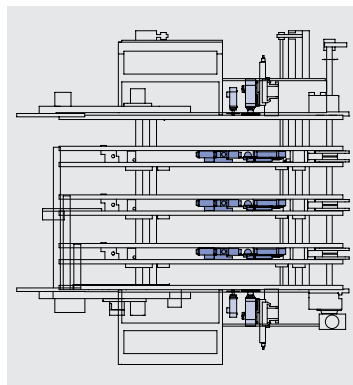
### Concept 1

Modular configuration with adjustable saw units for high flexibility  
FSQ 310, 380



### Concept 2

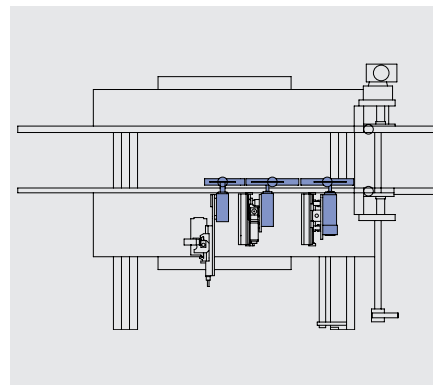
Special machine with scoring unit for furniture manufacturing  
FSQ 382



## Middle cut sawing concept

### Concept

Middle cut double end tenoner  
FPL 620/PS



# FSL 310, 320, 330 – Flexible multi rip saws

With the longitudinal multi rip saws FSL 310, 320 and 330 you always make the right choice.

From the standard single-row machine up to the automated two-row version – in every case you find the perfect solution for your individual requirements. These throughfeed multi rip saws stand for high efficiency and flexibility.

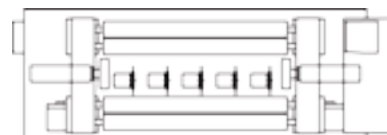
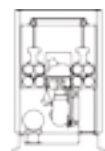


## FSL 310 – Your advantages at a glance

- Each saw unit may be adjusted individually
- The central extraction channel in the machine brings extraction power directly to the saw units
- Thick-walled, heavy duty extraction hoods to guard against the abrasive chip stream from the saw units
- Attractive machine enclosure surrounds the whole machine
- Stable workpiece transport using high precision ground rollers, optional also with knurled steel rollers

## FSL 310

Feed rate	15 – 60 (110*) m/min
Raw board width (max.)	2 500 (3 800*) mm
Board thickness	6 – 40 (60*) mm
Raw board length (min.)	660 mm
Cutting width (min.)	198 mm
Machine length	1 200 (1 800*) mm



\*on request

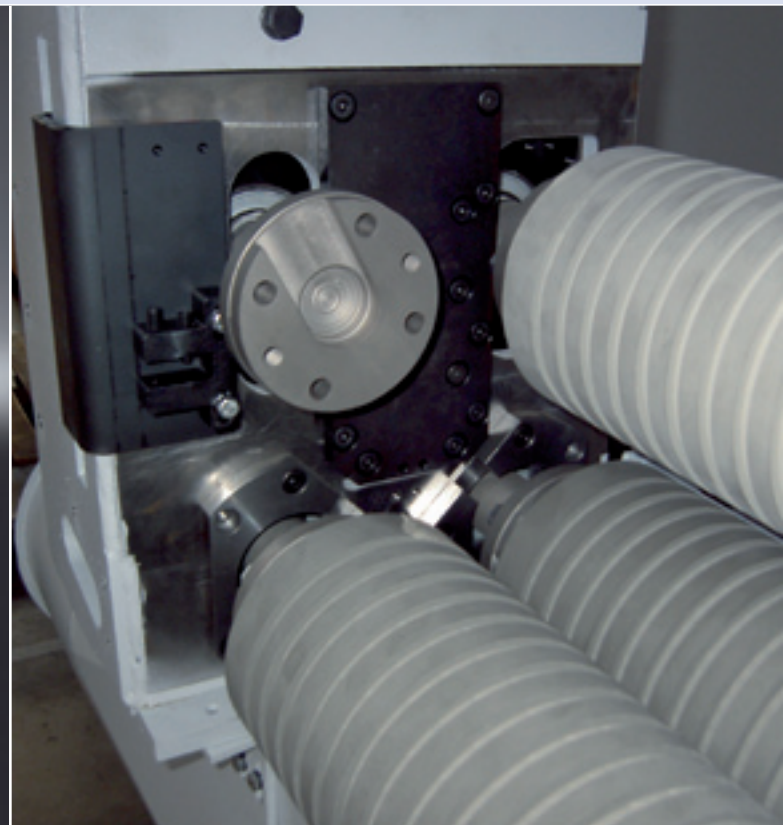
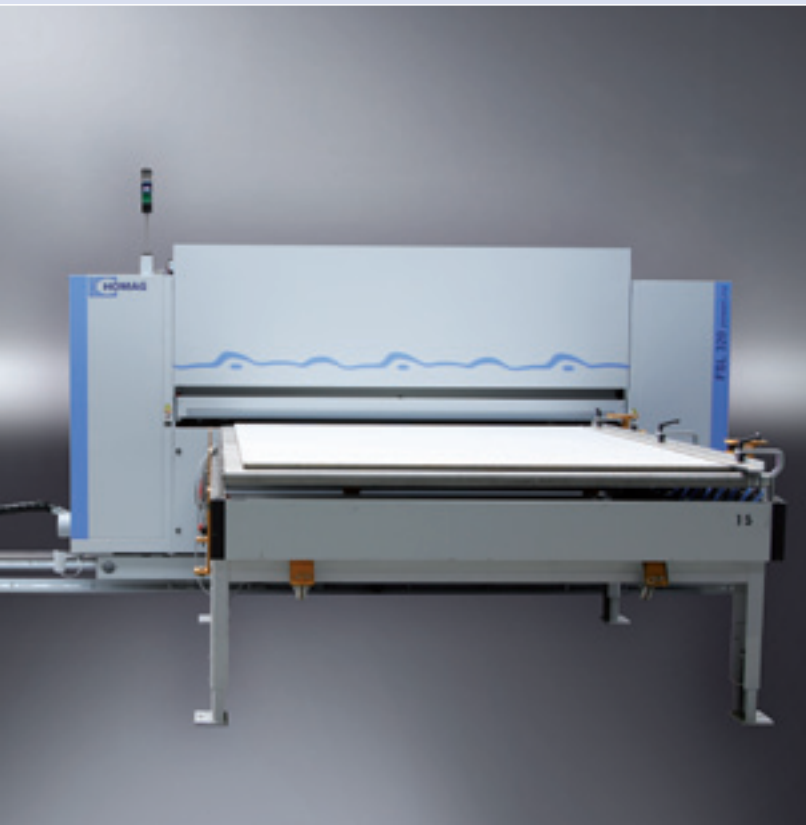


**FSL 320 – Your advantages at a glance**

- Two-row machine fitted with hogger units in the first row and saw units in the second row, each unit individually adjustable
- Narrower raw board dimensions are possible due to separate configuration with hoggers in the first row
- Number of cuts independent from raw board width
- Attractive machine enclosure surrounds the whole machine
- Stable workpiece transport using high precision ground rollers, optional also with knurled steel rollers

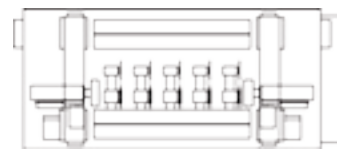
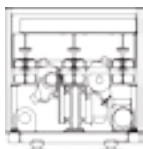
**FSL 330 – Your advantages at a glance**

- Each saw unit is individually adjustable and can be fitted with a scoring unit
- The central extractions channel in the machine brings extraction power directly to the saw units
- Thick-walled, highly stable suction hoods to act against the abrasive chip stream coming from the saw units
- Attractive machine enclosure surrounds the whole machine
- Stable workpiece transport using high precision ground rollers, optional also with knurled steel rollers



FSL 320	
Feed rate	15 – 60 (110*) m/min
Raw board width (max.)	2 500 (3 800*) mm
Board thickness	6 – 40 (60*) mm
Raw board length (min.)	660 mm
Cutting width (min.)	198 mm
Machine length	1 860 mm

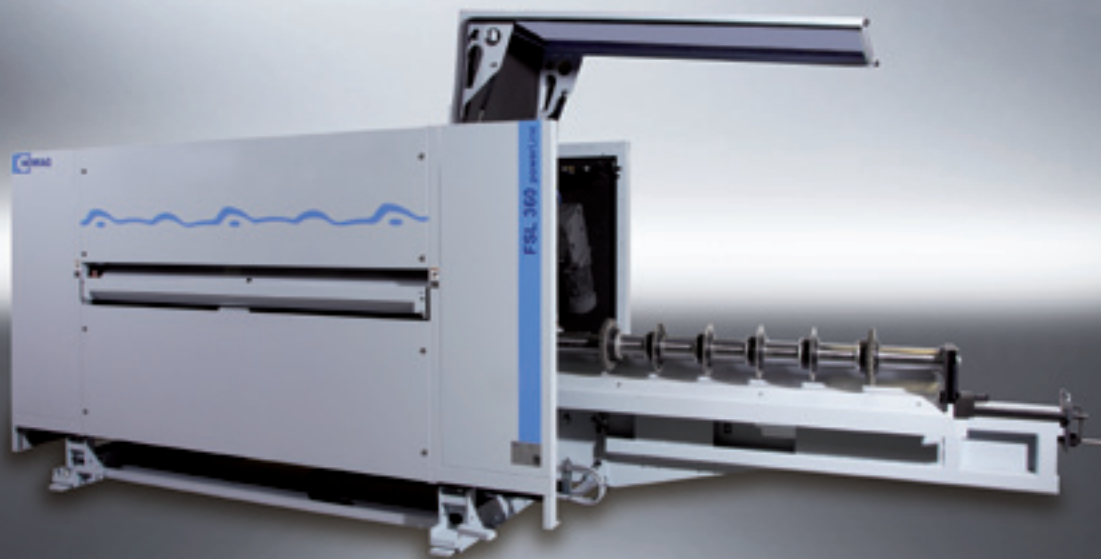
FSL 330	
Feed rate	15 – 60 m/min
Raw board width (max.)	2 500 mm
Board thickness	6 – 40 mm
Raw board length (min.)	900 mm
Cutting width (min.)	198 mm
Machine length	1400 mm



\*on request

# FSL 360 – The way to greater profitability

This robust multi rip saw is designed for maximum loading. Equipped with a multi blade arbor, the machine can be configured with adjustable blades. Quick and easy replacement of the arbors ensures high machine availability.

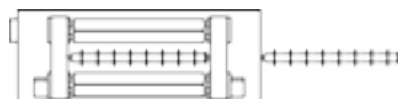
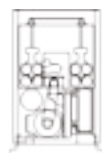


## FSL 360 – Your advantages at a glance

- High-precision arbor for adaption of tool clamping system
- Shaft bearing integrated in main shaft, thereby no bearing damage during tool change
- Extractable saw arbor unit for easy tool change
- The central extractions channel in the machine brings extraction power directly to the saw unit
- Attractive machine enclosure surrounds the whole machine
- Stable workpiece transport using high precision ground rollers, optional also with knurled steel rollers

## FSL 360

Feed rate	15 – 60 (110*) m/min
Raw board width (max.)	2 500 mm
Board thickness	6 – 40 mm
Raw board length (min.)	600 (450*) mm
Cutting width (min.)	
with hydro clamping system	50 mm
with spacer rings	20 mm
Machine length	1 200 mm



\*on request

# FSL 420 – Dividing with polygon shaft technology

A central drive shaft with a polygonal cross-section drives the individual units of this longitudinal saw. It is a low-wear machine which allows the efficient and flexible splitting of narrow formats. By using a saw unit bay a variable number of cuts can be realised.

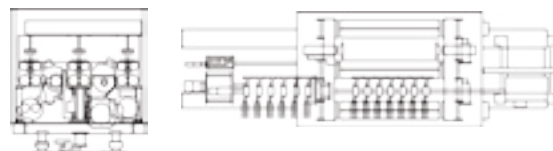


## FSL 420 – Your advantages at a glance

- Each saw unit is individually adjustable
- Flexible measurement setting of 98 - 600 mm, also during machine operation (optional: automated measurement setting)
- Short changeover-times due to optional fully automated adjustment
- All saw units are driven by a central shaft with polygon cross-section
- Approved components: Transport system from the FSL design modul

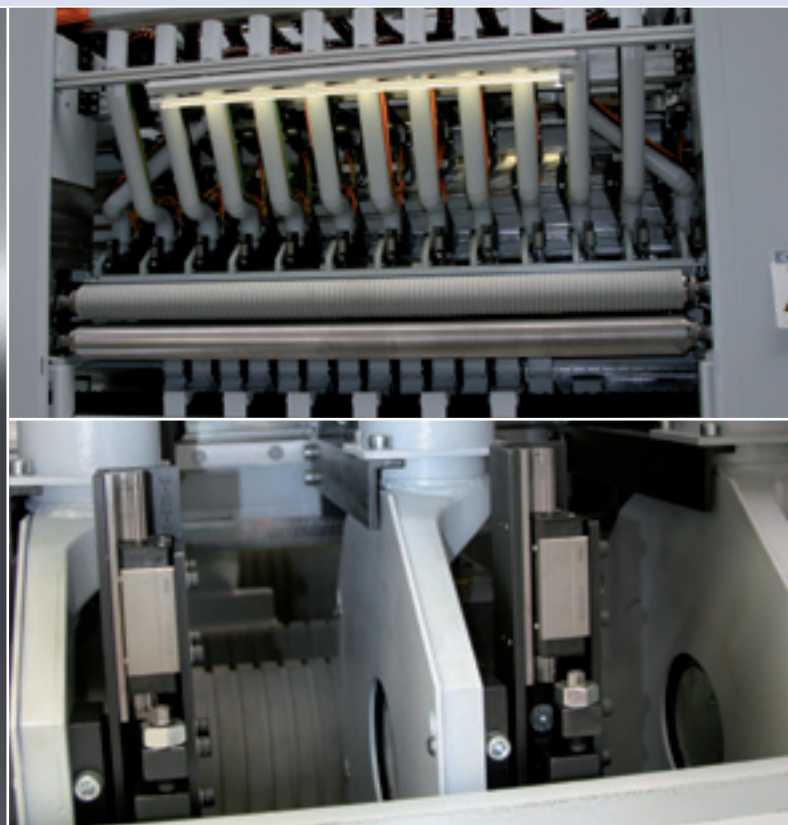
FSL 420	
Feed rate	15 – 60 (110*) m/min
Raw board width (max.)	2 500 mm
Board thickness	6 – 25 mm
Raw board length (min.)	660 mm
Cutting width (min.)	98 mm
Machine length	1 860 mm

\*on request



# FSL 324 – Dividing with material saving up to 6 %

Using a saw unit arrangement from top and bottom the board is separated with an offset saw cut. Modern disc motor technology allows a maximum of flexibility. The FSL 324 is designed for material-saving throughfeed sawing for a resource-saving production of laminate flooring.

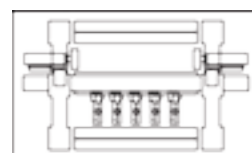


## FSL 324 – Your advantages at a glance

- Two rows with saw units arranged one upon the other
- Material saving up to 6 % due to offset sawing from top and bottom
- Disc motors allow sawing of narrow workpieces
- Flexible, automated measurement setting of the individual saw units, also during machine operation
- Approved components: Transport system from the FSL design modul

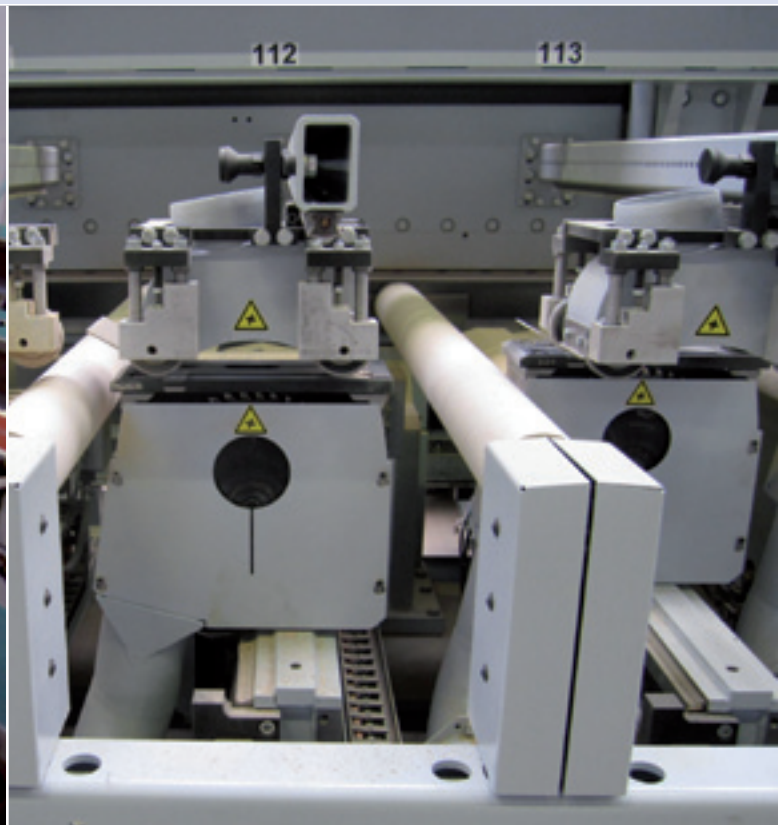
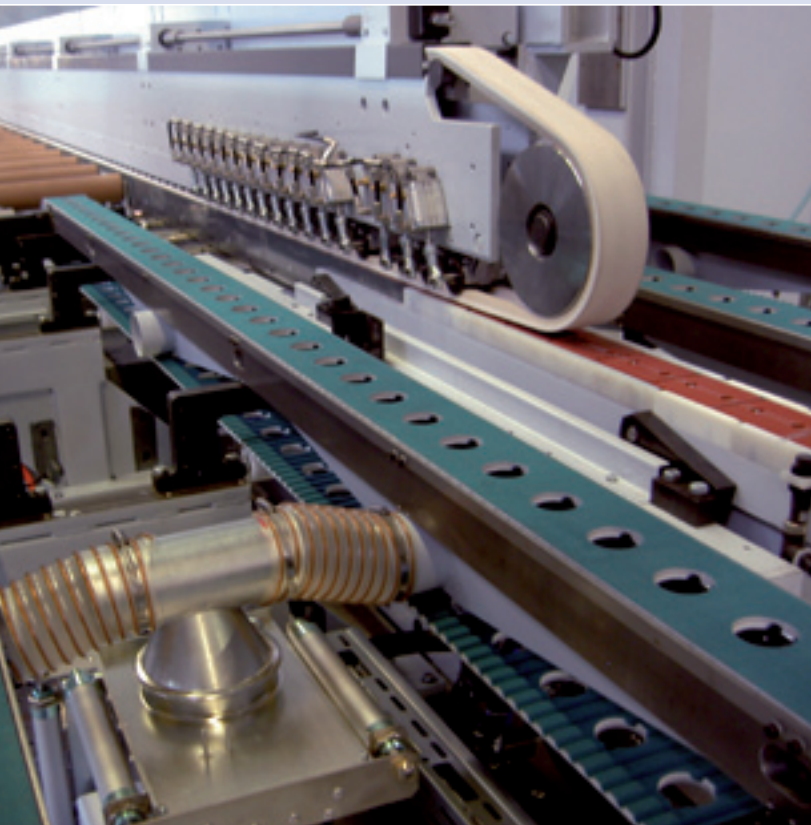
FSL 324	
Feed rate	15 – 60 (110*) m/min
Raw board width (max.)	2 500 mm
Board thickness	6 – 25 mm
Raw board length (min.)	760 mm
Cutting width (min.)	95 mm
Machine length	1 960 mm

\*on request



# FSL 480 – Accurate sawing with high precision transport system

A transport system with rolling block-link chain and pressure beam for workpiece guidance characterises the FSL 480. This transport system as well as the throughfeed alignment station with camera system and the servo saw unit adjustments allow high-precision cutting with the smallest of tolerances.

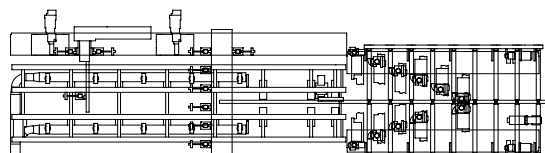
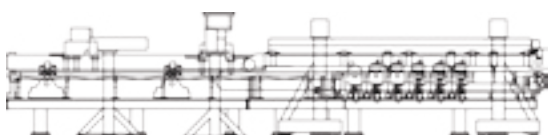


## FSL 480 – Your advantages at a glance

- Highest precision: guaranteed measurement tolerance of the splitted workpiece width of +/- 0,1 mm
- Saw units can be freely positioned with automatic adjustment, pneumatically engageable
- Integrated throughfeed alignment
- Automatic width adjustment in the workpiece gap during the machine operation by detection of marks using camera systems
- Approved technology: Transport system with rolling chain of the double end tenoner technology

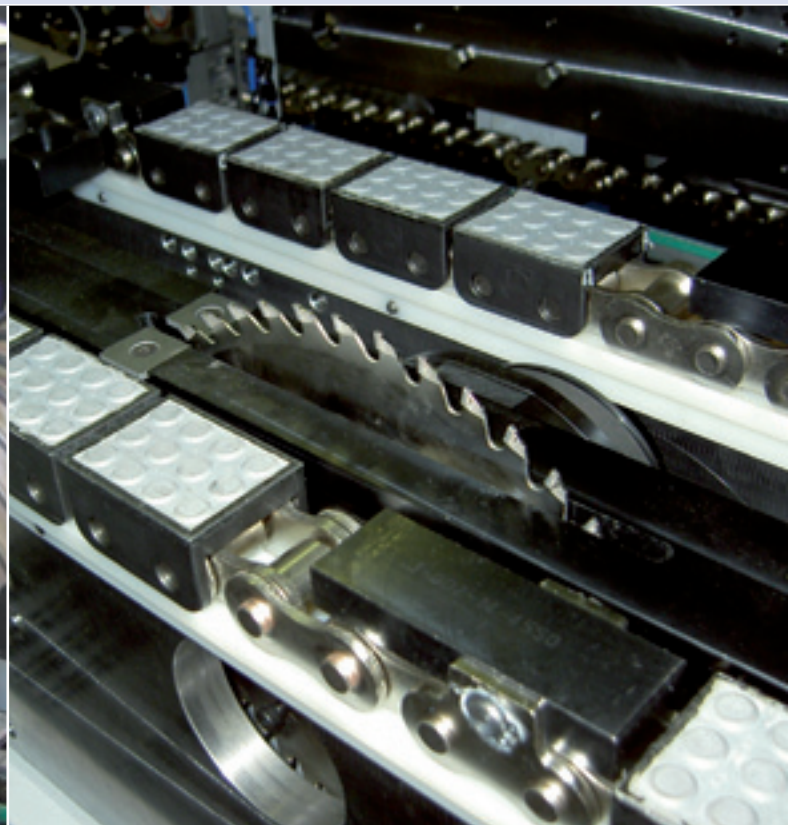
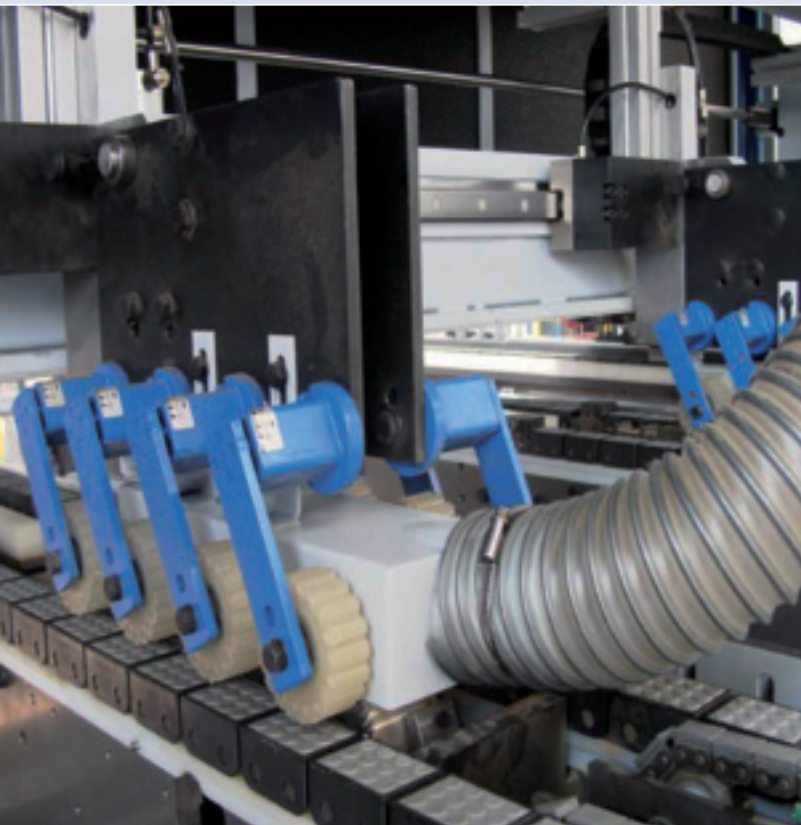
## FSL 480

Feed rate	30 – 60 m/min
Raw board width (max.)	2 080 mm
Board thickness	6 – 40 mm
Raw board length (min.)	1 200 mm
Cutting width (min.)	90 mm
Machine length	6 000 – 14 000 mm



# FSQ 310, 380 – Flexible cross cut saws

With the cross cut saws FSQ 310 and 380 you decide for maximum performance and flexibility, guaranteed by the principle of throughfeed cross cutting. The throughfeed saws are ideal for cross-cutting of strip- or board-shaped workpieces in a production line.

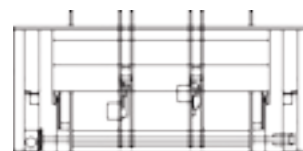
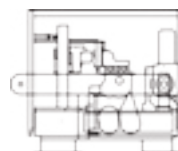


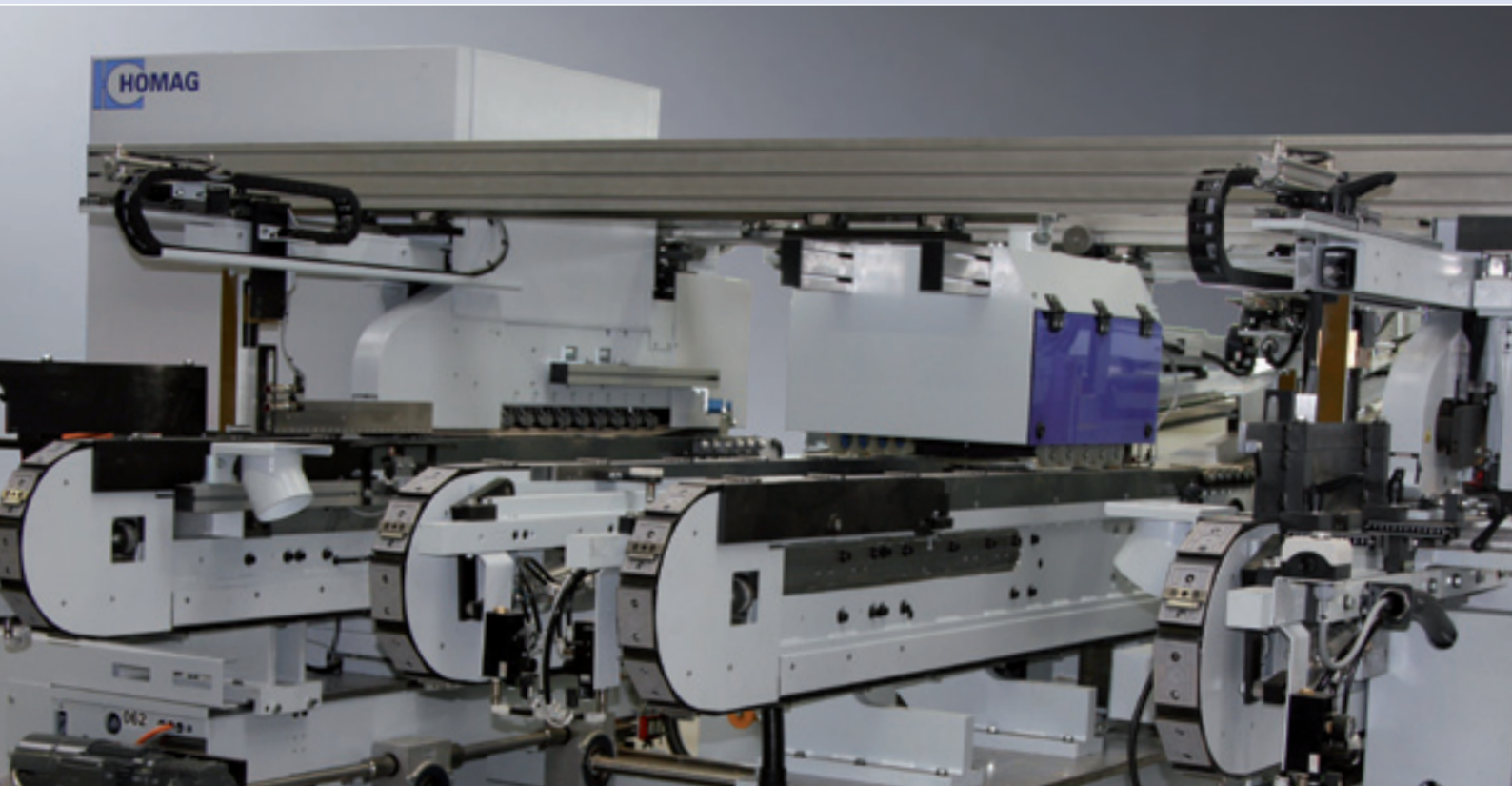
## FSQ 310 – Your advantages at a glance

- Flexible setting of the cutting width by manual moving of the transport units, pressure beam is simultaneously positioned
- Economically priced, gliding transport chain with special stop cams on both sides of the saw units
- Modular configuration with a variable number of transport units and saw units
- Saw units work from bottom, thereby no ragged edges on the top surface
- Workpiece magazine for high output or workpiece infeed in one level for workpieces with susceptible surfaces
- Single extraction hood for each processing unit

## FSQ 310

Feed rate	10 – 40 m/min
Raw board width (max.)	5 500 mm
Board thickness	6 – 40 mm
Raw board length	65 – 1 200 mm
Cutting width (min.)	320 mm



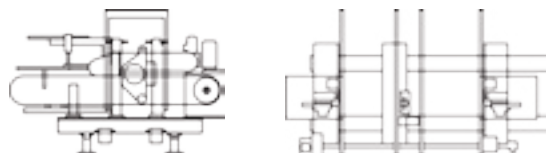


**FSQ 380 – Your advantages at a glance**

- Flexible setting of the cutting width by automatic moving of the transport units, pressure beam is positioned simultaneously
- High processing quality due to the precision, rolling block-link chain with special stop cams
- Modular configuration with a variable number of transport units and saw units
- Saw units work from bottom, thereby no ragged edges on the top surface
- Workpiece magazine for high output and non susceptible workpieces
- Single extraction hood for each processing unit
- Approved technology components of the HOMAG double end tenoner design modul

**FSQ 380**

Feed rate	20 – 60 m/min
Raw board width (max.)	5 500 mm
Board thickness	6 – 40 mm
Raw board length (min.)	70 – 400 mm
Cutting width (min.)	710 mm



# FSQ 382 – Cross cut saw for furniture manufacturing

The FSQ 382 is a masterpiece among cross-cut saws for the furniture industry, as it allows efficient production of several widths at high batch sizes. Thus a continuous material flow is guaranteed. Using innovative disc motor technology can achieve minimum cutting width of 310 mm.

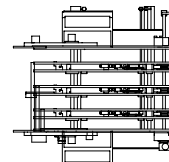
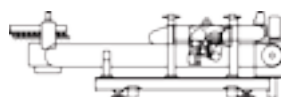


## FSQ 382 – Your advantages at a glance

- High processing quality using a precision 60 mm wide rolling block-link chain with special stop cams
- Optional automated height adjustment of the cams and length dependant cam activation in order to achieve minimum work-piece gaps
- Infeed using workpiece magazine or infeed in one level for work-pieces with susceptible surfaces
- Modular configuration with a variable number of transport units and saw units
- Individually preselectable servo scoring unit, controlled at the rear edge for ragged free processing
- Saw units with disc motors for minimum processing tolerances
- Whilst adjusting the transport units the pressure beam is automatically simultaneously positioned

## FSQ 382

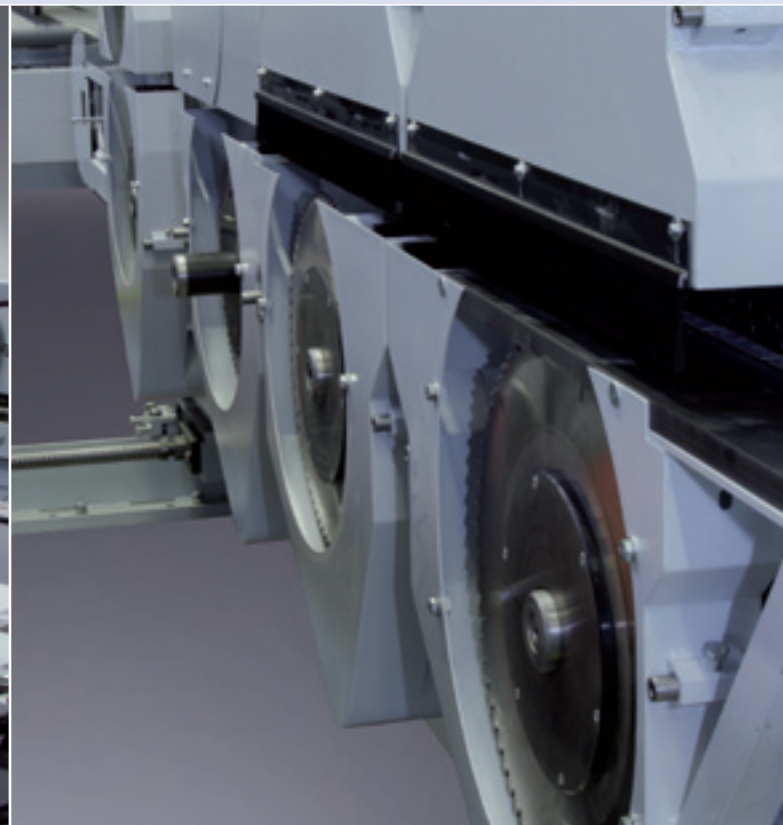
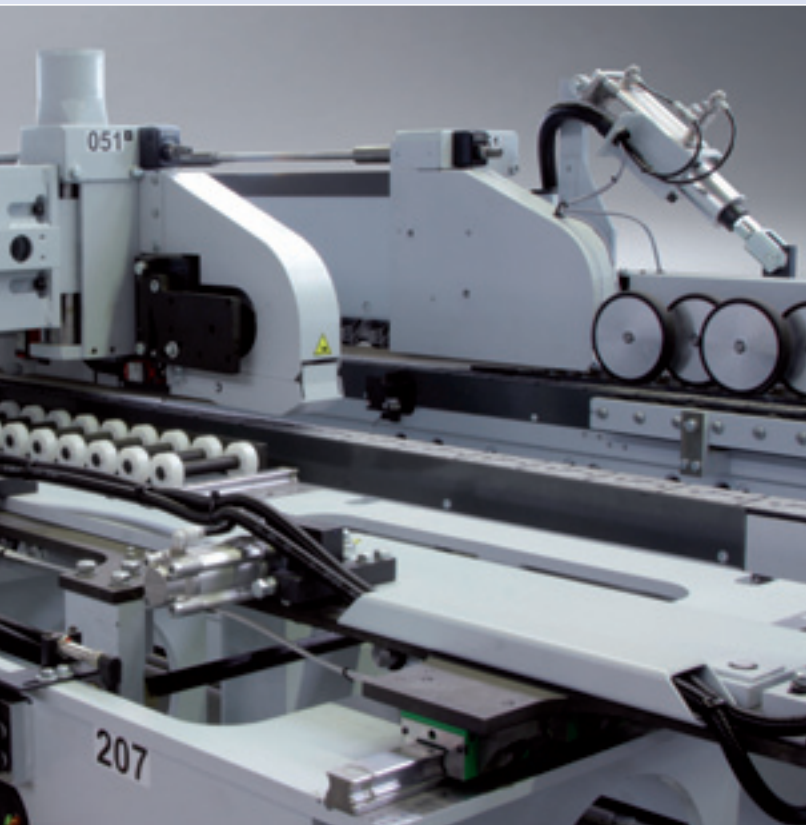
Feed rate	10 – 40 m/min
Raw board width (max.)	5 500 mm
Board thickness	10 – 40 mm
Raw board length	130 – 1 700 mm
Cutting width (min.)	310 mm





# FPL 620/PS – Premium class middle cut saw

The FPL 620/PS, based on the HOMAG double end tenoner technology, can reduce manufacturing costs and improve performance significantly. As a middle cut saw for centric dividing of finished edged workpieces it stands for highest accuracy and cutting quality.

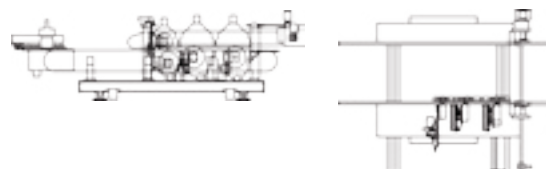


## FPL 620/PS – Your advantages at a glance

- Flexible setting of the cutting width through automatic adjustment of the machine base
- High processing quality due to the precision, rolling block-link chain
- Optional to be equipped with cams for the operation as cross cut machine
- High cutting quality due to low vibration scoring and sawing units
- Modular configuration with scoring, sawing and grooving units

## FPL 620/PS

Feed rate	10 – 40 m/min
Raw board width	204 – 1 304 mm
Board thickness	12 – 60 mm
Raw board length (min.)	300 mm
Cutting width (min.)	100 mm



# You invest, we reduce: Life cycle cost management

It is not the investment costs which decide the economic success of your production, but the capacity utilization and unit costs. This is why our primary objective is to combine top class production with higher productivity and consequently lower unit costs. With the new ecoPlus technology package from the HOMAG Group, you will also be helping to conserve precious energy, time, material and personnel resources.

For more information, go to:

[www.homag.com/services](http://www.homag.com/services)



## Unit cost reduction through

### Optimum financing

- HOMAG Finance offers optimized financing concepts based on individual business administration requirements
- The outstanding value stability of HOMAG machines offers benefits in terms of leasing and subsequent replacement investment

### High level of processing quality “without” finish processing

- Perfectly coordinated machine configuration

### Practically oriented training

- Selective and targeted training will help you quickly achieve full productivity
- Your employees will be prepared for safe, efficient HOMAG machine operation

## Reduced unit labour costs

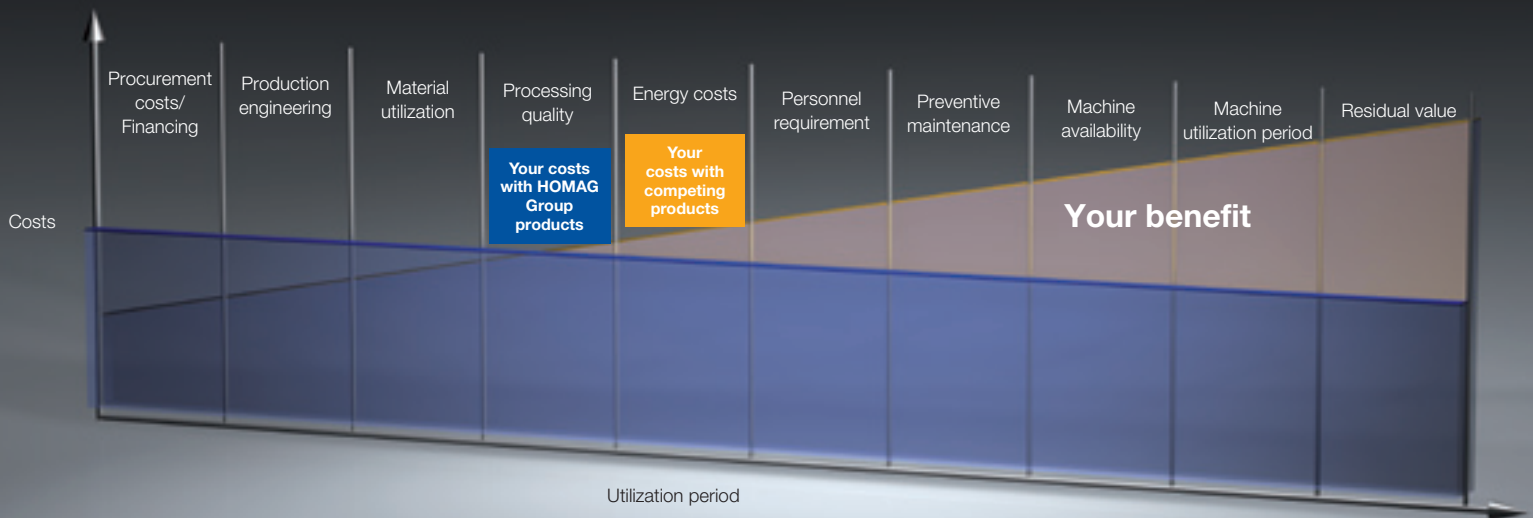
- Fast, simple operating capability of machines
- Simple resetting processes

## High degree of machine availability

- Worldwide servicing minimizes downtime
- TeleServiceNet – our “eye” into the machine avoids costly on-side services
- woodScout diagnostic software – intelligent self-help for all machine operators

## Fast achievement of productivity

- To get you quickly up to your targeted high shift output, our employees will visit your company to ease you into the start of production. This will take you faster to your targeted production output



### Minimal energy costs with ecoPlus\*



#### Preventive maintenance

- The software Machine Monitoring & Reporting\* (MMR) provides the machine operator with an indication of required maintenance
- Regular inspections and preventive maintenance help avoid faults and prolong the service life
- The worldwide HOMAG servicing network with over 500 technicians provides support when you need it

#### Machine utilization period

- Continuous expansion of functionality ensures compliance of the machines with the requirements of tomorrow
- The HOMAG conversion department offers solutions to address major conversion requirements, ensuring a high degree of investment security over years

- A valve control system\* switches the extraction on only for units which are actually operational. This reduces extraction costs by up to 20 %
- I-tools\* reduce the necessary extraction speed per individual I-tool. Current consumption per machine is reduced in this way by around 1 250 kWh. This does not take into account savings due to room air which requires no extraction (heating / air conditioning)
- The PC22 control switch cabinet\* is cooled using cool plate technology. This passive cooling system requires no energy. No filters require changing and maintenance costs are saved. The system also remains closed. No dust is able to penetrate
- All drive systems comply with energy efficiency category IE2
- Optional measurement and visualization of current consumption data\* from compressed air extraction and flow to optimization of overall energy consumption

\* Depending on equipment configuration, installed options, service period and workpiece spectrum.



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A VDMA campaign



A member of the HOMAG Group



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