Maximum flexibility by

REDUCER TECHNOLOGY

LINCK

Oberkirch at the border of the Black Forest is our home. Here are our entrepreneurial roots and from here we develop our products and services daily further.

EXPERIENCE TRADITION RELIABILITY

Leading in technology, economically convincing: Being the largest European manufacturer of sawmill equipment, we are the industrial partner no. 1

In more than 170 years of company history we changed from a family handcraft business to a technological leader in the wood-working industry. This is not surprising at all as the timber industry is deeply linked with our area. We commit to a high quality level "made in Germany" and keep a close partnership with our customers worldwide. Precision and diligence from process planning till commissioning characterize both, our service as well as production.

FLEXIBLE
DURABLE
ROBUST

Individual guidance, optimum configuration and innovative spirit distinguish our sawlines.

We offer solutions for the woodworking industry. Depending on the sawmill concept, the available space on site or the focus of the business, we supply sawlines that meet the individual requirements and possibilities of our customers. After having analyzed the precise needs we give you advice for designing your operation with regards to maximum efficiency and profitability.

Only high quality lumber can be sold at best prices. Linck lines are therefore planned, designed and manufactured with perfect sawmill machines whose robust construction guarantees a troublefree long-lasting operation even under hardest conditions. Whether you work at -20°C or +40°C, Linck machines always provide constant high accuracy and best surface quality.

Technologies:

- Profiling technology
- Reducer technology
- Edging technology
- Log yards
- Round log feeding systems

PLANNING BUILDING COMMISSIONING

Highest added value with maximum recovery. Our reducer technology guarantees best quality.

Linck reducer sawlines offer a multitude of possibilities for optimizing your recovery in terms of increasing added value. Our advantage is the result of system concept and unique vertical range of manufacture as Linck provides mechanical equipment, electrical control and optimizing systems from one source. The extensive knowhow of our engineers comes with every single component.

The production process starts with a precise 3D-log scanning. The data from each log are used to achieve the maximum optimizing result.

Another important component is the chipper canter infeed system with its cutting pattern related log rotation and precise log centering for maximum recovery. An optimized production process is thus guaranteed from the beginning.

Linck sawlines offer every opportunity for lumber optimization: Based on a freely editable look-up table, the plant operator can determine dimension or value of the sideboard assortment as well as the percentage of wane allowance. Recovery can so be adapted to the requirements resp. optimized with regards to the required products at any time. The individual acquisition of each log even allows to optimize the cutting pattern accordingly. Special functions are core splitting or the production of core boards.

You determine the production target.
All the rest is done by our reducer technology.

Convince yourself of the possibilities:

LAYOUT 1

Annual capacity up to 40.000 m³ of round logs per shift

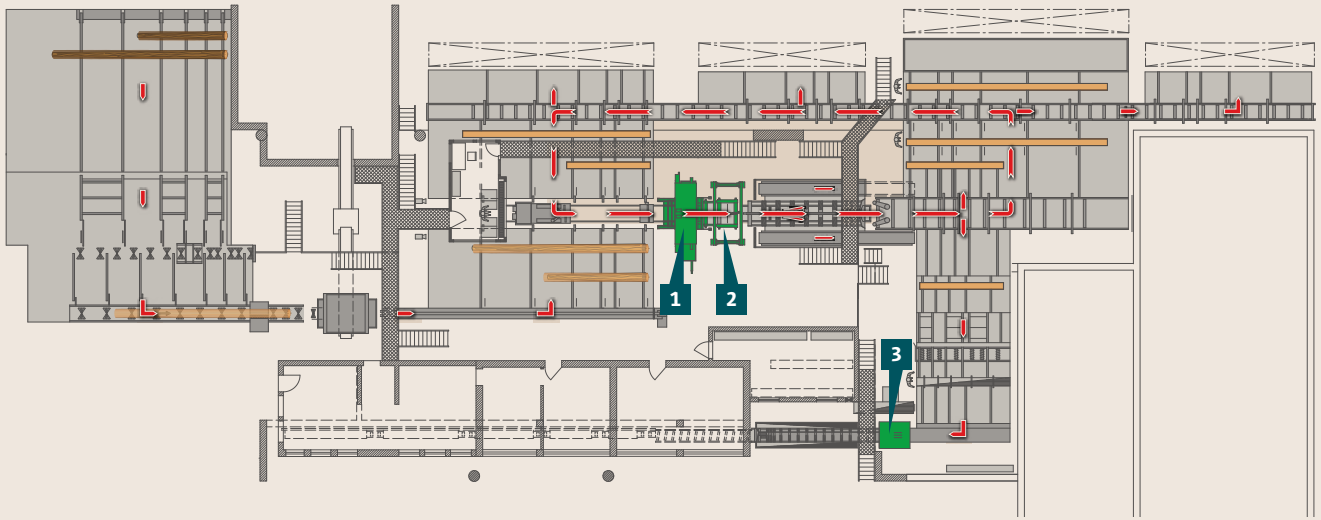
As an alternative to the gangsaw, this type of sawline includes a circular saw fed by a remote-controlled infeed carriage allowing a higher feed speed.

Nevertheless maximum flexibility is achieved by the possibility of logs passing the line several times.

Using a trim saw after the saw unit allows to produce standard length sideboards, even when sawing construction timber.

Possible, plant specific cutting pattern

Most suitable for small production capacities



First pass

1 **Saw unit CSMK375-A3/B3**
Processing of round logs, production of two-sided cants and sideboards

2 **Trim saw AGF**
Trimming of sideboards

Second pass

1 **Saw unit CSMK375-A3/B3**
Resawing of two-sided cants, production of four-sided cants and sideboards

2 **Trim Saw AGF**
Trimming of sideboards

Third pass

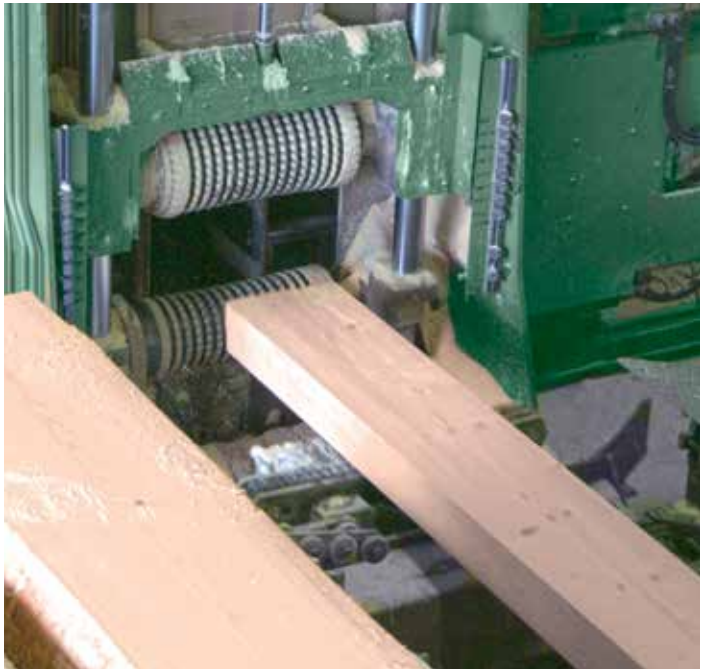
1 **Saw unit CSMK375-A3/B3**
Resawing of four-sided cants

3 **Board edger Optimes**
Edging of sideboards

Due to the permanent log tracking during processing, there are no problems with round logs or two- and four-sided cants.

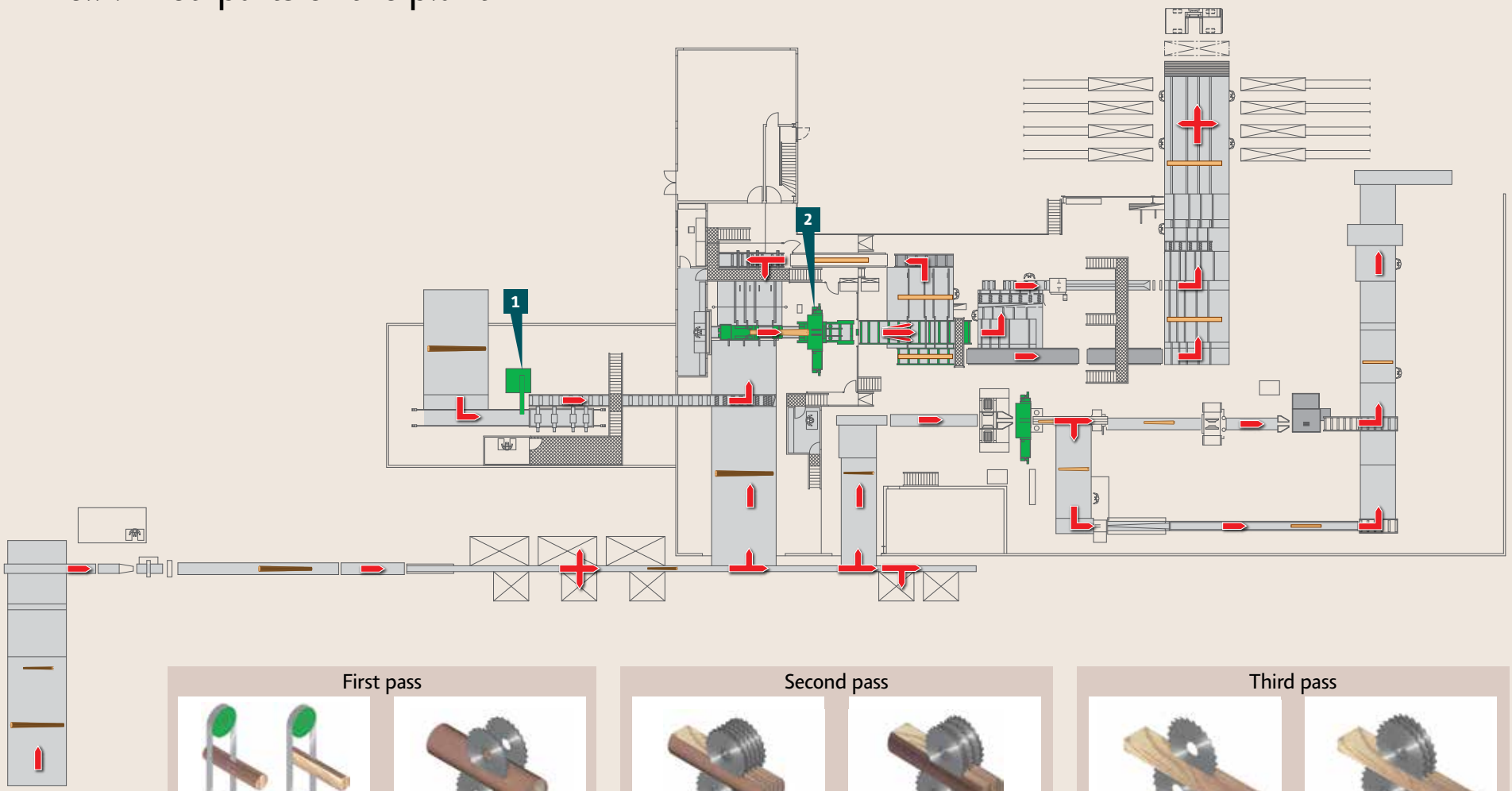
First pass:
Production of a two-sided cant and separation of sideboards

Second pass:
Cant resawing

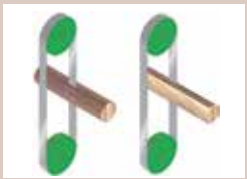


Third pass:
Splitting of four-sided cants

Well-linked parts of the plant



First pass



1 **Band headrig**
Processing of round logs, production of two-sided cants and sideboards

2 **Saw unit CSMK375-A3/B3**
Processing of round logs, production of two-sided cants and sideboards

Second pass

2 **Saw unit CSMK375-A3/B3**
Resawing of two-sided cants, production of four-sided cants and sideboards

Third pass

2 **Saw unit CSMK375-A3/B3**
Resawing of four-sided cants

View from the infeed carriage towards the saw unit – log feeding on the right, two- and four-sided cant feeding for the second and third pass on the left

LAYOUT 2

Annual capacity up to 50.000 m^3 of round logs per shift

This sawline allows feeding from two sides. A separate band headrig is integrated and connected with the reducer line by means of a feeding conveyor. Two- and four-sided cants from the bandsaw can therefore be resawn on the circular saw line resulting in considerably reduced processing steps and optimization of time. Feeding the products from the band headrig to the circular resaw is included in the sawline control and therefore guarantees an automatic production sequence.

Possible, plant specific cutting pattern

LAYOUT 3

Annual capacity up to 75.000 m³ of round logs per shift

The infeed carriage is replaced by an automatic infeed system and a chipper canter. This basic design of a chipper canter-circular saw-line uses a merry-go-round system where only the single cant can be transported back to the machine group. Only in the last of maximum three passes it is possible to split the cant into several products with the saw unit. The sawn lumber then moves straight ahead to the lumber sorting plant.

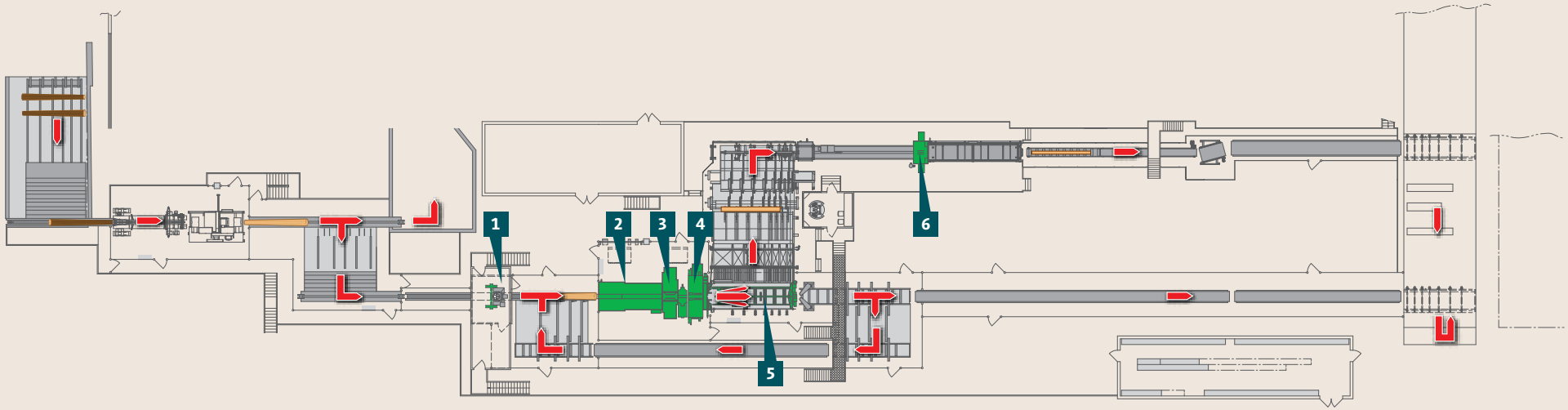
Feed speeds up to 100 m/min. are possible.

Possible, plant specific cutting pattern

Infeed side of the chipper canter-circular saw-combination with automatic log feeding. Fully automatic log rotation based on 3D-scanning data.

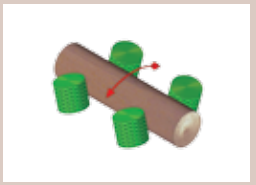
Outfeed side of the machine group: The separating conveyor separates centre products and sideboards to be taken to the board edger.

Basic design of a chipper canter-circular saw-line



First pass

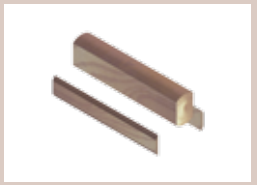
1 **3D-scanner**
Round log scanning



2 **Infeed- and centering system EV45 SZ-D2/Z2-N2**
Automatic log rotation and centering

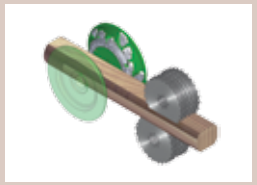
3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

4 **Saw unit CSMK375-A3/B3**
Production of sideboards



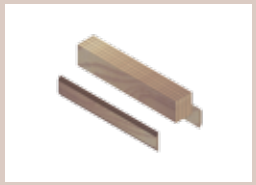
5 **Separating conveyor SEK**
Separation of sideboards

Second pass



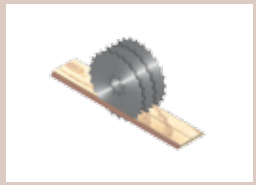
3 **Chipper canter VM45**
Resawing of cants, production of four-sided cants and chips

4 **Saw unit CSMK375-A3/B3**
Production of boards, planks and sideboards



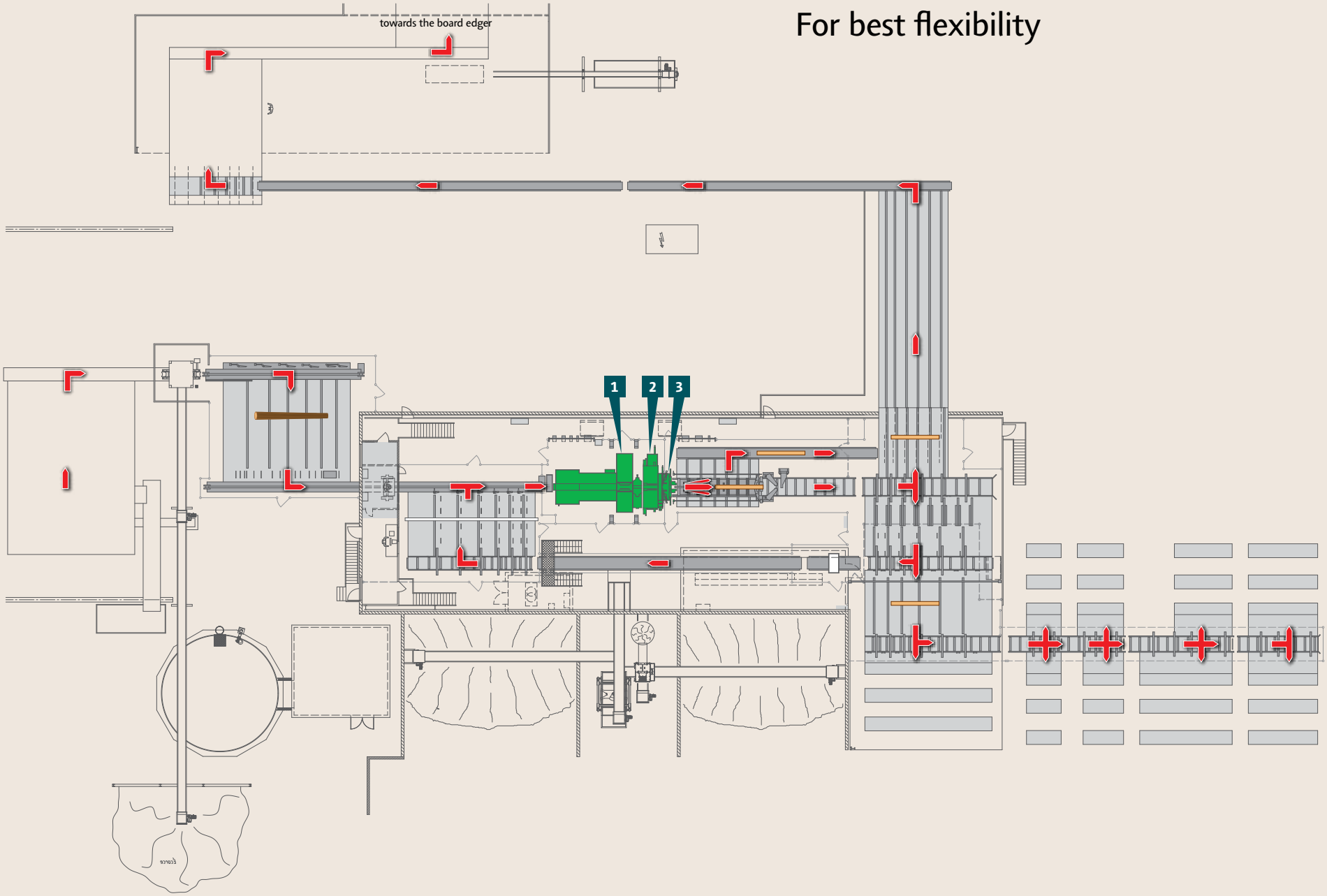
5 **Separating conveyor SEK**
Separation of sideboards

Third pass



6 **Board edger Optimes**
Edging of sideboards

For best flexibility



First pass

1 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

2 **Saw unit CSMK425-A3/B3**
Processing of round logs, production of sideboards

3 **Circular crosscut saw KCK**
Trimming of sideboards

Second pass

1 **Chipper canter VM50**
Resawing of two-sided cants, production of four-sided cants and chips

2 **Saw unit CSMK425-A3/B3**
Resawing of two-sided cants, production of four-sided cants and sideboards

3 **Circular crosscut saw KCK**
Trimming of sideboards

Third pass

2 **Saw unit CSMK425-A3/B3**
Resawing of four-sided cants

Round logs, two- and four-sided cants being processed at the same time

Singulating conveyor in the merry-go-round system

LAYOUT 4

Annual capacity up to 100.000 m³ of round logs per shift

The merry-go-round system of this chipper canter-circular saw-line allows the feeding of multiple centre products. The unscrambling conveyor makes sure that two- and four-sided cants are reliably singulated even when feeding products of different dimensions.

Final sawing of centre products is carried out in the following machine pass whereas sideboards are transported to a board edger plant.

Possible, plant specific cutting pattern

LAYOUT 5

Annual capacity up to 125.000 m³ of round logs per shift

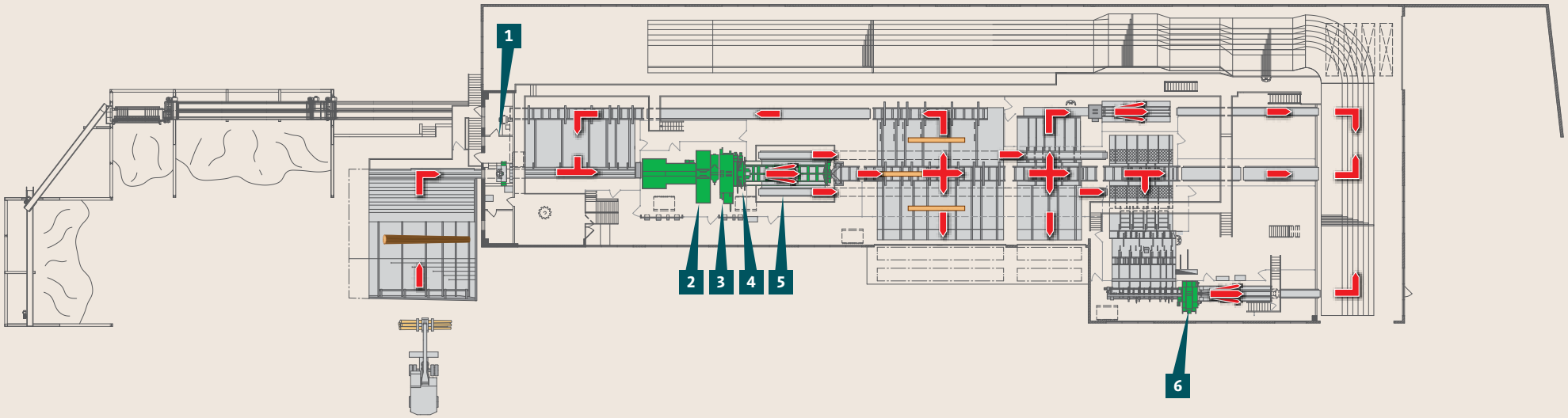
This type of configuration is ideal in case centre products longer than 6 m are required – e.g. for construction timber. The flexible trimming of sideboards is possible by installing a trim saw after the circular saw unit.

Two successive sideboards can be produced from log lengths exceeding approx. 7 m. The taper provides more material at the large end of the log. The sawline takes optimum advantage of this circumstance by opening the cutter heads for a board thickness in the cut. An increased recovery can be achieved with this solution by the possibility of producing an additional sideboard at the large end of the log.

Capacity-enhancing is furthermore the use of a combined board edger-resaw saving another processing step in the chipper canter machine group with certain cutting patterns.

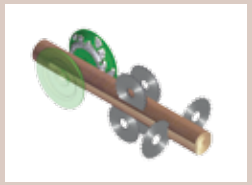
Possible, plant specific cutting pattern

The top solution for construction timber



First pass

1 **3D-scanner**
Round log scanning



2 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

3 **Saw unit CSMK375-A3/B3**
Processing of round logs, production of sideboards

4 **Circular crosscut saw KCK**
Trimming of sideboards

5 **Separating conveyor SEK**
Separation of sideboards

Second pass

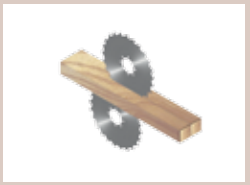
2 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

3 **Saw unit CSMK375-A3/B3**
Resawing of two-sided cants, production of boards, four-sided cants and sideboards

4 **Circular crosscut saw KCK**
Trimming of sideboards

5 **Separating conveyor SEK**
Separation of sideboards

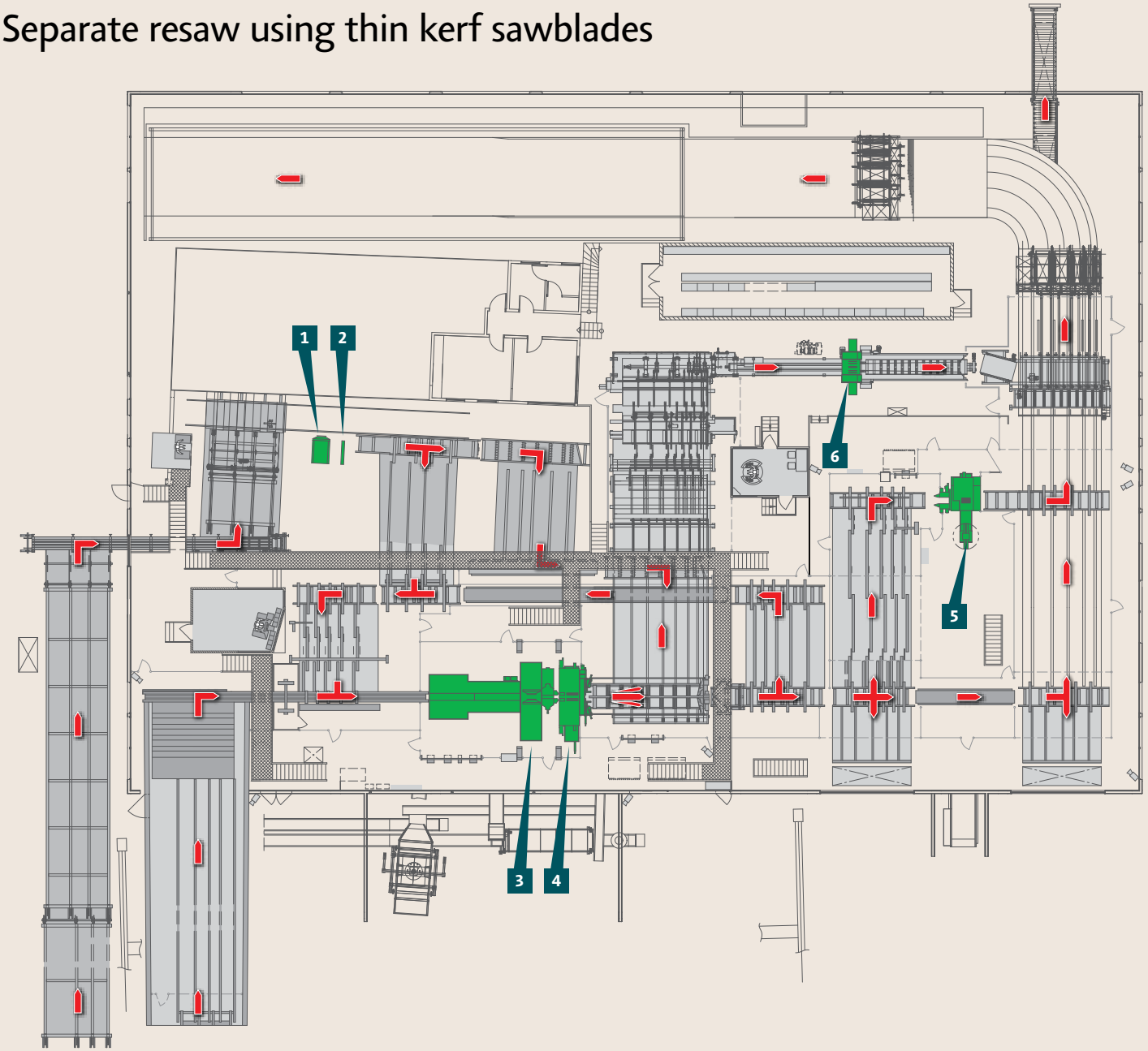
Third pass



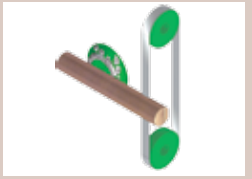
3 **Saw unit CSMK375-A3/B3**
Resawing of four-sided cants

6 **Board edger CSM120-A3**
Edging of sideboards
Resawing of four-sided cants

Separate resaw using thin kerf sawblades



First pass



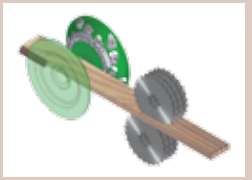
1 **Chipper canter disc**
Opening face

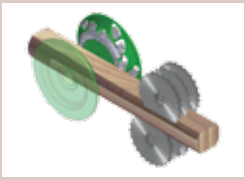
2 **Band headrig**
Production of two-/four-sided cants and sideboards

3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

4 **Saw unit CSMK375-A3/B3**
Processing of round logs, production of sideboards

Second pass





3 **Chipper canter VM45**
Resawing of two-sided cants, production of four-sided cants and chips

4 **Saw unit CSMK375-A3/B3**
Resawing of two-sided cants, production of boards, four-sided cants and sideboards

Third pass

5 **Circular resaw CSMK225-A1**
Resawing of four-sided cants

6 **Board edger Optimes**
Edging of sideboards

Machine group with chipper canter, saw unit and separating conveyor

Feeding conveyor to the resaw

Resaw with tool changing device

LAYOUT 6

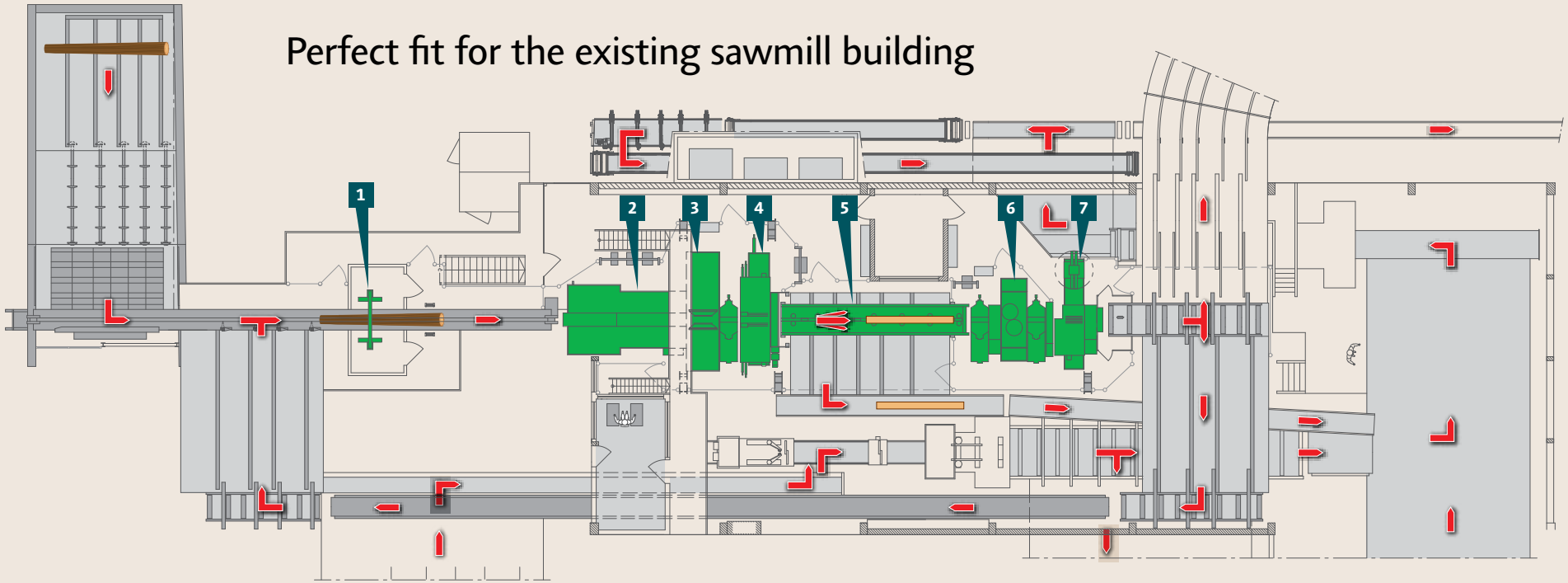
Annual capacity up to 100.000 m³ of round logs per shift

Using a pure resaw for splitting four-sided cants into multiple products makes this concept most suitable for producing packaging material. The equipment of the resaw with a fixed saw setting allows to leave out a third pass.

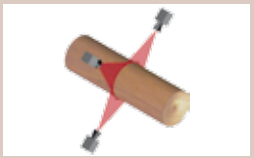
Round log diameters exceeding 65 cm are processed on a separate band headrig. Appropriate conveying equipment then feeds the two- and four-sided cants automatically to the reducer sawline for final sawing. The whole diameter range can be processed on a limited space.

Possible, plant specific cutting pattern

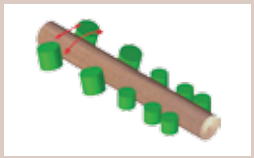
Perfect fit for the existing sawmill building



First pass

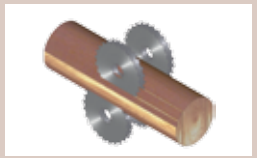


1 **3D-scanner**
Round log scanning



2 **Infeed- and centering system EVP50 S-D2/Z2-N2**
Automatic log rotation and centering

3 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

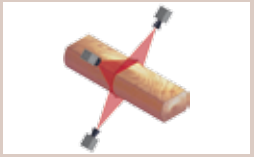


4 **Saw unit CSMK375-A2/B2**
Processing of round logs, production of sideboards

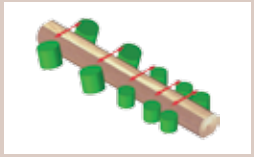
5 **Separating conveyor SEA**
Separation of sideboards

The second machine group with saw unit and horizontal split saw in the background. On the right the existing gangsaw line.

Second pass

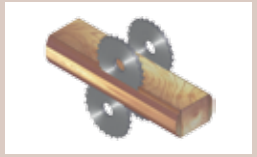


1 **3D-scanner**
Two-sided cant scanning

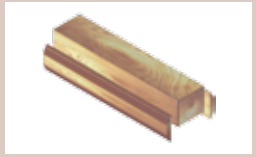


2 **Infeed- and centering system EVP50 S-D2/Z2-N2**
Automatic cant centering or diagonal alignment

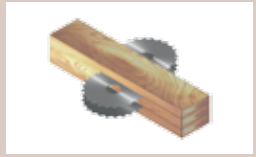
3 **Chipper canter VM50**
Resawing of two-sided cants, production of four-sided cants and chips



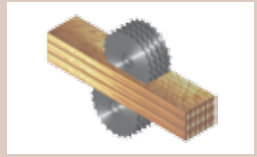
4 **Saw unit CSMK375-A2/B2**
Resawing of two-sided cants, production of sideboards



5 **Separating conveyor SEA**
Separation of sideboards



6 **Horizontal split saw HKM360-A2**
Horizontal splitting of four-sided cants



7 **Saw unit CSMK375-A1**
Splitting of four-sided cants

LAYOUT 7

Annual capacity up to 100.000 m³ of round logs per shift

Linck-sawlines can be adapted to nearly any space available. De facto every square meter was utilized in this case to accommodate an optimum reducer sawline with board edger. Room was even made for a second machine group in the merry-go-round system consisting of a saw unit and a horizontal split saw finally splitting the four-sided cants already in the second pass. It was possible to leave the existing gangsaw line at its original place.

After having transported the two-sided cants back to the machine group after the first pass, the second one is started by feeding them again through the 3D-entrance scanner. This makes an additional scanner obsolete and guarantees highest accuracy and efficiency in every pass.

Possible, plant specific cutting pattern

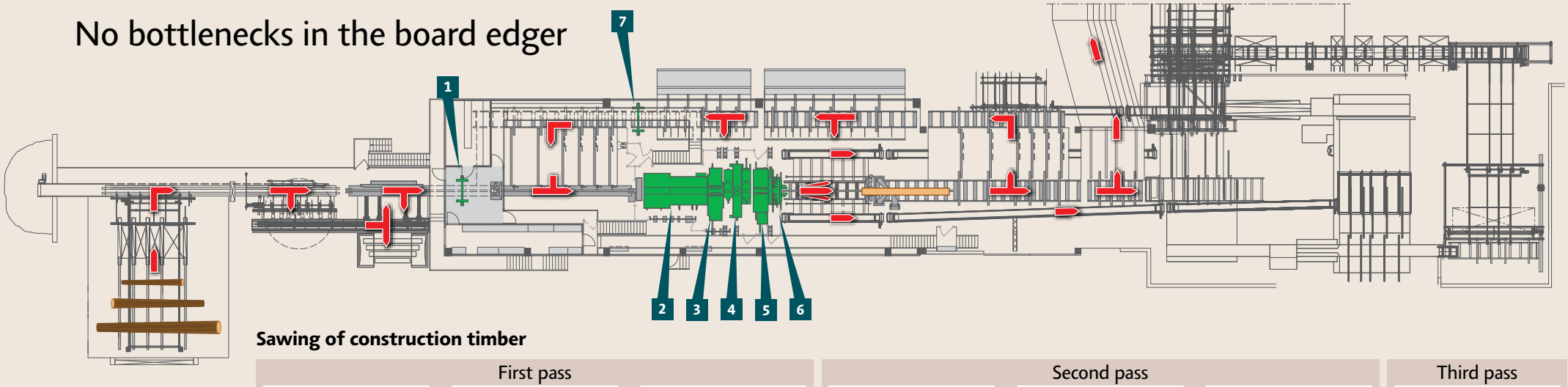
LAYOUT 8

Annual capacity up to 100.000 m³ of round logs per shift

The configuration shown includes an integrated profiler unit which allows to produce one sideboard per side in the second pass. The board edger plant is thus noticeably relieved and bottlenecks avoided. Sorting bins integrated in the merry-go-round system make it possible to directly sort out the centre products.

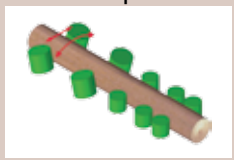
Possible, plant specific cutting pattern

No bottlenecks in the board edger



Sawing of construction timber

First pass


1 **3D-scanner**
Round log scanning

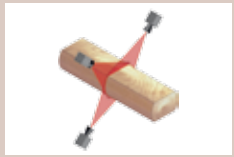
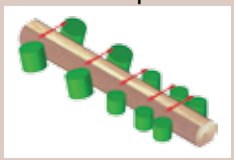
2 **Infeed- and centering system**
EVP50 SZ-D2/Z3-N2
Automatic log rotation and centering

3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

5 **Saw unit CSMK425-A3/B3**
Processing of round logs, production of sideboards

6 **Circular crosscut saw KCK**
Trimming of sideboards

Second pass


7 **3D-scanner**
Two-sided cant scanning

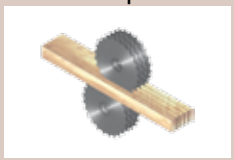
2 **Infeed- and centering system**
EVP50 SZ-D2/Z3-N2
Automatic cant centering or diagonal alignment

3 **Chipper canter VM45**
Resawing of two-sided cants, production of four-sided cants and chips

5 **Saw unit CSMK425-A3/B3**
Resawing of two-sided cants, production of boards/four-sided cants and sideboards

6 **Circular crosscut saw KCK**
Trimming of sideboards

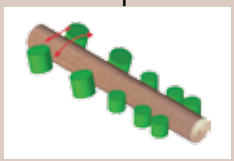
Third pass



5 **Saw unit CSMK425-A3/B3**
Resawing of four-sided cants

Sawing of standard lengths

First pass

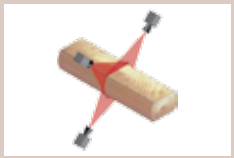
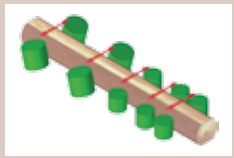
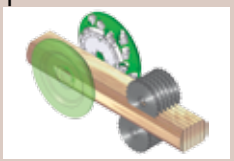

1 **3D-scanner**
Round log scanning

2 **Infeed- and centering system**
EVP50 SZ-D2/Z3-N2
Automatic log rotation and centering

3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

5 **Saw unit CSMK425-A3/B3**
Processing of round logs, production of sideboards

Second pass


7 **3D-scanner**
Two-sided cant scanning

2 **Infeed- and centering system**
EVP50 SZ-D2/Z3-N2
Automatic cant centering or diagonal alignment

3 **Chipper canter VM45**
Resawing of two-sided cants, production of four-sided cants and chips

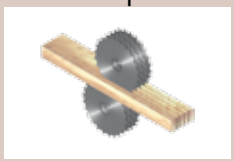
5 **Saw unit CSMK425-A3/B3**
Resawing of two-sided cants, production of boards/four-sided cants and sideboards

3 **Chipper canter VM45**
Resawing of two-sided cants, production of four-sided cants and chips

4 **Profiler unit VPF340**
Profiling of two sideboards

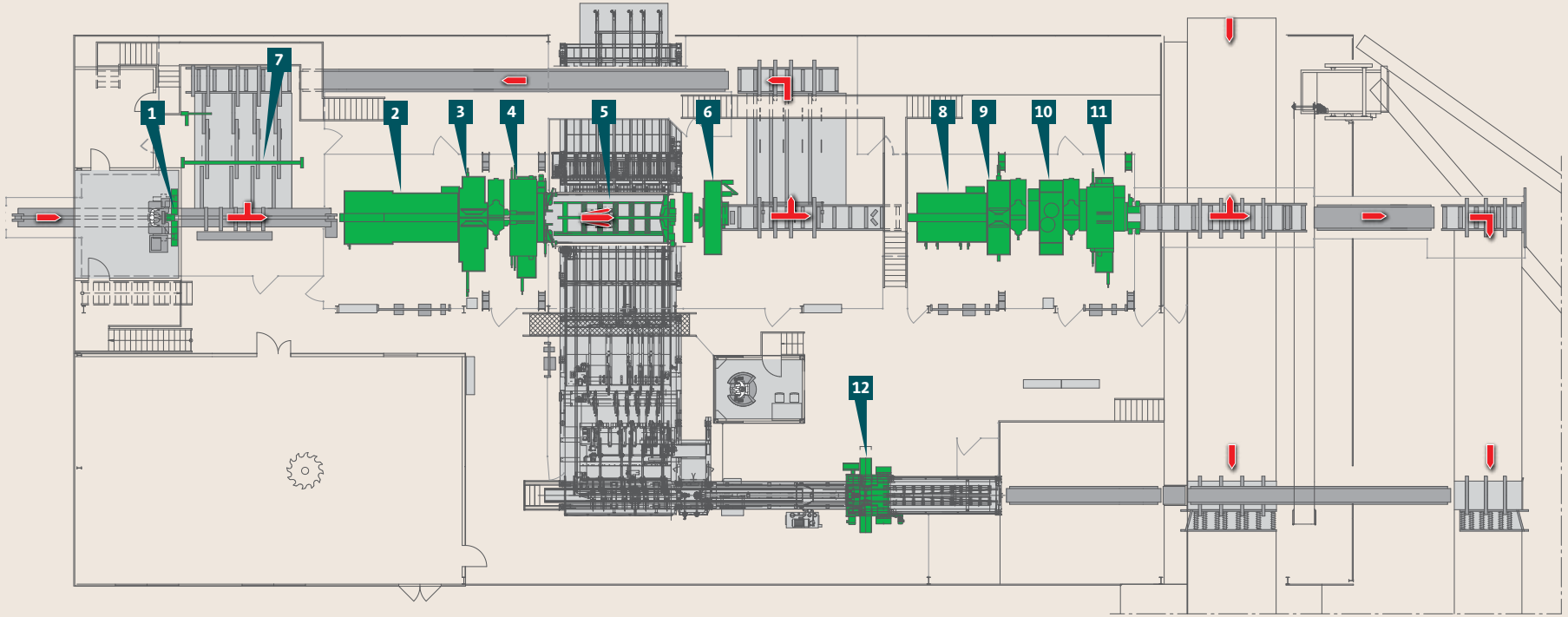
5 **Saw unit CSMK425-A3/B3**
Auftrennen der Kanthölzer

Third pass



5 **Saw unit CSMK425-A3/B3**
Resawing of four-sided cants

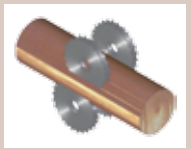
More throughput with small diameter logs

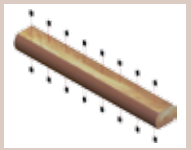


Sawing with merry-go-round system

First pass




1 **3D-scanner**
Round log scanning

2 **Infeed- and centering system EVP45 SZ-D2/Z3-N1**
Automatic log rotation and centering

3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

4 **Saw unit CSMK375-A3/B3**
Processing of round logs, production of sideboards

5 **Separating conveyor SEK**
Separation of sideboards

6 **Cant turner DV70-1**
Turning of two-sided cants by 90°

7 **Laser scanner Lincktronic V**
Two-sided cant scanning

2 **Infeed- and centering system EVP45 SZ-D2/Z3-N1**
Automatic cant centering or diagonal alignment

Sawing in line

1 **3D-scanner**
Round log scanning

2 **Infeed- and centering system**
EVP45 SZ-D2/Z3-N1
Automatic log rotation and centering

3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

4 **Saw unit**
CSMK375-A3/B3
Processing of round logs, production of sideboards

5 **Separating conveyor SEK**
Separation of sideboards

6 **Cant turner DV70-1**
Turning of two-sided cants by 90°

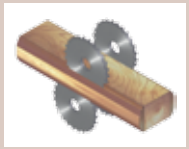
8 **Infeed- and centering system**
EVP45 SZ-Z3
Automatic cant centering or diagonal alignment

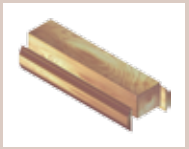
9 **Chipper canter V25**
Resawing of two-sided cants, production of four-sided cants and chips

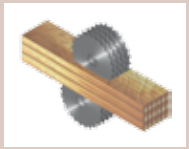
11 **Saw unit**
CSMK285-A3/B3
Resawing of four-sided cants

12 **Board edger**
Optimes/BKO
Edging of sideboards

Second pass







3 **Chipper canter VM45**
Processing of round logs, production of two-sided cants and chips

4 **Saw unit**
CSMK375-A3/B3
Resawing of two-sided cants, production of four-sided cants and sideboards

5 **Separating conveyor SEK**
Separation of sideboards

10 **Horizontal split saw**
HKM360-A2
Horizontal splitting of four-sided cants

11 **Saw unit**
CSMK285-A3/B3
Resawing of four-sided cants

12 **Board edger**
Optimes/BKO
Edging of sideboards

LAYOUT 9

Annual capacity up to 125.000 m³ of round logs per shift

The sawline accommodates a resawing machine group consisting of chipper canter, saw unit and horizontal split saw.

The outstanding feature of this configuration is the processing and splitting of small diameter logs in a straight line instead of using a merry-go-round system. The processing at high feed speed increases the capacity considerably. This type of sawline represents a perfect alternative for sawmills having a high percentage of small diameter logs and consequently reduced volume.

Possible, plant specific cutting pattern

LAYOUT 10

Annual capacity up to 150.000 m³ of round logs per shift

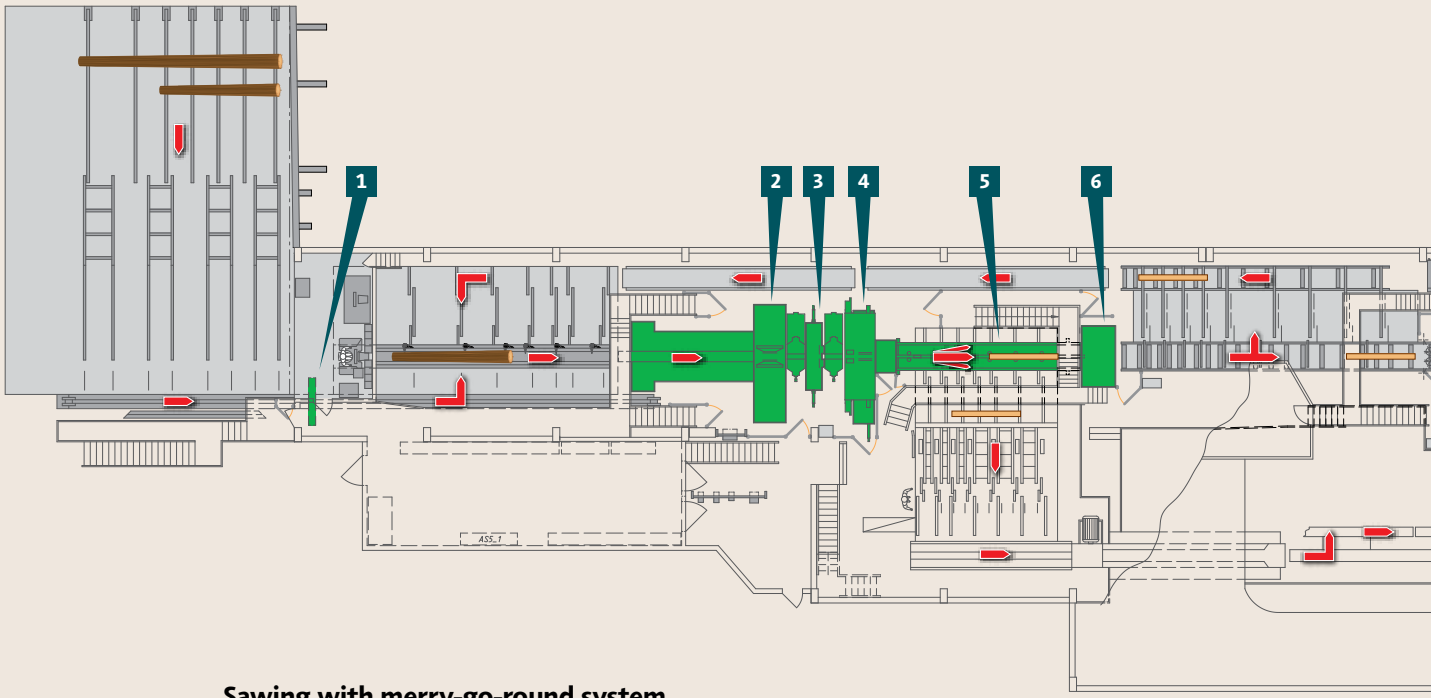
The resawing machine group consists of chipper canter, saw unit, horizontal split saw and profiler unit.

Using the profiling technology eliminates the transport of sideboards to the board edger. The board edger is only needed for sideboards produced under precut. The reduced amount of unedged boards avoids bottlenecks.

The result is a high-performance sawline for straight processing of large diameter logs and therefore allowing higher sawing capacities.

Possible, plant specific cutting pattern

Merry-go-round system with maximum equipment



Sawing with merry-go-round system

First pass

1 **3D-scanner**
Round log scanning

2 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

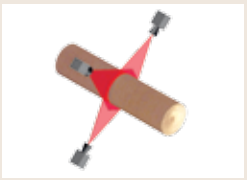
3 **Circular crosscut saw VKS**
Trimming of sideboards

4 **Saw unit CSMK375-A2/B2**
Processing of round logs, production of sideboards

5 **Separating conveyor SEA**
Separation of sideboards

6 **Cant turner DV90**
Turning of two-sided cants by 90°

Sawing in line

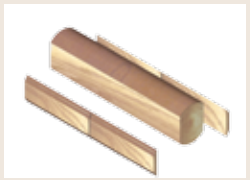


1 **3D-scanner**
Round log scanning

2 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips

3 **Circular crosscut saw VKS**
Trimming of sideboards

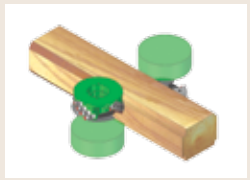
4 **Saw unit CSMK375-A2/B2**
Processing of round logs, production of sideboards



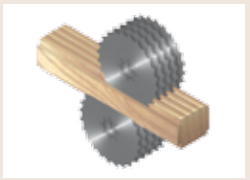
5 **Separating conveyor SEA**
Separation of sideboards

6 **Cant turner DV90**
Turning of two-sided cants by 90°

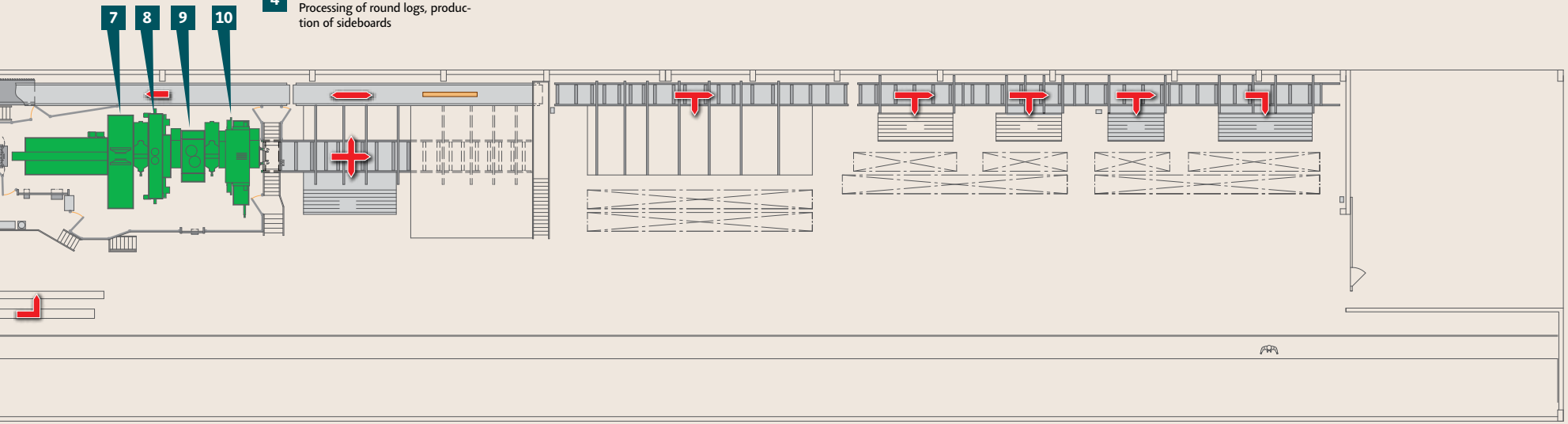
7 **Chipper canter VM50**
Processing of round logs, production of two-sided cants and chips



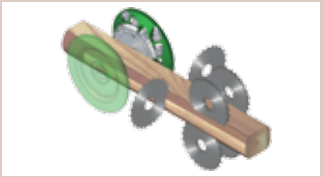
8 **Profiler unit VPF340-A**
Profiling of two sideboards



10 **Saw unit CSMK375-A3/B3**
Resawing of cants, production of boards, planks and sideboards



Second pass



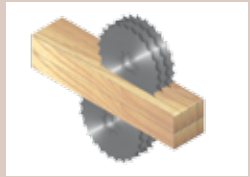
2 **Chipper canter VM50**
Resawing of two-sided cants, production of four-sided cants and chips

3 **Circular crosscut saw VKS**
Trimming of sideboards

4 **Saw unit CSMK375-A2/B2**
Resawing of two-sided cants, production of four-sided cants and sideboards

5 **Separating conveyor SEA**
Separation of sideboards

9 **Horizontal split saw HKM260-A1**
Horizontal splitting of four-sided cants



10 **Saw unit CSMK375-A3/B3**
Resawing of four-sided cants

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04/2013 · en.