

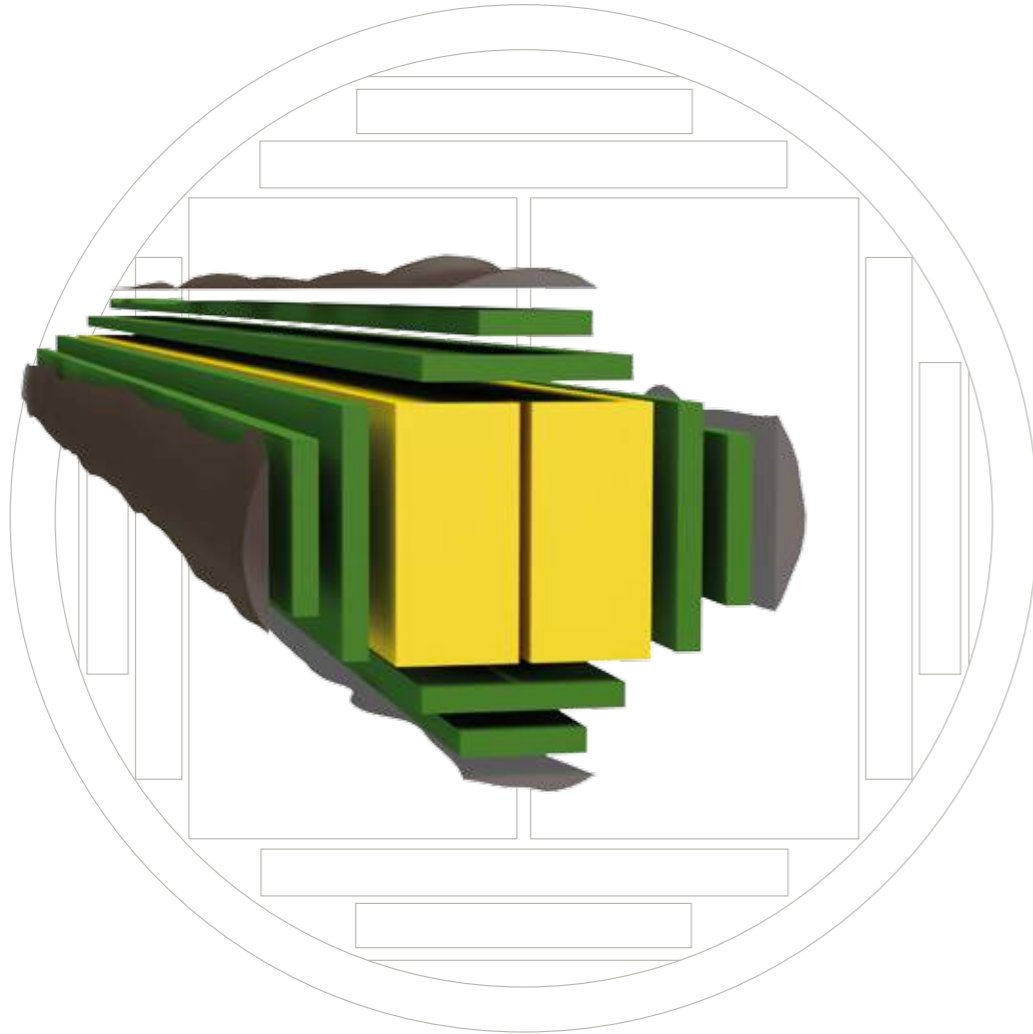
■ PROFILINGTECHNOLOGY

FR16
FR15 V
FR14
FR15 H
FR15 M
FR15 S



PROFILING TECHNOLOGY

EWD Profiling Technology stands for efficient lumber production for more than 30 years.



The first profiling lines have been processing mainly closely graded logs. The tools had been set fix for one saw pattern.

The profiling lines have become continually more and more flexible in the course of their development.

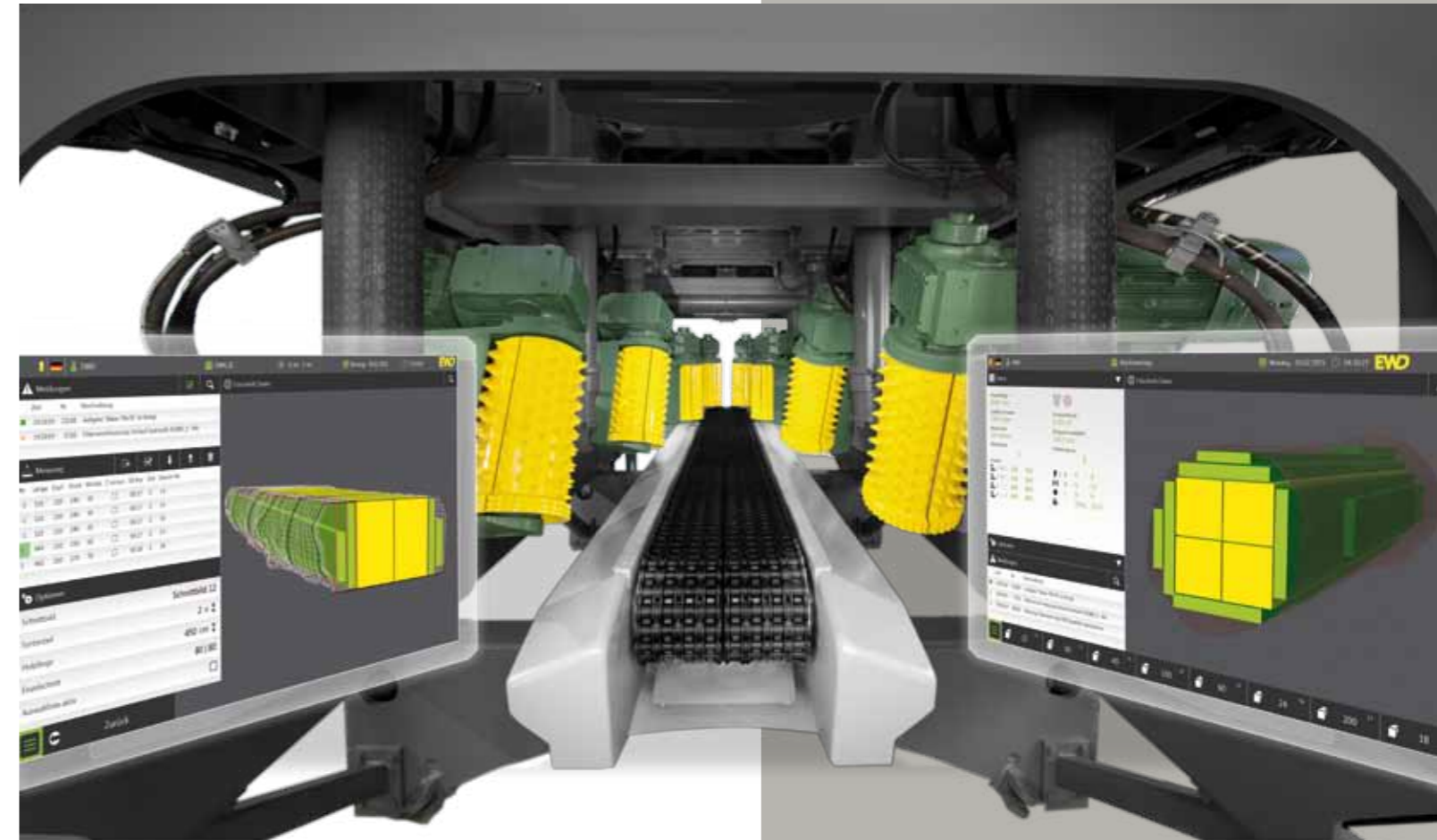
The modern day EWD Profiling Lines cover today lines operating with one saw pattern per log batch to fully flexible sawlines processing logs in scan and set mode, with asymmetric saw

patterns, including active curve sawing and diagonal profiling for maximum center product and side board recovery.

Each log can be sawn individually, for its maximum yield and with optimized log gaps for resetting of the tools.

The feed speed of the profiling lines is selected based on required production, offering range up to a top speed of 200 m/min.

Efficiency and Recovery with eWOOD-TECHNOLOGY

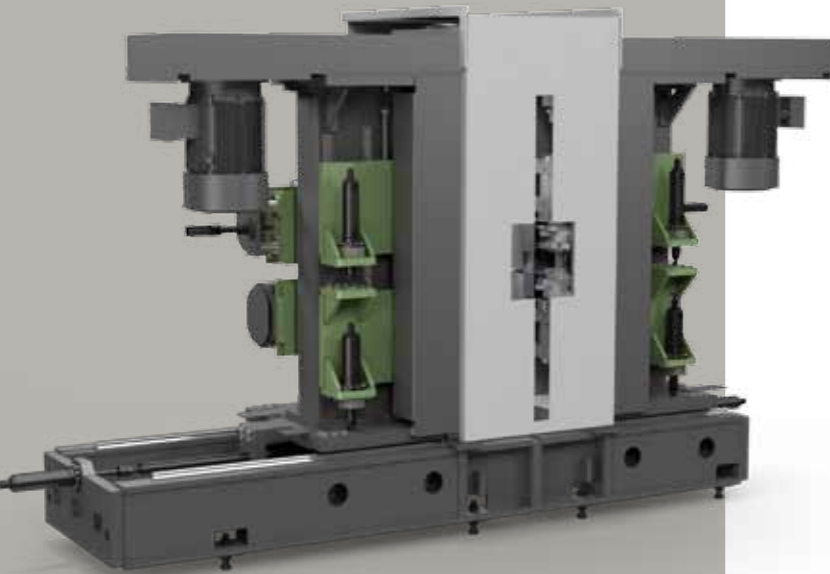


- State of the art scanning and sensor technology
- Professional optimization and operations software
- Powerful PLC control systems

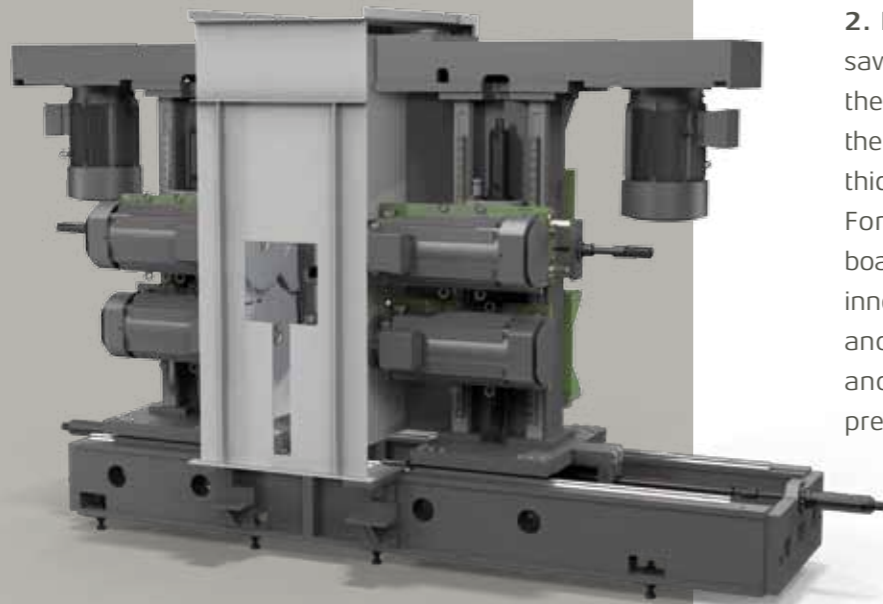
are the important factors besides the solid and time-proven machine design for the high efficiency and recovery of EWD Profiling Lines.

PROFILING AND SAW UNIT FR16

Profiling and sawing with one machine, for scan and set processing



Machine view: Infeed side



Machine view: Outfeed side

The Profiling and saw unit FR16 does:

1. Per side the profiling of one side board with vertically arranged profiling heads. The profiling heads may be fitted for a variable chip length up to 30 mm with 2 or 4 knives on the tool circumference. For the production of pellet chips and for lumber without fiber tear out and extraordinary long tool usage times the P-System heads, developed together with LEUCO, will be used.

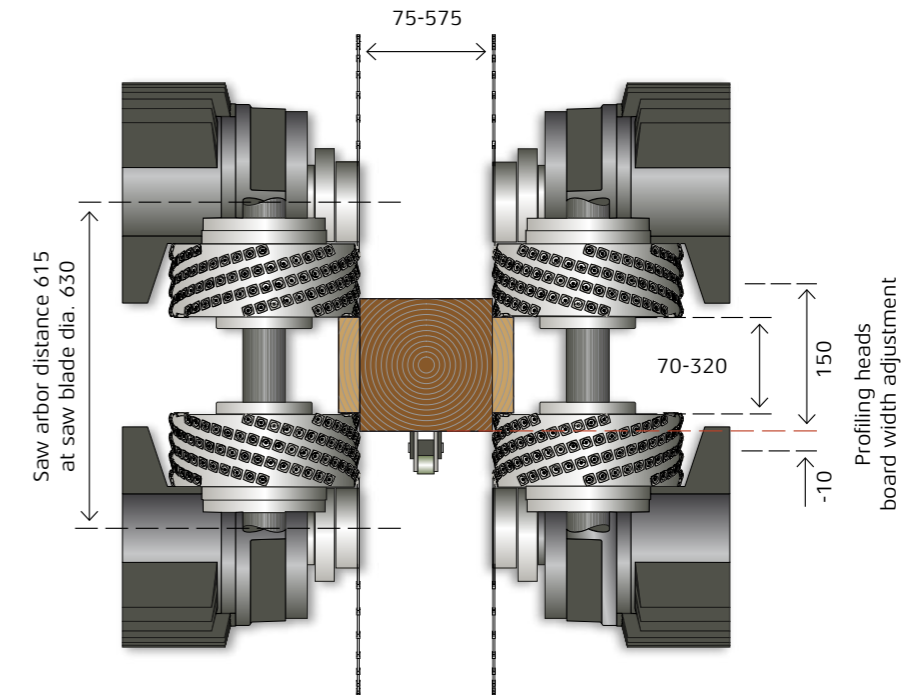
2. Per side up to 2 side boards may be sawn off from a log or 2-sided cant with the double arbor circular saw module. In the standard version, the inner side board thickness is fix set, using spacer rings. For a flexible thickness of the inner side board an optional saw arbor with telescopic inner saw arbor is available. The horizontal and vertical positioning of profiling heads and saw blades is done by fast and high precision servo-hydraulic networks.

Tool change access by walk-in moveable change platform.

TOOLS – SETTING DISTANCES



Profiling and saw unit FR16



TECHNICAL DATA

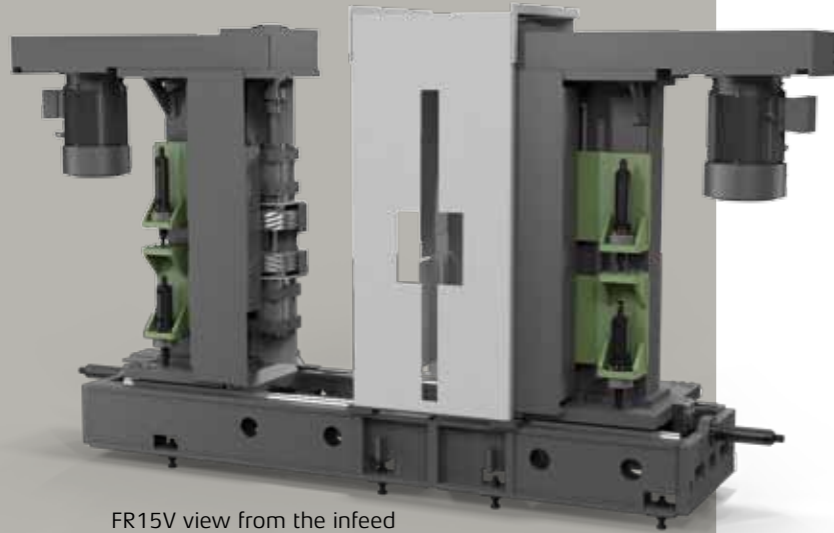
FR16 does the profiling and sawing of the side boards in one machine

Log/cant length min.	m	2,4
Drive power profiling heads	kW	2 x 75 - 132
Drive power saw motors	kW	4 x 80 - 110
Weight incl. drive motors	t	22
Machine opening tool change	mm	950
Feed speed max.	m/min	150



PROFILING UNIT FR15V

Profiling with vertically arranged profiling heads, for variable board position and width



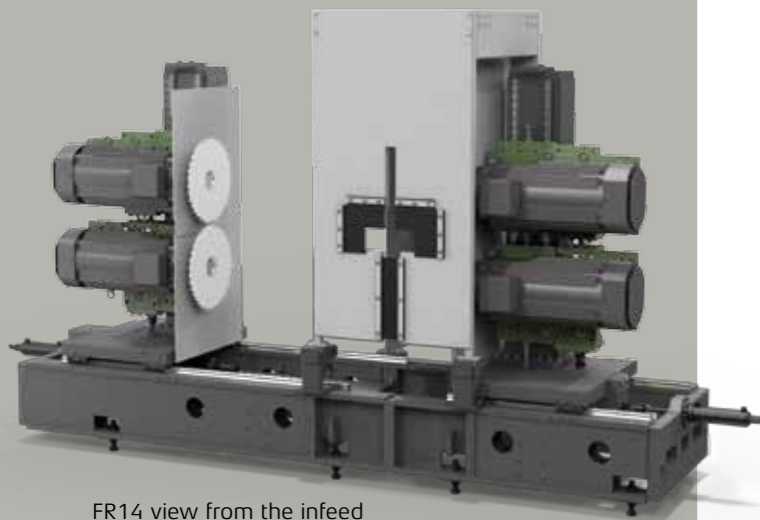
FR15V view from the infeed side, in tool change position.

FR15V profiling unit does the profiling of one side board per side. Profiling is done with vertically arranged profiling heads. The profiling heads may be fitted for a variable chip length up to 30 mm with 2 or 4 knives on the tool circumference. For the production of pellet chips and for lumber without fiber tear out and extraordinary long tool usage times the P-System heads, developed together with LEUCO, will be used. The horizontal and vertical positioning of profiling heads is done by fast and high precision servo-hydraulic networks.

Tool change access by walk-in moveable change platform.

SAW UNIT FR14

Double arbor circular saw for the sawing off of side boards



FR14 view from the infeed side, in tool change position

The FR14 double arbor circular saw unit can saw per side up to 2 side boards from a log or 2-sided cant. In the standard version, the inner side board thickness is fix set, using spacer rings.

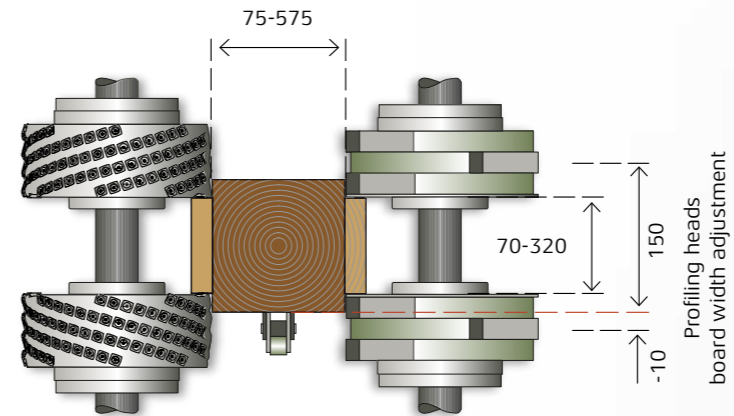
For a flexible thickness of the inner side board an optional saw arbor with telescopic inner saw arbor is available. The horizontal and vertical positioning of saw blades is done by fast and high precision servo-hydraulic networks.

Tool change access by walk-in moveable change platform.

TOOLS – SETTING DISTANCES



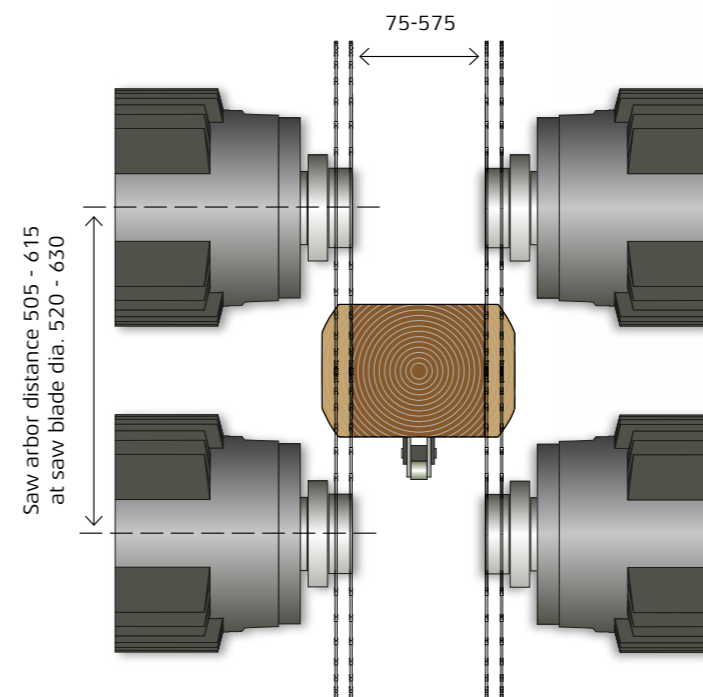
Profiling unit FR15V



TECHNICAL DATA

Log/cant length min.	m	2,4
Drive power profiling heads	kW	2 x 75 - 132
Weight incl. drive motors	t	16
Machine opening tool change	mm	950
Feed speed	m/min	150

Saw unit FR14



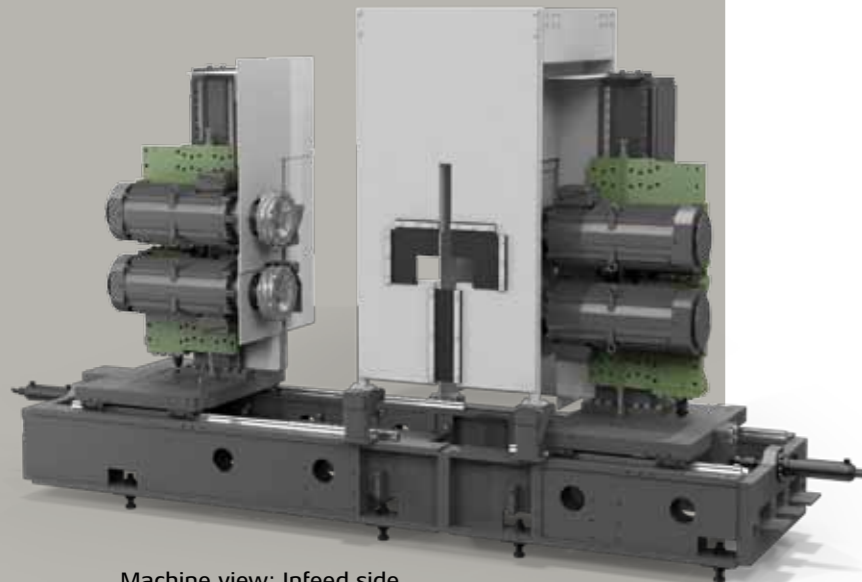
TECHNICAL DATA

Log/cant length min.	m	2,4
Drive power saw motors	kW	4 x 80 - 110
Weight incl. drive motors	t	17
Machine opening tool change	mm	950
Feed speed max.	m/min	150

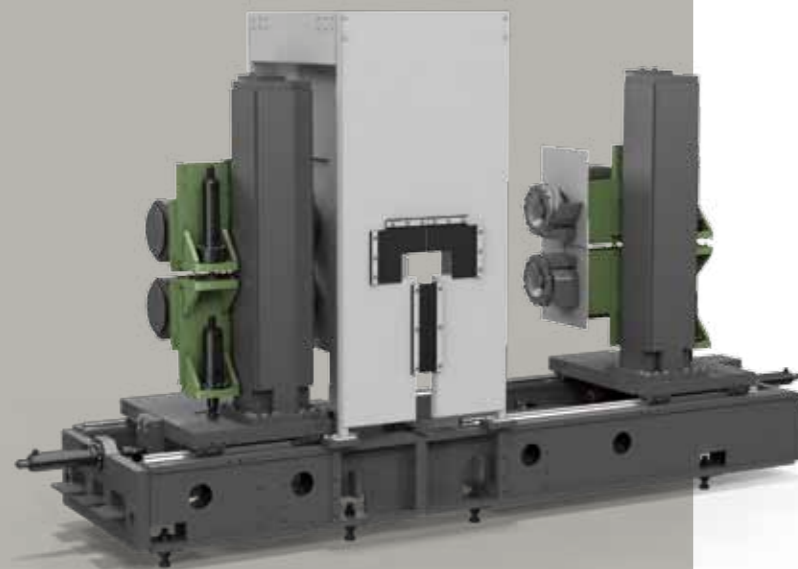
Sleeve length useable for fix 3rd and 4th side board: max. 50 mm

■ PROFILING UNIT FR15H

Profiling with horizontally arranged profiling heads, for variable board position and width



Machine view: Infeed side



Machine view: Outfeed side

The profiling unit FR15H does per side the profiling of one side board with horizontally arranged profiling heads. The profiling heads may be fitted for a variable chip length up to 30 mm with 2 or 4 knives on the tool circumference. For the production of pellet chips and for lumber without fiber tear out and extraordinary long tool usage times the P-System heads, developed together with LEUCO, will be used.

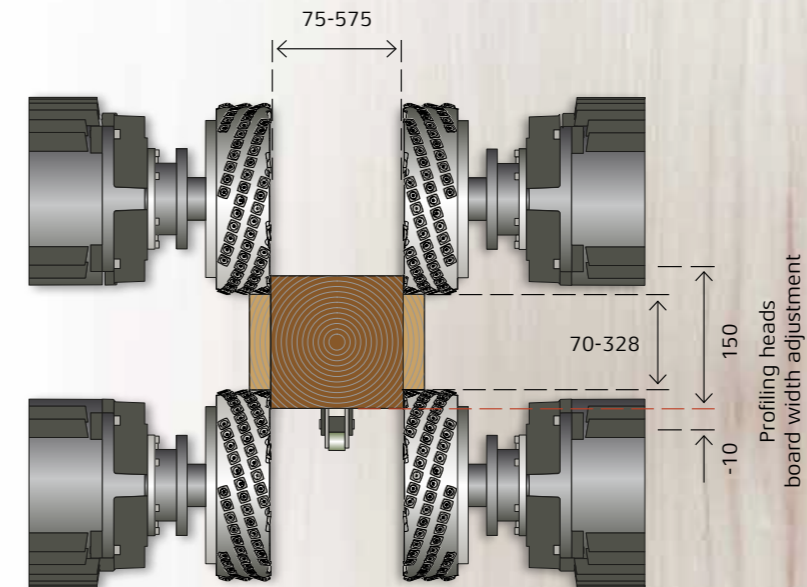
The horizontal and vertical positioning of profiling heads is done by fast and high precision servo-hydraulic networks.

Tool change access by walk-in moveable change platform.

The profiling unit FR15H can perform diagonal profiling of the boards, relative to the transport level at full feed speed to achieve the same recovery as an optimizing board edger.

■ TOOLS – SETTING DISTANCES

Profiling unit FR15H



TECHNICAL DATA

Log/cant length min.	m	2,4
Drive power profiling heads	kW	4 x 50 - 65
Weight incl. drive motors	t	13
Machine opening tool change	mm	950
Feed speed max.	m/min	150

Profiling unit FR15M

TECHNICAL DATA

For fix board width and variable board position

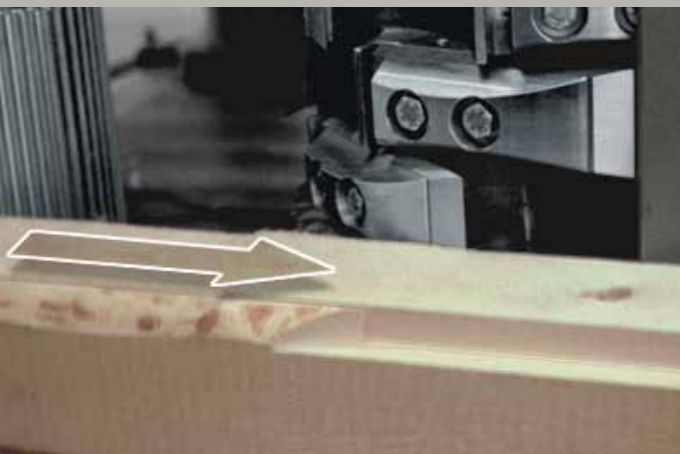
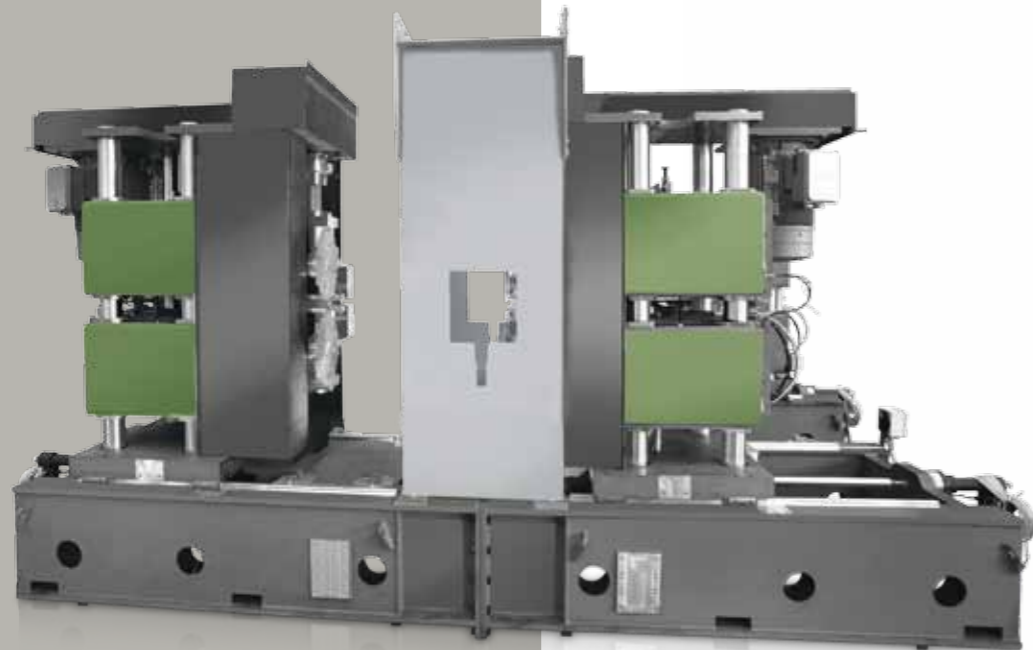
Cant length min.	m	1,5
Drive power profiling heads	kW	4 x 45
Weight incl. drive motors	t	8
Feed speed max.	m/min	100



■ PROFILING UNIT FR15S

Profiling with vertically arranged profiling heads and preceding notching saws

The pulp and paper industry requires for their process optimization and the best paper quality a high and homogenous chip quality. The use of preceding notching saws avoid the generation of "comma" chips. The profiling chips produced by the FR15S reach the maximum chip quality achievable for this process.

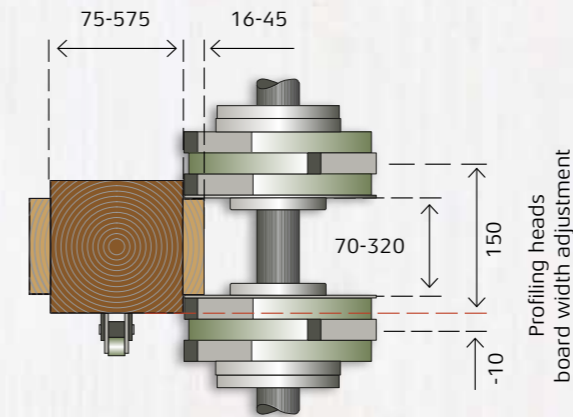


For the individual optimum recovery of each side board, the profiling unit FR15S can perform diagonal profiling of the boards. The profiling heads are positioned and tilted for each board individually, based on the 3D scanner data and optimization results. The precise closed loop motion control system allows achieving the maximum recovery while always using the maximum wane allowance programmed.

■ TOOLS – SETTING DISTANCES



Profiling unit FR15S



TECHNICAL DATA

Log/cant length min.	m	2,4
Drive power saw motors	kW	4 x 50-65
Drive power profiling heads	kW	2 x 75-132
Weight incl. drive motors	t	26
Machine opening tool change	mm	950
Feed speed max.	m/min	200

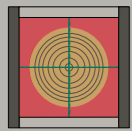


■ **COMPACT PROFILING LINE EXAMPLE 1**

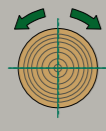
Compact profiling line for 2 + 2 side boards, with upgrade possibility to 4 + 4 side boards.
For log length of 2,5 to 6,1 m and a log diameter of max. 55 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness, side boards variable in thickness, width and position.
Length of the profiling line: approx. 64 m

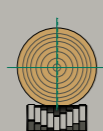
MESS 3D



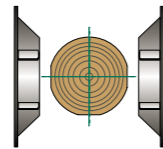
ZE



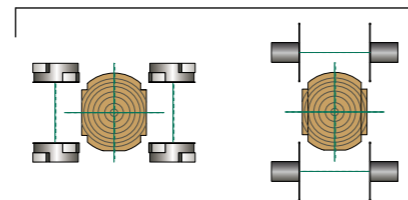
FZ1



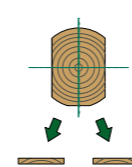
PF19



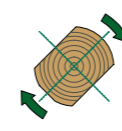
FR16



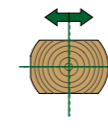
TTS / TDP



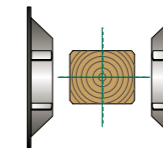
TKV



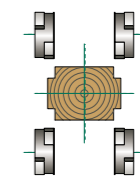
ZE



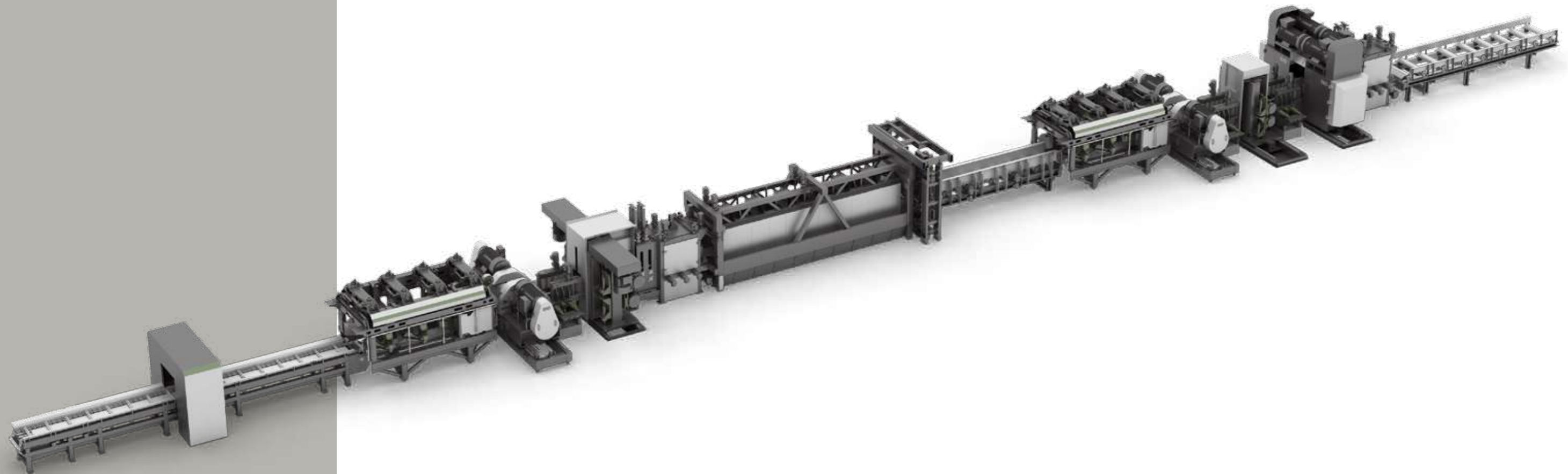
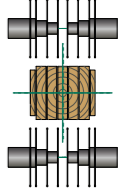
PF19



FR15H



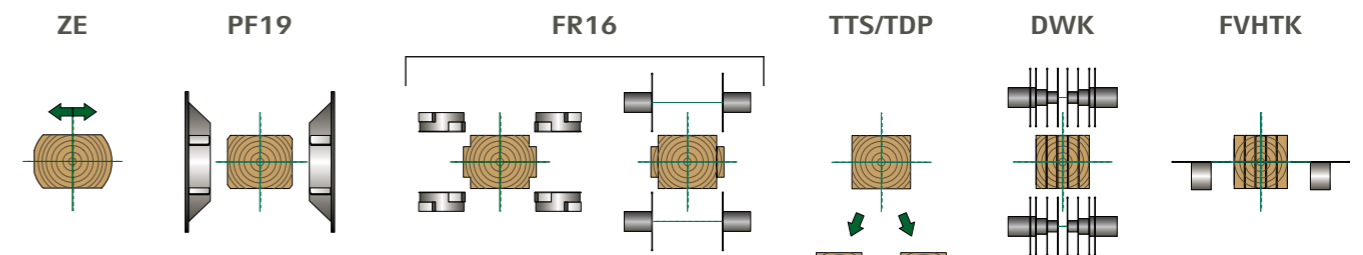
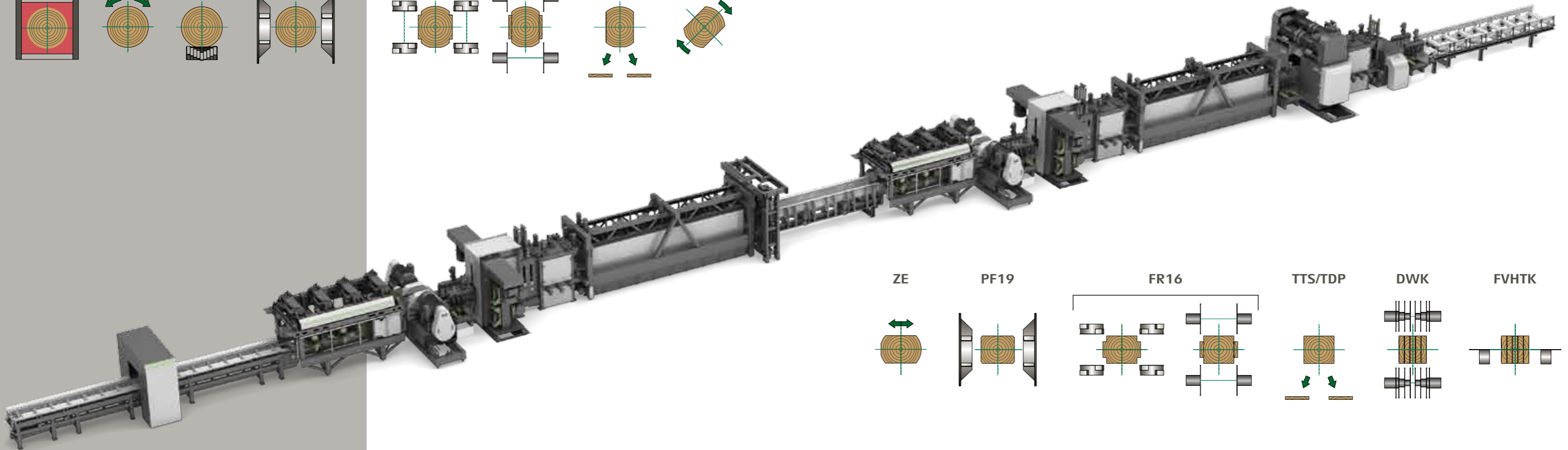
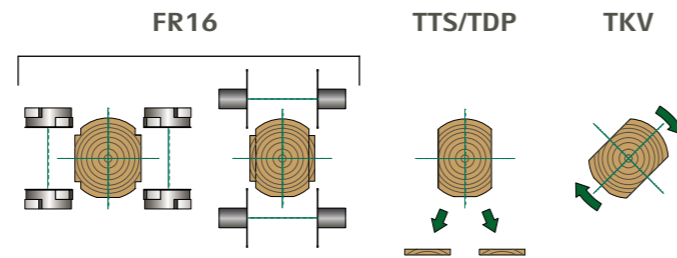
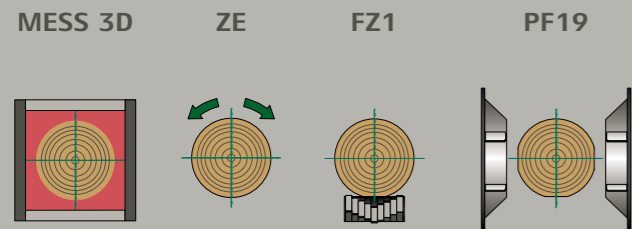
DWK



COMPACT PROFILING LINE EXAMPLE 2

Compact profiling line for 2 + 2 side boards, with separate vertical and horizontal resaw station for the center product, with upgrade possibility to 4 + 4 side boards.
For log length of 2,5 to 6,1 m and a log diameter of max. 55 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness for vertical resawing, 2 x 5 or 3 x 5 products variable, combining vertical and horizontal resawing, side boards variable in thickness, width and position.
Length of the profiling line: approx. 78 m

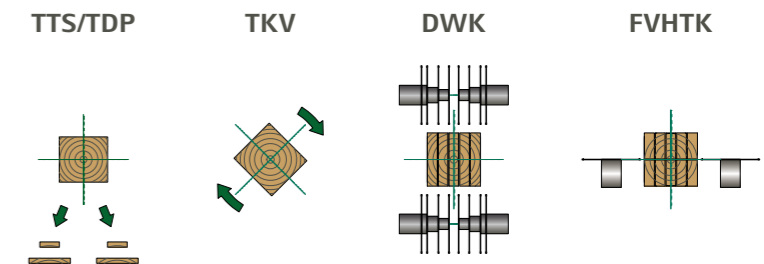
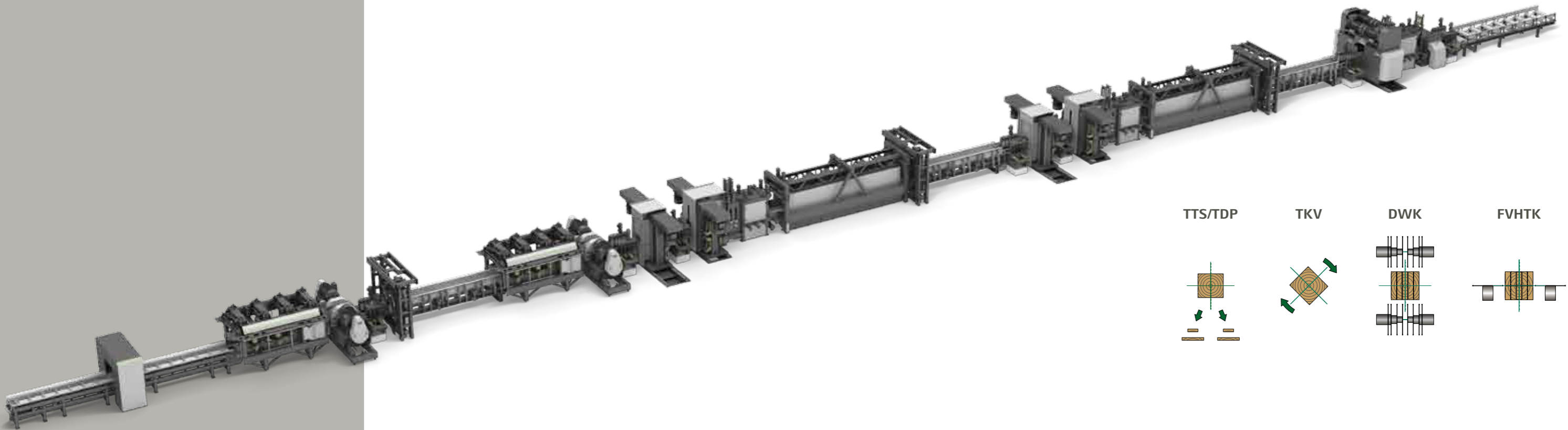
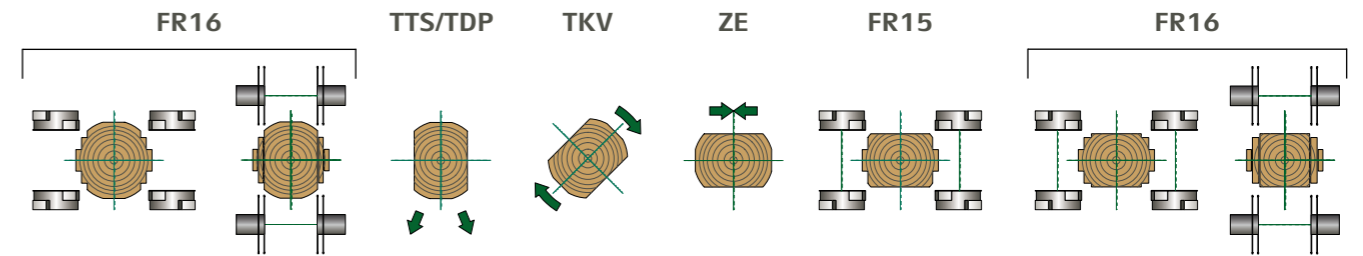
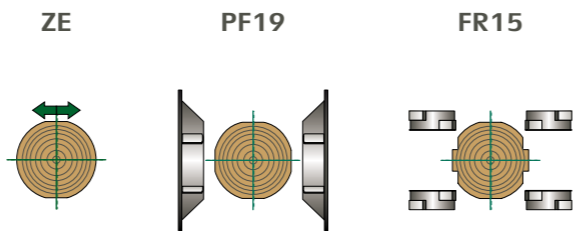
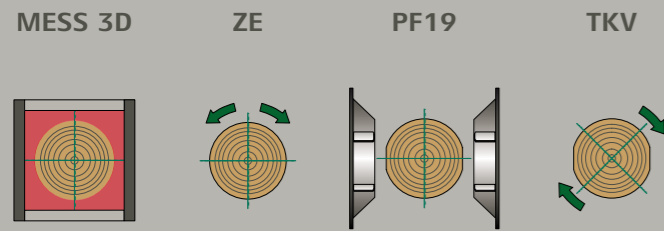


■ CLASSIC "CHIP-TURN-CHIP PROFILING LINE Example 3



Classic profiling line for 4 + 4 side boards, with separate vertical and horizontal resaw station for the center product.
 For log length of 2,5 to 6,1 m and a log diameter of max. 55 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness for vertical resawing, 2 x 5 or 3 x 5 products variable, combining vertical and horizontal resawing, side boards variable in thickness, width and position.
 Length of the profiling line: approx. 114 m



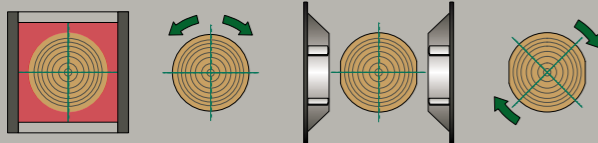
■ CLASSIC "CHIP-TURN-CHIP PROFILING LINE Example 4

With 2nd 3D scanner for true shape scanning of open faces and perfect optimization of the side boards

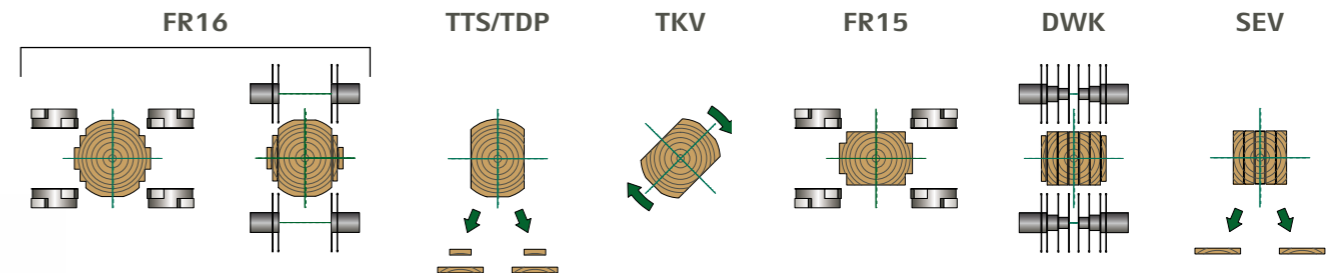
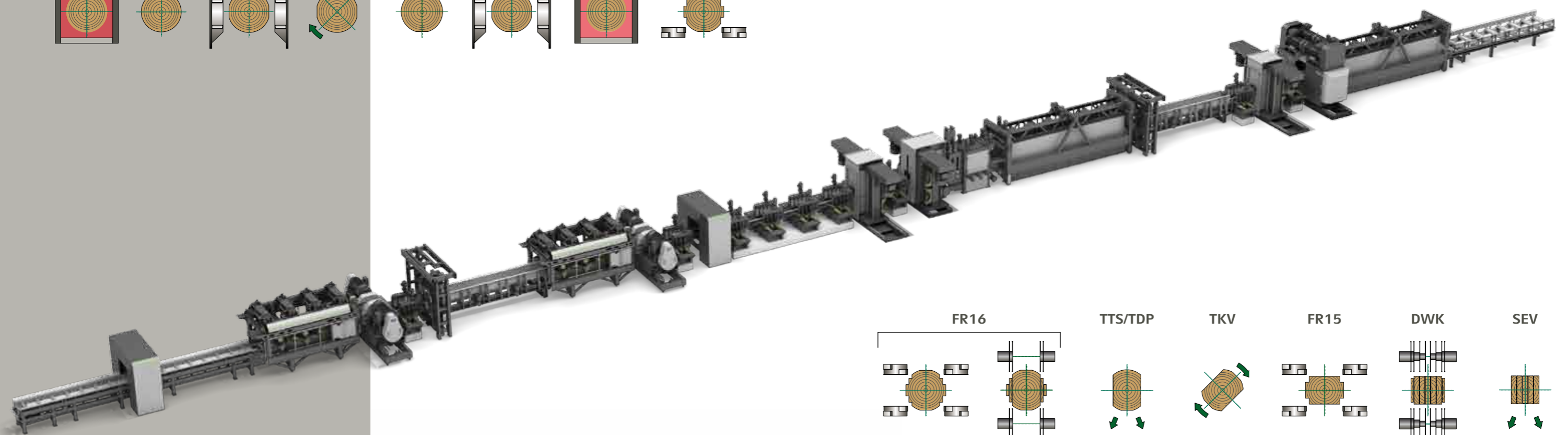
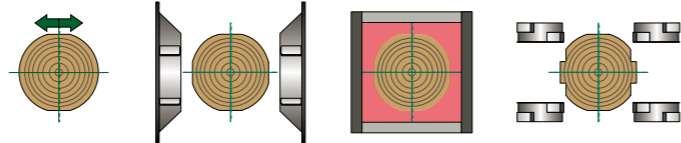
Classic profiling line for 4 + 2 side boards. The flexible resaw station combines the sawing of side boards and center product in one machine. For log length of 2,5 to 6,1 m and a log diameter of max. 55 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness, side boards variable in thickness, width and position. Length of the profiling line: approx. 100 m

MESS 3D ZE PF19 TKV



ZE PF19 MESS 2 3D FR15



REDUCING-PROFI-LINE EXAMPLE 5

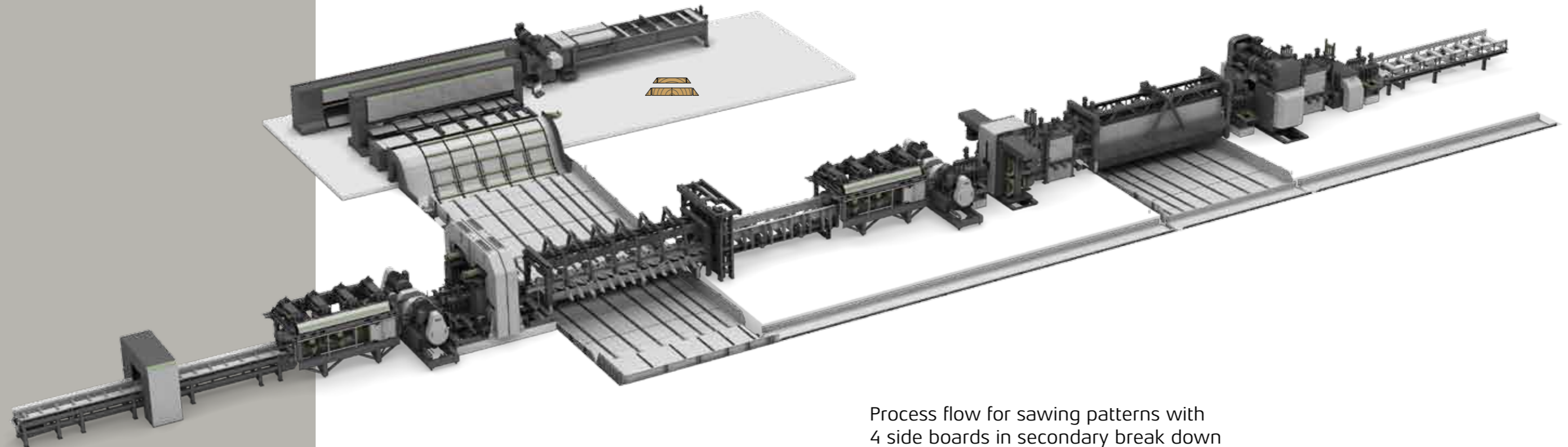


With Quadro reducer bandsaw in primary break down.

Combined Reducing and Profiling line, with separate vertical and horizontal resaw station for the center product.
For log length of 2,5 to 6,1 m and a log diameter of max. 75 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness for vertical resawing, 2 x 5 or 3 x 5 products variable, combining vertical and horizontal resawing. In primary break down up to 4 side boards of maximum thickness 100 mm each can be sawn.

In secondary break down 2 side boards can be profiled up to a thickness of 45 mm each. Large logs can be sawn in secondary break down with up to 4 side boards, which will be sent to the optimizing edger system. Length of the Reducing-Profiling line: approx. 77 m



Process flow for sawing patterns with 4 side boards in secondary break down



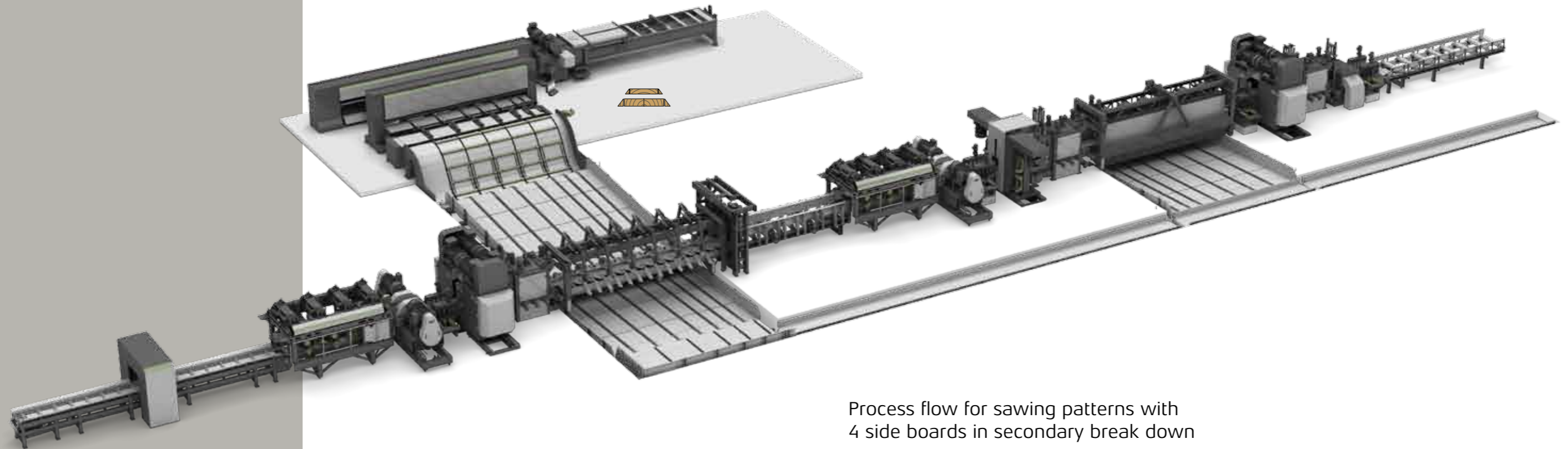
REDCING-PROFI-LINE EXAMPLE 6

With double arbor circular saw unit DWK in primary break down and resawing.

Combined Reducing and Profiling line, with separate vertical and horizontal resaw station for the center product.
For log length of 2,5 to 6,1 m and a log diameter of max. 70 cm, including taper and sweep.

The line is designed for scan and set sawing, adjusting the tools from log to log. Maximum 5 center products of variable thickness for vertical resawing, 2 x 5 or 3 x 5 products variable, combining vertical and horizontal resawing. In primary break down up to 6 side boards can be sawn.

In secondary break down 2 side boards can be profiled up to a thickness of 45 mm each. Large logs can be sawn in secondary break down with up to 4 side boards, which will be sent to the optimizing edger system. Length of the Reducing-Profiling line: approx. 78 m



Process flow for sawing patterns with 4 side boards in secondary break down





The SawLine Company™

EWD Altötting - Head quarter

Esterer WD GmbH

Estererstrasse 12

84503 Altötting, Germany

phone: +49 86 71 - 5 03 - 0

fax: +49 86 71 - 5 03 - 386

e-mail: info@ewd.de

EWD Reutlingen - Branch office

Esterer WD GmbH

Täleswiesenstrasse 7

72770 Reutlingen, Germany

phone: +49 71 21 - 56 65 - 0

fax: +49 71 21 - 56 65 - 400

e-mail: info@ewd.de

Due to constant product improvements or developments the illustrations and specifications contained in this brochure are subject to change without notice.