



KOSKISEN

Quality has a name.

**Koskisen Sawmill
2023**

The new sawmill is the largest investment in Koskisen's history

- Production at the new sawmill completed in Järvelä will start in phases in 2023 and 2024
- Estimated investment approximately EUR 50 million in 2021–2024
- In the first phase, production volumes will increase by about a third. Increased product offering, especially for the company's important Japanese market
- In addition to increasing volumes, product quality is also improving
- The efficiency of the sawing process is expected to increase by up to 40%



The new saw significantly improves the productivity of saw products production



Factors that improve productivity

- higher sales volumes
- increased side streams
- improved material efficiency and quality yield
- high degree of automation
- efficient logistics throughout the process



The new production line increases sawing productivity by up to 40% and enables the use of an even wider range of log diameter classes. In this way, we are able to serve our customers with new products and the wood raw material will be used even more precisely for end products that bind carbon for a long time.







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**Start day of
production**
3 July 2023

**Working in the
sawing process**
6 people/shift

Production
400,000 m³

Log use
800,000 m³/year

Truck loads
55/day
13,000/year

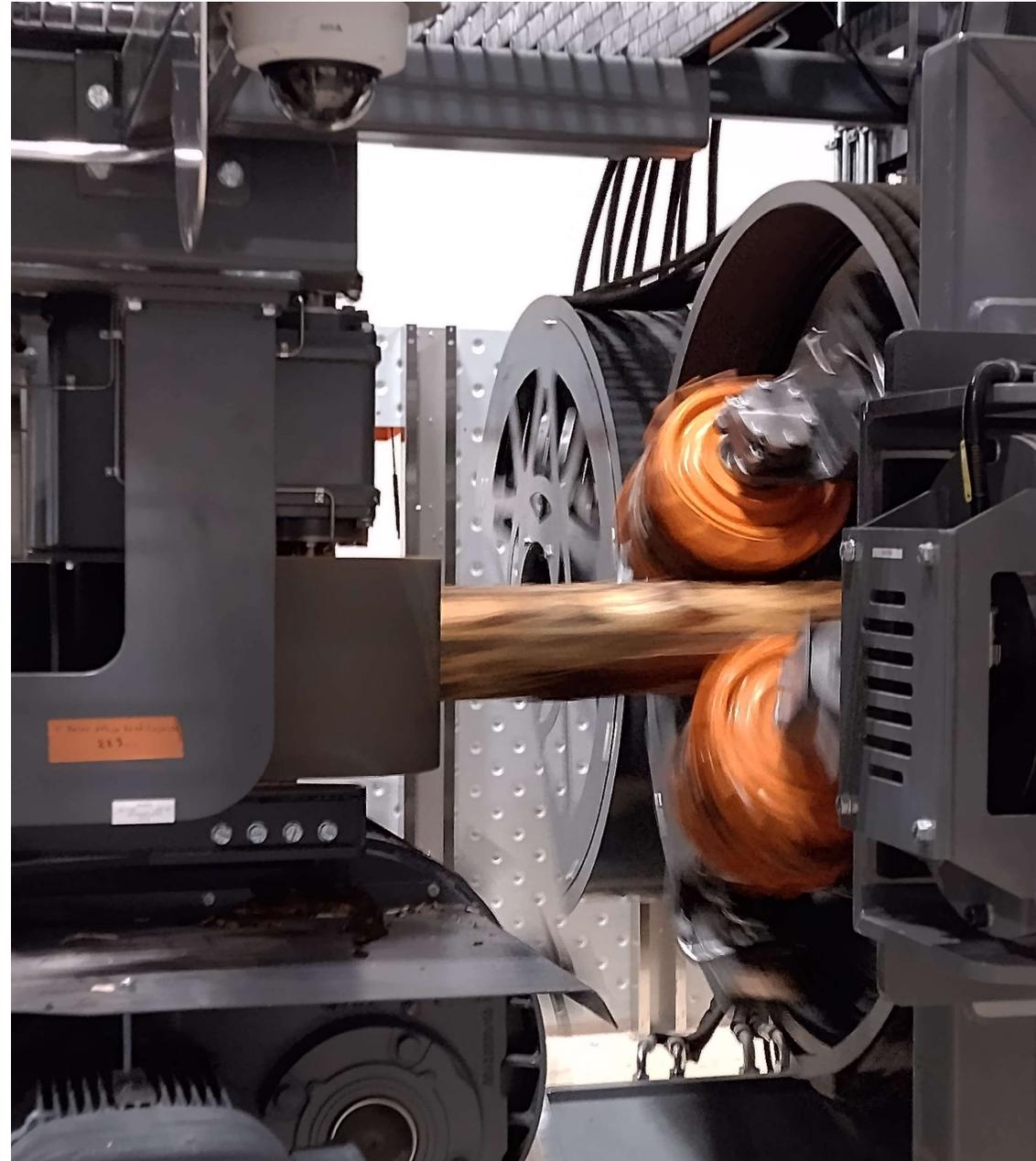
New sawmill improves raw material efficiency for the entire Group

The latest sawing technology enables even wider use of log diameter classes

- Valuable wood raw material will be used more precisely in end products that bind carbon for a long time
- Also benefits the forest owner; thanks to the log dimensions made possible by the new sawmill, the share of logs obtained from wood will increase

The increased raw material procurement will also increase the availability of wood in the Group's other production processes, such as birch plywood production

- Increased side streams for raw material for products and energy production



Project description

Currently

Currently, the sawmill is in two separate locations, 4 kilometres apart

- Log sorting and sawing at Tehdastie site
- Sorting, drying, packaging and further processing at Mäntsäläntie site



New sawmill

New sawmill with green sorting and stick stacking will be built in the Mäntsäläntie area

- Phase 1: EUR 50 mill. investment, with around EUR 9 mill. in annual benefits
- Integration brings significant benefits in costs, logistics and productivity
- Investment can be made without any stops in production → Full production will be secured by running the existing line until the new line is at full capacity

Log sorting will be built at the same site later

- New land is bought
- Project value around 15Mio€
- In the beginning, logs will be transported from the existing log sorting in the Tehdastie area
- The Tehdastie site will have more space for possible panel industry and bioenergy investments
- New sorting line with 102 pockets will be ready early 2025. Main supplier Nordautomation Oy.

The Tarha site has been strategically developed to handle increasing volumes

- New biofuel powerplant started in 4/2020
 - 2 dry sorting lines. The other sorting line has a state-of-the-art on-line planing facility, which started in 6/2020
 - A new channel kiln will be completed in 4/2024
- ...
- Potential of 500,000 m³/year production with 2 new drying kilns

Changes in the log and product range

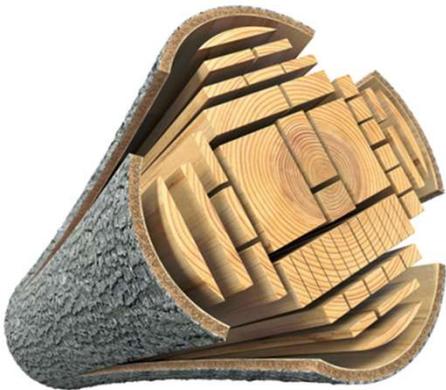
New production lines enable the use of a wider log range:

Log diameter range from 11 cm up to 50 cm (top)

- Efficient line also for small diameter logs
- Enables us to cut slightly larger logs, which are currently sold to our competitors

Log lengths from 3.1 m up to 6.2 m

- Possibility to efficiently produce 3.0-m products
- Also 20-foot products possible



New production lines enable a wider product range:

More flexible cutting line

- Possible to cut “scan and set” patterns log by log

Wider dimension scale

- Higher cants up to 12-inch or 300 mm
- Minimum cant height 75 mm
- Minimum thickness of center pieces 22 mm
- Sideboard thicknesses from 16 mm up to 50 mm
- Minimum dimension 16x75 on sideboards and 22x75 with center pieces
- Maximum dimension 50x225 on sideboards and 100x300 with center pieces

Infeed

Infeed

- AS Hekotek, Estonia
- Valon Kone Oy, Finland

Possibility to cut unsorted logs

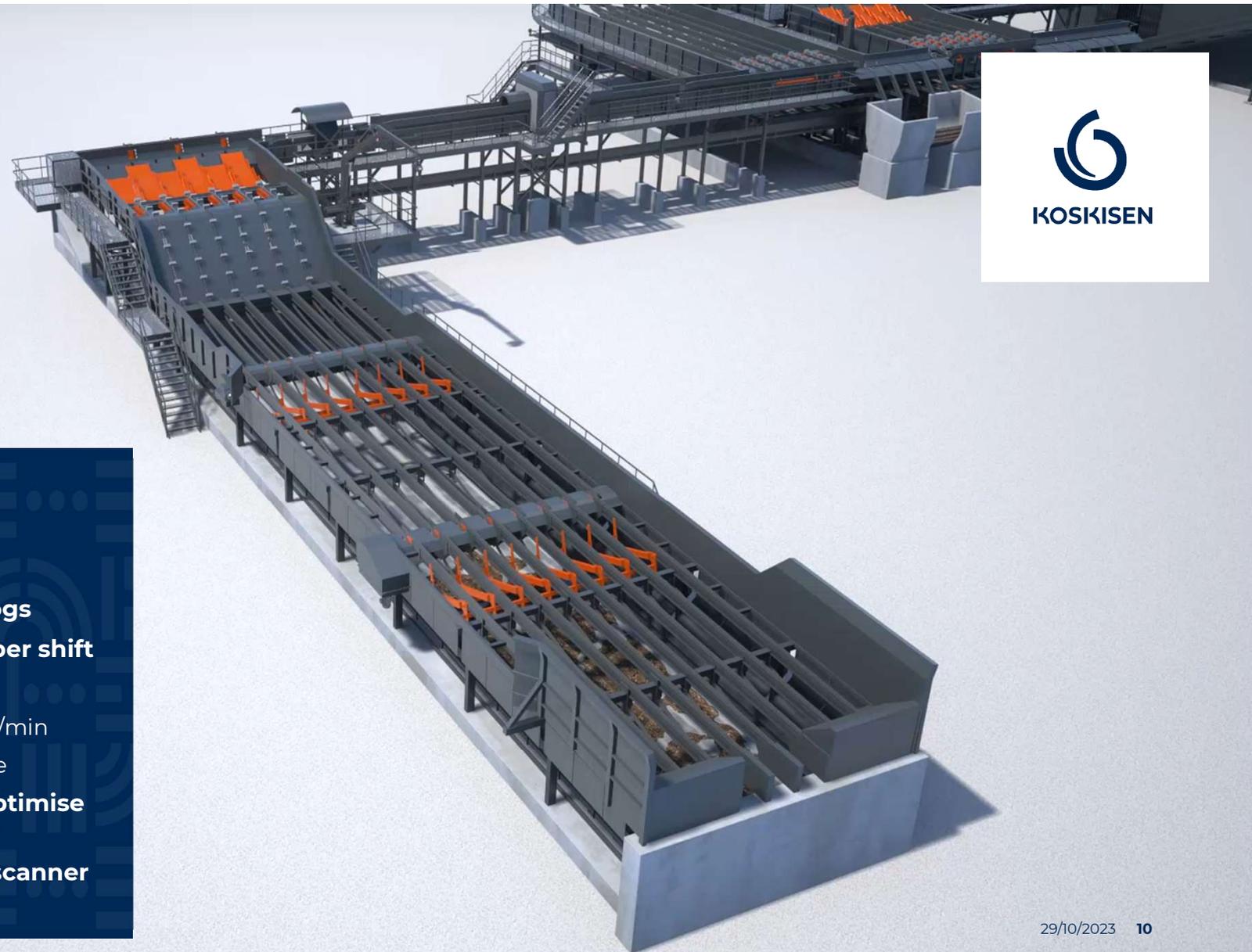
Infeed capacity 18,000 logs per shift

High speed debarking line

- Debarking speed 170 m/min
- One debarking machine

HD quality log cameras to optimise cutting pattern and yield

Space reservation for X-ray scanner



Sawline

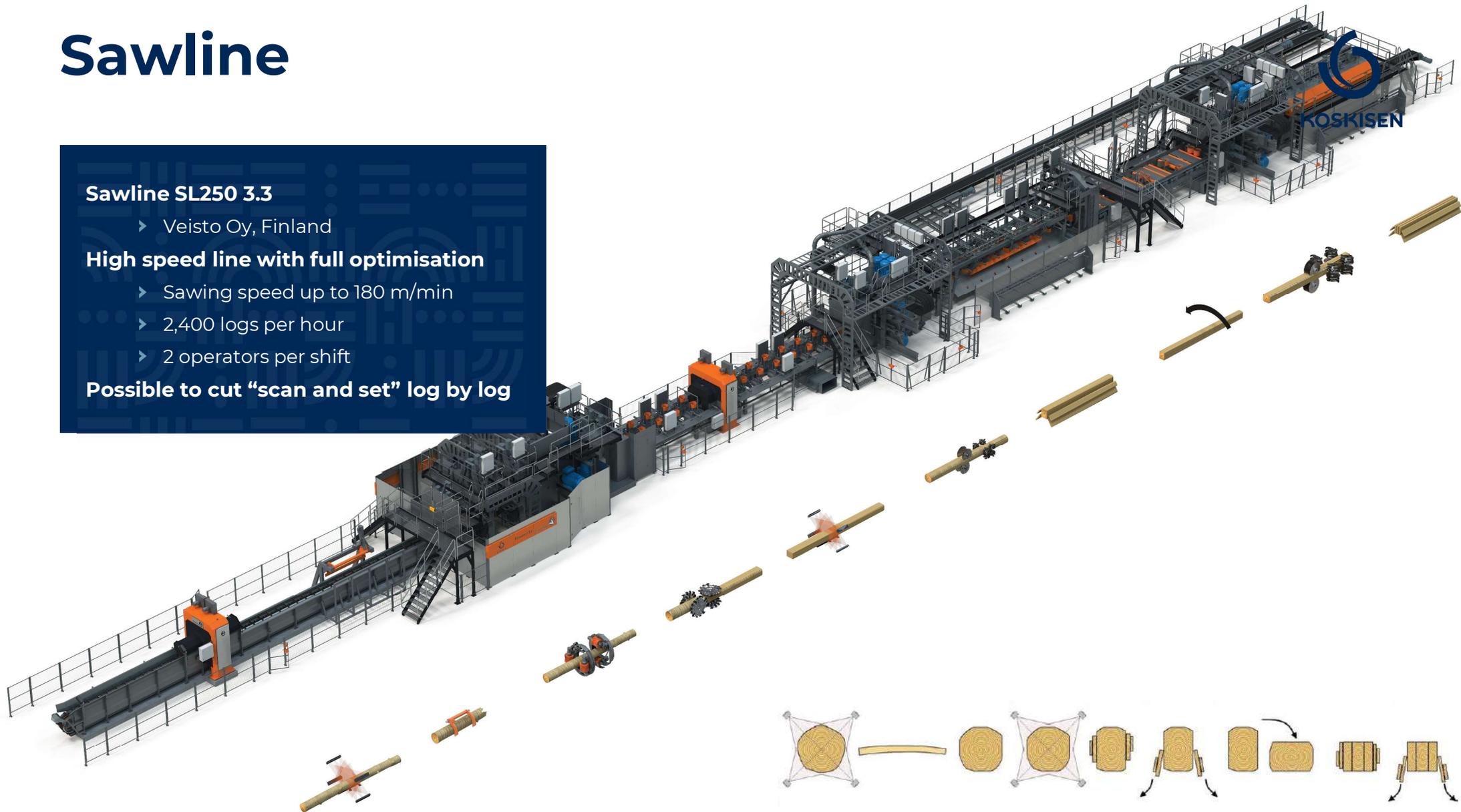
Sawline SL250 3.3

- ▶ Veisto Oy, Finland

High speed line with full optimisation

- ▶ Sawing speed up to 180 m/min
- ▶ 2,400 logs per hour
- ▶ 2 operators per shift

Possible to cut “scan and set” log by log





Green sorting



Green sorting and stick stacking

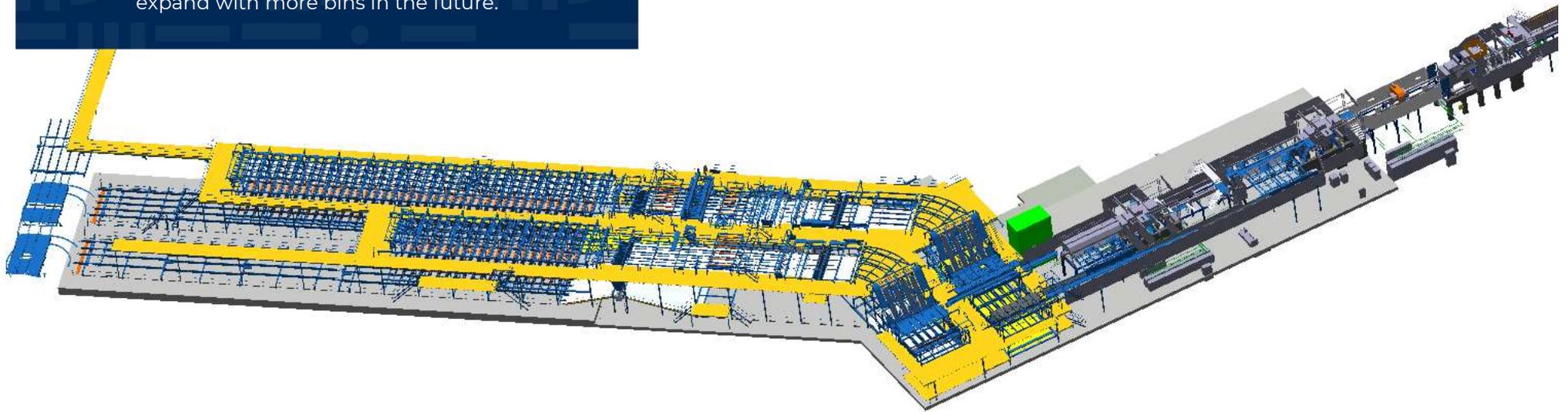
- Renholmen AB, Sweden
- Microtec Espoo, Finland

Two green sorting lines

- Production speed up to 160 pcs/min
- On the board line there are 40 sink bins and on the center line 20 bins, both with gentle emptying, Soft Bin.
- On both lines, there is the possibility to expand with more bins in the future.

Camera and cutting systems

- On the board line, Finscan camera sorting is installed with Renholmen's subsequent all-electric cutting system with Electro Positioner and Trimmer ElectroSinus.
- The trimmer is installed with an integrated fire protection system.





Stick Stacker

- The new Stick Stacker and stick intake were placed in an existing building.
- Assembled and commissioned on a surface outdoors next to the producing Sticker Stacker.
- The Sticker Stacker contains 37 products/machines which were divided into four sections and lifted into place.
- Stick intake with the possibility to feed sticks from outside, dry sorting or combined.
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- Production speed up to 200 pcs/min
- Sticks/layer 11 pcs



Project Partners



Infeed and by-product processing
AS Hekotek, Estonia



Debarking
Valon Kone Oy,
Finland



Sawline
Veisto Oy, Finland



Green sorting and stick-stacking
Renholmen AB, Sweden
Microtec Espoo, Finland

