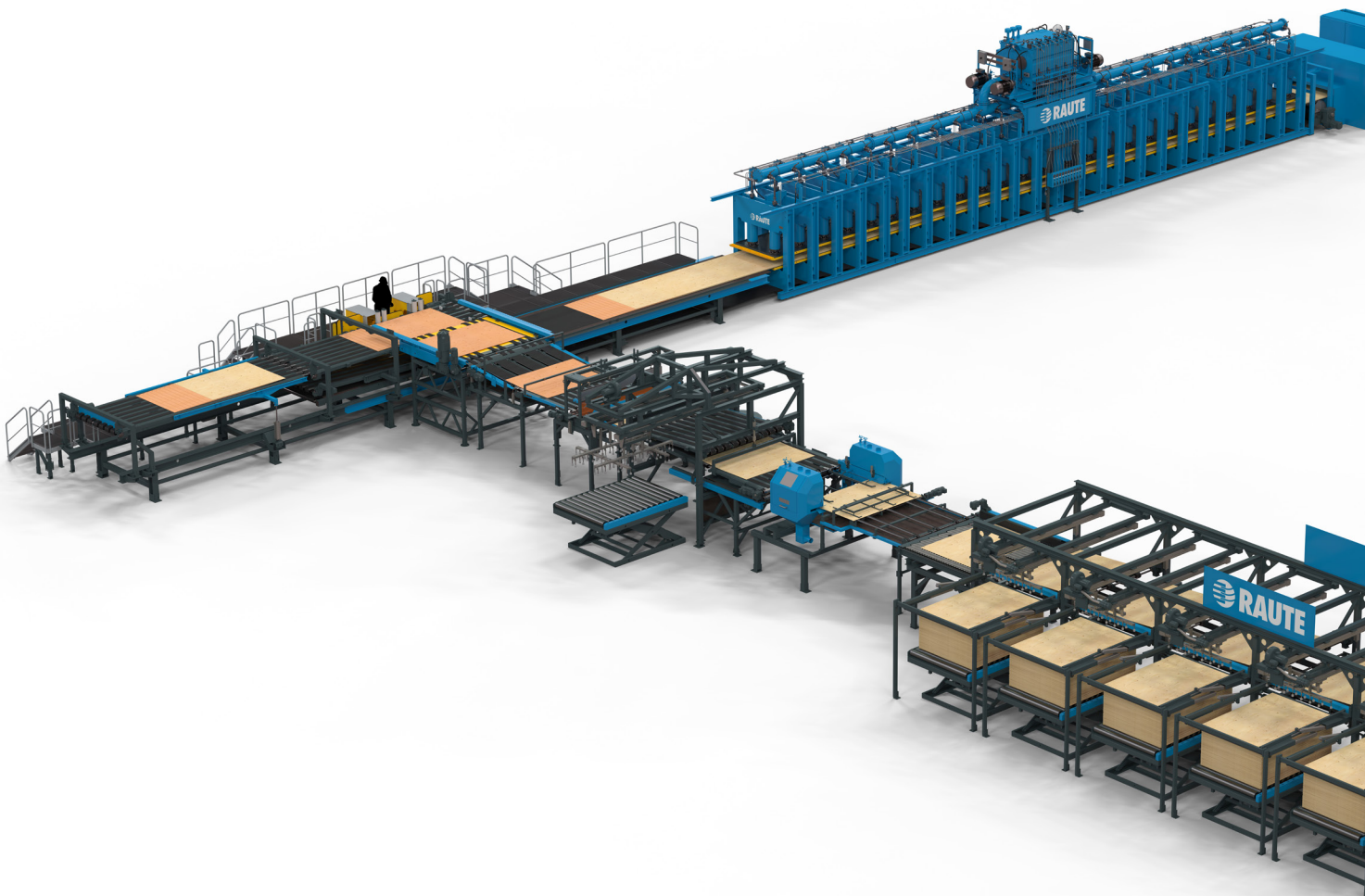


LVL

# Laminated Veneer Lumber Technology



# LVL LINE

Laminated veneer lumber, LVL, is made as a continuous billet of glued thin veneer sheets. The timber is processed in many ways before it becomes the strong and durable wood product that it is known for. At Raute, we are a complete mill supplier, and you can find your production technology, training, and partnership in one go.

## LVL TECHNOLOGY

- Veneer grading ensures the high-standard load-bearing value of the LVL product.
- Veneer analyzers evaluate all veneer properties, which has an impact on its rigidity and strength.
- With veneer scarfing, you get the strongest joints between the veneers.
- Continuous lay-up is the heart of Raute LVL lines, and it allows custom-length LVL panels up to 24 meters.
- Our automatic glue applicator is flexible to use many gluing methods to provide cost-effective gluing.
- The stack handling is automatic to bring the correct veneer grader into each feeder bin.
- Pre-pressing makes a solid billet by securing the glue bond.
- Billets are cut and trimmed with cross-cutting and edge-trimming machines.
- Hot pressing creates a permanent waterproof bond between veneers.
- Finally, billet handling consists of, for example, cutting, edge, and face sealing or packaging for the customer.



Raute R7 veneer analyzers



Continuous lay-up



Gluing

## TECHNICAL DATA

Raw materials	Soft and hardwoods
Line width	4, 6, or 8 ft (1.2, 1.8, 2.5 m)
Veneer sizes	8x4, 6x6, 8x6, 8x8 ft.
Product thicknesses	20–75 (90) mm
Cross plies possible	Yes
Gluing method (phenolic resin)	Liquid extrusion or curtain coater
Hot press length	60, 80, or 90 ft.
# press openings	2, 3, 4, or 6 (8)
Number of operators	3–5 persons
Line capacity	20,000–200,000 m <sup>3</sup> /a

**“The cooperation with Raute before, during, and after the project has been exceptional.”**

Schalk Grobbelaar, Group Engineer  
York Timbers, South Africa

## 1 VENEER INFEED AND SCARFING

1

- Multiple veneer grades in freely selectable feeding order
- Gentle veneer handling with low-energy consumption vacuum grippers
- Easy access to feeder bins
- Non-stop stack change
- Low noise level
- No dust emission
- Safe
- Scarfing and butt sawing inline

## 2 GLUING

2

- Gluing method according to your needs, minimized glue consumption with liquid extrusion (LEG) or curtain coater (CC)
- Precise spreading rate with mass flow meter
- Glue consumption even as low as 130 g/m<sup>2</sup>
- Automatic washing programs
- Settings via modern HMI (Human Machine Interface)

## 3 CONTINUOUS LAY-UP

3

- Accurate for scarfed- and x-ply veneers
- Safe and easy access by operator
- Fulfills requirements of all LVL standards

## 4 PRE-PRESSING

4

- Continuous lay-up
- Guarantee of good glue bond with all LVL thicknesses
- Simple and reliable

## 5 EDGE HOGGERS

5

- Clean billet edges
- Precise and automatic cross-cut

## 6 BILLET INFEED

6

- Buffer between lay-up and hot pressing
- Enables maximum output from the hotpress

## 7 HOT PRESSING

7

- Full press capacity with any product length
- Simple and robust
- Operator presence required only during press loading
- Intelligent thickness control
- For all capacity needs
- Lowest maintenance costs

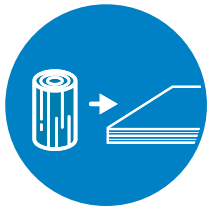
## 8 BILLET HOT STACKING

8

- Final glue setting in hot stacks



# BENEFITS



## COMPLETE MILL SUPPLIER

We have the machinery for every production phase. Raute provides you the whole package – machinery, software, training, and partnership.



## EXPERIENCED PARTNER

More than 50% of all structural LVL is produced using Raute's machinery. We have made ca. 40 LVL line deliveries around the world.



## EFFICIENCY AND ACCURACY

We provide several gluing methods according to your needs, and our analyzers guarantee the strength of the veneer – always in an energy-efficient manner.

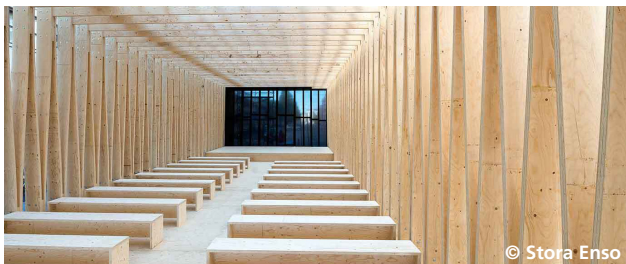


## OCCUPATIONAL SAFETY

Our LVL line requires only three people to monitor the process. Our vacuum cup veneer feeders with exhaust air filtering minimize dust in the respiratory air.

# USAGE

The market for LVL is constantly growing, because eco-friendly solutions are high in demand. LVL is a popular choice, because the affordable material is versatile. Whether you use it for load-bearing floors, walls, or roofs, LVL is easy and quick to install. With Raute's expertise, LVL is the material for every project.



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Making wood matter