



Complete CLT production solutions

LEDINEK - ENGINEERED TIMBER - CLT PRODUCTION LINE IN CANADA

CLT production plant for Element 5 in Ontario Canada

Element5 has invested in a large-scale facility to expand its mass timber production capacity. The company's new facility will produce CLT panels and glulam beams in a range of sizes, offering the market a versatile selection of mass timber products.

The production line is being installed in a new facility on a greenfield site strategically located at the midpoint between Toronto and Detroit. The line integrates the newly developed **Z-Press** to produce superior edge-glued panels. The maximum size of the CLT panels the factory will produce is 16 m x 3,5 m x 0,36 m. The panels have the option to be sanded on both sides for an enhanced visual finish. The facility also is equipped with wood conditioning capabilities and a state-of-the-art CNC router to machine the ready pressed and sanded CLT elements. This will be the first complete turnkey CLT line delivered to North America.

The entire line is integrated under the **X-Lam Manager**, a PC-based master computer system developed by Ledinek Engineering that provides production management, production flow control and visualization, statistics, real-time information and production analysis tools.

Company: **Element 5**

Location: Ontario / Canada

CEO: Patrick Poulin

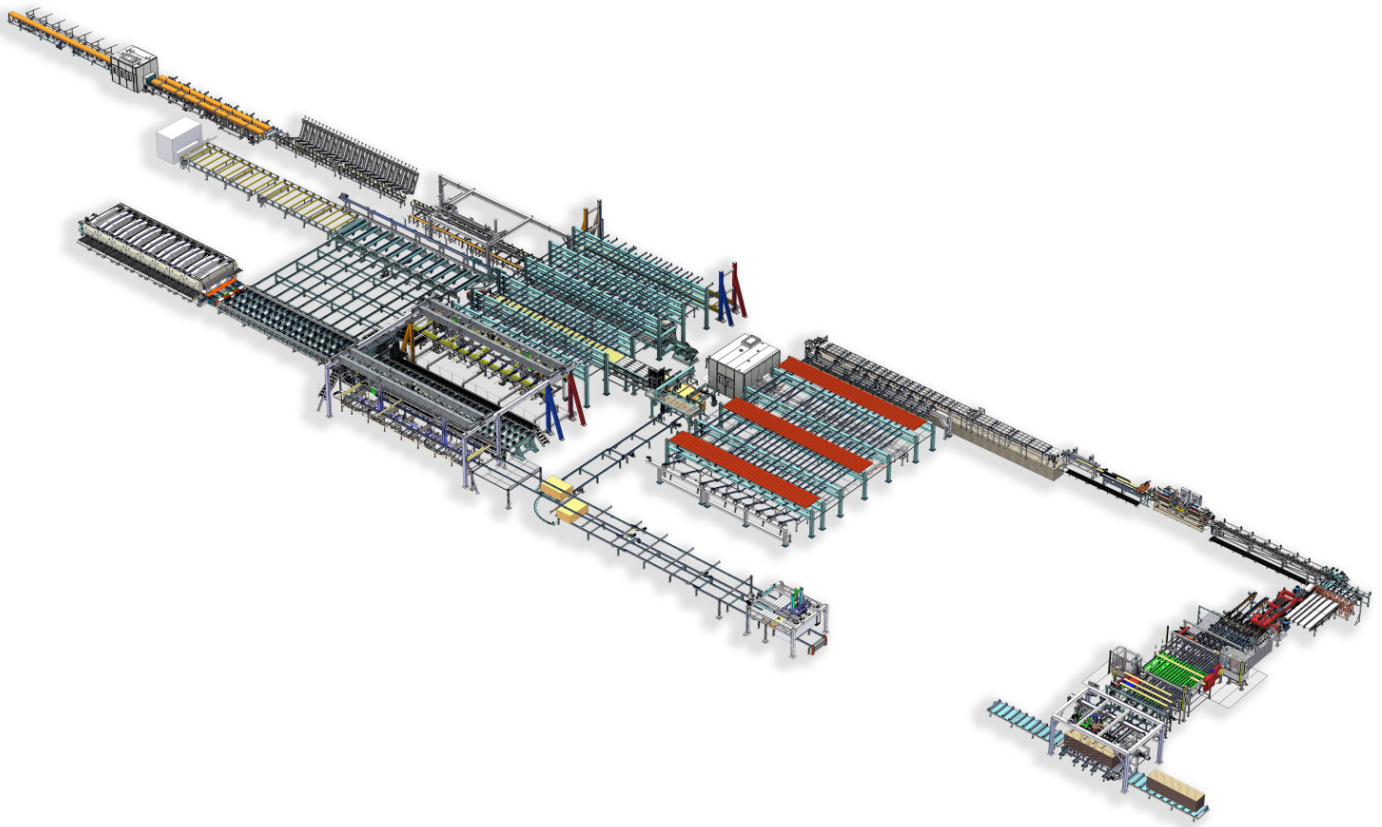
Project Leader: Chris Latour

Employees: 50

Species: Spruce

Operators: 5+2

Production capacity: 40,000 m³ / y



Turnkey CLT production

1. Vacuum de-stacking of 2 different timber qualities
2. Moisture meter with reject gate
3. Cross cut saws to remove timber defects at the board ends
4. Infeed system to finger jointing machine
5. **KONTIZINK L-S120** finger jointing line with capacity up to 80 pcs/min; 120 m/min
6. Multi tray curing storage for the fresh finger joints
7. Infeed to the **SUPERPLAN 4V-S350** planer for laminations, high speed and perfect finish
8. Hot-melt edge gluing **Z-PRESS** for fast assembly bonding of solid wood laminations.
9. Multi tray storage for longitudinal laminations
10. Cross-cut saw for cross lamination panels
11. Stacker for cross layer panels
12. Buffer for cross layer packages
13. Vacuum de-stacking for cross layers
14. Vacuum layer assembly unit for Longitudinal Layer
15. Vacuum layer assembly unit for Cross Layer
16. CNC controlled PUR (1 component polyurethane) glue application unit OEST
17. Solid fast movable PE coated aluminium table for CLT panel assembly
18. **X-PRESS 16** - cross laminated timber press with up to 0,8 N/mm² pressure
19. X-PRESS 16 m x 3,5 m x 0,36 m
20. Longitudinal CLT panel push off unit with outfeed conveyor
21. Surface sanding machine IMEAS 3.200 mm wide
22. Glulam press up to 16 m long
23. **EUROPLAN 600 4V** beam planer 4 side + 4 chamfering units 600 x 300 mm
24. CNC joinery machine

Facts

- Up to 16 m x 3,5 m x 0,36 m panel size
- Production capacity up to 40.000 m³/year
- 80 m³ Shift production
- PUR glue used for higher capacity
- High flexibility of the CLT production process
- Total installed power: app. 2.000 kW
- Dust extraction capacity app. 100.000 m³/h
- Recommended hall: 200 m x 44 m x 9 m


Photo gallery



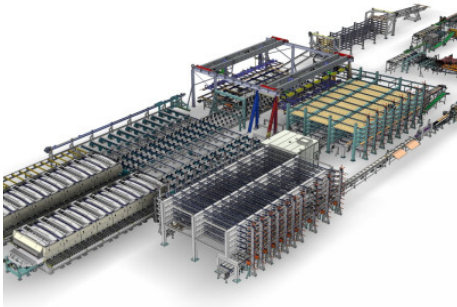


Element5 - St Thomas Plant Tour

Element5 St.Thomas Plant Drone Flyover

 Ledinek X-Press product brochure

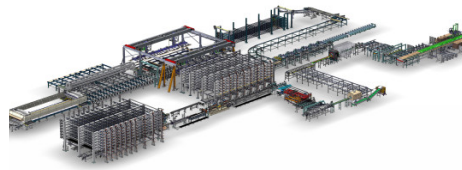
Related products



▶ CLT production line Norway

Company Splitkon AS from Åmot in Norway has invested in a new industrial production for large format cross laminated timber panels.

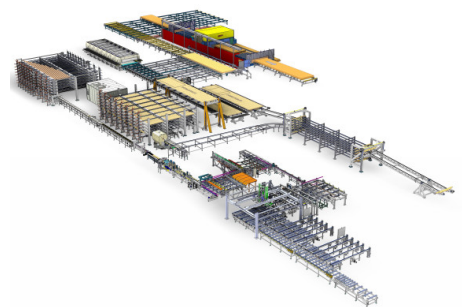
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▶ CLT production line France

S.A.S. Piveteau Bois from Sainte Florence has invested in a new industrial production for large format cross laminated timber panels.

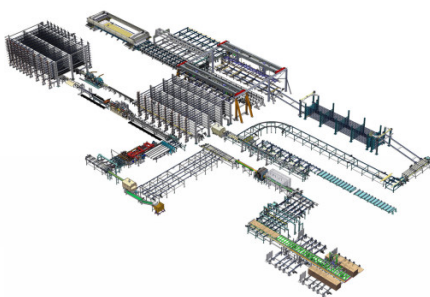
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▶ CLT production line Australia

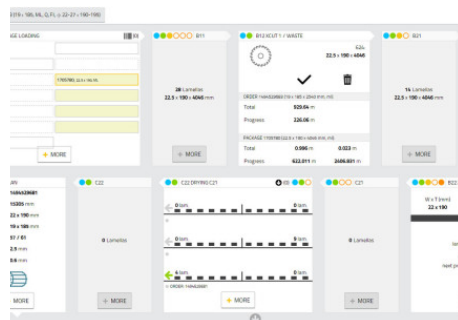
First complete CLT production from one supplier in Australia at XLAM We got the opportunity to supply a CLT production Turnkey solution.

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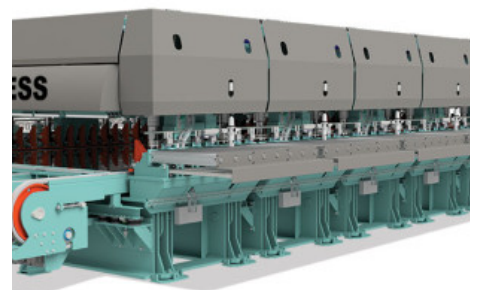
▶ CLT production line Japan

First complete CLT production



▶ X-Lam Manager

Easy to use PC based process control and visualisation system for the complete CLT production



▶ X-Press

Cross laminated timber press CLT Press XPress for excellent quality products

from one supplier in Japan at Cypress Sunadaya Co., Ltd. We got the opportunity to supply a CLT production Turnkey solution.

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line. Comprehensive visualization and editing possibilities of orders for the production of cross laminated timber

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