



**BRIGHTWATER
ENGINEERS**

SOLUTION PROVIDERS TO INDUSTRY



Concept



Design



Manufacture



Install



Commission

PROJECT REPORT

VENEER LINE AND LVL PRESS INSTALLATION

NELSON PINE INDUSTRIES LTD, RICHMOND, NEW ZEALAND





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VENEER LINE AND LVL PRESS

The Situation

Nelson Pine Industries Ltd is a world leader in the manufacture of Medium Density Fibreboard (MDF). In 2000, NPIL announced the establishment of \$80,000,000 in a Laminated Veneer Lumber (LVL) production facility. A Raute Veneer Line, Babcock 6 Deck Drier and a Raute Composer are the key components of the veneer production line and a Dieffenbacher Continuous Press and Billet Handling System are the key components of the LVL manufacturing process line. A New Zealand based contractor was needed to assemble and commission the veneer line, drier and LVL press, and to fabricate, install and commission the materials handling systems.

The Solution

Brightwater Engineers was awarded a single contract in 2 stages to carry out the mechanical installation and commissioning of the Veneer Line, Drier and Waste Handling equipment in the Veneer Building, and the Scarfer, LVL Layup, Press and Billet Handling Equipment in the LVL Building. The total scope of work involved over 40,000 man hours with a peak labour force of 35 trades persons.



The Scope

Veneer Line

The Veneer Line Equipment installed and commissioned consisted of:

- A Raute Veneer Line including the Charger and Lathe, a Clipper and Vacuum Diverter and Vacuum Stackers including all interconnecting conveyors.
- A Babcock 6 Deck Drier 50m long with associated infeed, outfeed, metering equipment, vacuum stacker and outfeed chain conveyors.
- A Raute Composer with associated dry waste conveyors and chipper
- Windsor Waste Disposal Equipment including blowers, blowlines and discharge cyclones.
- A Green Waste Hogger and associated core and reject conveyors.

LVL Line

The LVL Equipment installed and commissioned consisted of:

- CTC Scarfer
- CTC Feeder Line and Glue Room
- Dieffenbacher Layup Station
- RFT Microwave
- Dieffenbacher Continuous Press including the Thermal Oil Heating System.
- Dieffenbacher Press Outfeed and Flying Cutoff Saw.
- The Billet Handling System (refer project report LVL Billet Handling System)
- Baker Billet Handling Crane
- Steinemann Sander
- Cross Cut & Rip Saws
- Windsor Waste Extraction System consisting of extraction ducting to the saws, sander and scarfer, bag houses, blowers, blowlines and retrofitting higher capacity silo top filters to 3 sander dust cyclones.



The Benefits

Brightwater Engineers provided complete turnkey installation:

- a project team with a peak labour force of 35 obtained from existing workshop resources, local hire and subcontractors
- all installation resources including cranes, forklifts and access equipment
- all required temporary site facilities
- supervision, health and safety and Q.A. quality systems.
- interfacing with civil and electrical contractors
- close liason with the client
- Local adaptation of European design to NPIL and NZ Conditions
- Liaison with European designers and equipment suppliers
- Local procurement, fabrication, installation and commissioning
- Delivery on time and to budget.





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