

CNC Processing FACT SHEET

Overview

TimberLab is once again pioneering a new era in the manufacture of Glulam and Engineered timber Solutions.

With 75 years history in Glulam and Engineered Timber, **TimberLab brings to New Zealand the first large scale 5 axis CNC Bridge** for the automated processing of solid wood elements.



We have always done it well. Now we do it Better!

This new facility enables TimberLab to produce precision detailing to an even better and more consistent degree than was possible previously.

Benefits

Designers now have the opportunity to develop distinctive timber structures incorporating timber profiles, connections, details and designs that have not previously been available in New Zealand.

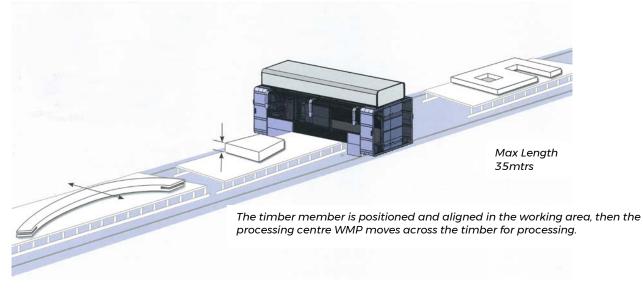
Straight from the draftsman's CAD drawings, TimberLab utilises internationally recognised specialist timber software – CADWORK and LIGNOCAM – to send finished details to the Weinmann CNC processing machine. LIGNOCAM's unique simulation package allows the machinist to see the exact operations to be performed on an element. TimberLab's Weinmann WMP 240 CNC Bridge unit enables the complete and detailed profiling of Glulam, LVL, CLT, Solid timber components up to 35m long and 4m wide.

This acquisition enables a wide range of processing options from accurately forming predetermined shapes to precision cutting, drilling, rebating, grooving, routing and bevelling; all to the most demanding tolerances.





TimberLab - Producing creativity with precision



With the WMP 240 five sides of the element can be processed. The CNC machine has got two processing units. The first is the 4.5 axis Flex 35 sawing unit that can be used for a cutting depth of max. 350 mm, The second is a 5 axis spindle that can access an 18 place tool-changer as well as other pick up stations for specialist tools like a flangeless saw or a deep drill system. This gives TimberLab enormous processing flexibility. Even sharp-edged 90° angles can easily be generated by a special tool for internal corners, which is important for square cut-outs. The WMP can process deep

drillings up to 1.10 m into an element, and the flangeless saw and a chain morticing aggregate will further enhance processing flexibility.

Performance

Accuracy	With computer controlled processing, precise dimensional accuracy (accurate to 1mm per 30mtrs).
Connections	Complex alignment of components can be produced to demanding tolerances.
Innovation	Flexibility of form means innovative designs can be achieved that were not previously possible.
Shaping	With fully interpolating 5 axis processing 3D shapes can be produced in timber.
Speed	End cutting and compound rebating can be speedily achieved on multiple members.
Quality	Repeatable accuracy ensures a precise and reliable quality solution.
Size	The WMP 240 can process solid timber elements 35m long - 4m wide and 450mm thick
Tolerances	Squareness, section sizes, prescribed angles and bevels are computer controlled.

Features

End cutting – Deep cutting – Mortising – Routing – Deep drilling – Slotting – Rebating - Beveling – Large holes – Angle drilling – Shaping – Angle Cutting – Engraving

