

Windsor Log Conditioning Chambers



Simple Cost-Effective Log Softening For Veneers

We know each customer has their own unique site needs and requirements, so each Log Conditioning Chamber (LCC) is designed to exactly suit their needs.

Please get in touch to discuss your requirements and we will tailor a solution just for you.

- Bespoke design to suit specific site requirements
- Longer production runs between knife replacement
- Reduced maintenance costs
- Low capital costs compared to soaking baths
- More environmentally friendly than other methods
- Safe to operate
- Built from corrosion resistant stainless steel



Windsor Log Conditioning Chambers

Benefits Over Log Baths

- Reduced capital and running costs
- Provides a semi continuous supply of logs to peeler or slicer
- No water staining of the logs
- Less waste water / Reduced environmental impact
- Improved thermal efficiency
- Conditioned logs are free from grit and contaminants which damage peeler knives / blades
- Reduced H&S requirements for operation.



Windsor log conditioning chambers offer a simple effective system for softening logs.

How Does It Work?

Each bespoke Log Conditioning Chamber (LCC) is designed to meet the requirements of each facility.

Conditions in the chamber are controlled with low pressure saturated steam to ensure all logs are heated uniformly and kept wet.

Approximately 6-9 'log carts' will fit inside each Log Conditioning Chamber. These log carts can be heated in one of two ways:

BATCH:

The chamber is filled with logs, the doors are closed and this batch of logs is conditioned until the required temperatures are reached. Then the doors are opened and all logs are removed.

PROGRESSIVE:

Operation starts similar to the batch process, but when the doors are opened, only 1-2 log carts are removed from the outfeed end. 1-2 fresh carts are pushed in from the infeed end and the doors are closed.

The conditioning process will then continue. This allows the chamber to better match site throughputs, ensuring logs are at the correct temperature when they are processed.



During operation both doors are opened, new logs are pushed in one end and conditioned logs are pushed out the other end.

Environmentally Friendly

Condensate from the conditioning process is captured through a series of canals and trenches to an outside sump where it is pumped back into the chamber for reuse.

Process water can be reused for many cycles before needing to be replaced.

The overall volume of process water in the log chamber during operation is approximately 10m³.

This reduces the amount of waste water produced by conditioning the logs over more traditional systems, reducing the environmental impact of the system.



System condensate is collected and pumped back into the system for reuse.

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OPTION: Heating System

Windsor log chambers can be designed to work with any heat source available on site.

This could be steam, hot water or hot oil.

If there is no heat plant on site then the chamber can also include a self-contained gas or diesel heating system.



A self contained natural gas heating system that directly drives the steam generator.

OPTION: Automated Doors

Our standard doors are manually operated. They use a hydraulic ram to assist in the raising and lowering of the door. The door is then manually pushed left or right along a rail to clear the door opening (below).

If site safety requires an automated system then we also have our vertical door option (left). This can be remotely raised and lowered from the safety of the log loader cabin.



Our vertical door design allows for safer remote operation.

OPTION: Sprinkler System

A sprinkler line can be added to the log chamber for additional humidity.

With coarse sprinkler heads and a wedge-wire rotary filter, recycled process water can be used through the sprinkler system so no additional water is needed.



An optional filter is available for the sprinkler system.



Let us solve your problem

At Windsor we are all about understanding your process. This allows us to find the perfect solution to your problems. We've worked in a wide range of industries and can offer you support with these products and services:

Air Filtration

- Activated Carbon
- Air Conditioning Filters
- Bag Filters
- Clean Rooms
- Gas Filtration
- HEPA Filters
- Hospital Filters
- Intake Filters
- Theatre Laminar Flow Systems

Air Movement

- Blowers & Gas Boosters
- Dampers & Flow Control
- Fibreglass Fans
- Industrial Fans
- Process Fans
- Side Channel Blowers

Environmental Control

- Bag & Cartridge Filters
- Cooling Towers
- Cyclones
- De-Humidifiers
- Dust Collectors
- Evaporative Cooling Systems
- Fluid Strainers
- Heat Exchangers
- Odour Control
- Scrubbers

Maintenance & Servicing

- All products

Measurement & Instrumentation

- Flow & Pressure instruments
- Hand held pressure measurement
- IR Temperature Instruments

Design & Consulting Services

- Specifically in relation to our expertise in air movement, filtration, humidity control, dust collection

Other Products

- Attenuation
- Energy plants
- Kiln Drying
- Material Handling

Please contact our Wellington office for these products:

3A Broken Hill Rd, Porirua, Wellington 2055, New Zealand
Ph: +64 4 232 8080
wellington.sales@windsor.co.nz