

L200_{PRO}

Operating Modes Overview

nyle
Dry Kilns



KEY FEATURES



Versatility

Easily switch between modes based on the species and chamber configuration.



Energy Savings

Reduce operating costs with DH and Hybrid efficiency.



Product Quality

Lower risk of defects through more precise moisture and temperature control.



Adaptability

Designed to perform across all lumber types and drying schedules.



User-Friendly Interface

Built to simplify operation while giving professionals full control.

Control Modes Overview

Flexible control options built for real-world drying conditions.

The L200Pro is more than just a controller. It's a purpose-built solution that gives kiln operators the ability to manage three distinct operating modes. These options allow you to fine-tune how your kiln handles temperature, humidity, and airflow across a wide range of lumber types.

Whether you're working with hardwoods, softwoods, or a mix of both, the L200Pro helps you maintain consistency, reduce energy use, and improve overall drying performance.

AVAILABLE DRYING MODES

Conventional Mode: Conventional Mode uses a straightforward approach. The dry bulb set-point controls the heat, the wet bulb set-point controls when the vents open, and the spray set-point manages humidity levels through water spray. This mode is easy to operate, reliable, and compatible with nearly any load.

Dry Bulb Set-point → Turns the heat on or off

Wet Bulb Set-point → Opens or closes the vents

This is an ideal option for general-purpose drying, mixed species, or operations familiar with traditional kiln control methods.

DH Mode (Dehumidification): In DH Mode, moisture is removed using a compressor instead of venting. This keeps heat inside the chamber and results in better energy efficiency. The vents only open when the temperature rises beyond the desired range. The spray system works just as it does in Conventional Mode, maintaining humidity when needed.

Dry Bulb Set-point → Turns the heat on or off

Wet Bulb Set-point → Turns the compressor on or off

DH Mode is especially effective for drying hardwoods that need a slower, more controlled process. It reduces the risk of warping, checking, and other moisture-related issues.

Hybrid Mode: Hybrid Mode brings together the strengths of both conventional heating and dehumidification. It uses a standard heat source like gas or electric as the primary driver, while the compressor provides supplemental control. The system intelligently balances both based on set-point conditions, which helps remove moisture more efficiently without wasting heat.

Dry/Wet Bulb Offsets → Controls both heat and compressor

Wet Bulb Set-point → Opens or closes the vents

This is a great solution for faster-drying softwoods, smaller chambers, or more complex loads where traditional DH might not be enough on its own.



PERFORMANCE COMPARISON

	<u>Conventional Mode</u>	<u>DH Mode</u>	<u>Hybrid Mode</u>
Moisture Removal	Uses mechanical venting to exhaust humid air from the chamber.	Removes moisture through a closed-loop dehumidification system powered by a compressor.	Combines compressor-based dehumidification with traditional venting as needed.
Heat Retention	Low. Because moist air is vented to the outside, heat is lost during the process.	High. The system retains most of the heat since venting is minimized.	High. Retains heat by minimizing venting while balancing heat input from multiple sources.
Energy Efficiency	Moderate. Energy is lost through venting and constant reheating of the kiln chamber.	High. Uses less energy by recycling heat and avoiding unnecessary venting.	Very High. Optimizes both energy use and moisture removal with intelligent control logic.
Best for	General-purpose drying across a variety of lumber types.	Slow-drying hardwoods like oak and maple that benefit from gradual, stable drying.	Fast-drying softwoods or difficult loads where DH alone may not keep up.

Choosing the Right Mode for Your Operation

The flexibility of the L200Pro allows you to adjust to the specific needs of your material & environment. For operations that value simplicity and time-tested methods, Conventional Mode remains an excellent default. For those aiming to reduce energy consumption and improve control during long hardwood drying cycles, DH Mode offers clear advantages. And for high-throughput operations or those drying softwoods in tightly controlled spaces, Hybrid Mode delivers the speed and precision you need without sacrificing efficiency.

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