

## Thermal modification

Solid wood, wood-based materials or other lignocellulosic materials can be thermally modified with the IHD thermo kiln under defined conditions. The kiln (MAHILD MH 2000 TMT) allows the treatment in an open process type, i.e. under atmospheric pressure and at temperatures up to 250 °C. Serviceable batch size is up to 1200 mm length, 650 mm width and 800 mm height.

With special devices also flat materials (panels, slats, veneers) or pourable materials (chips, particles, fibres, flours) can be thermally modified.

The thermo kiln is controlled by PC and SPS with the software MM 4000. Process steps and lots of parameters are free programmable. Control factor for thermal treatment are the chamber and the internal wood temperature. To ensure a consistent flow through the batch, the fan is operated in a reversing mode.

## Services

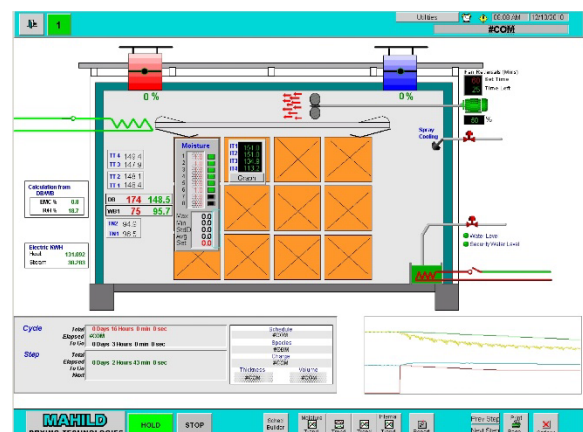
The thermo kiln is available for services for thermal modification, e. g. to investigate achievable modification effects or optimal treatment parameters. With up to 3 processes per week, an appreciable amount of material can be treated if necessary. Costs are depending firstly on the duration of treatment. In order to assess the effects of the modification and to determine achieved material or product properties, subsequent physical, mechanical, chemical, or biological investigations and tests can be performed in our laboratories.

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Thermo kiln of IHD



Control screen

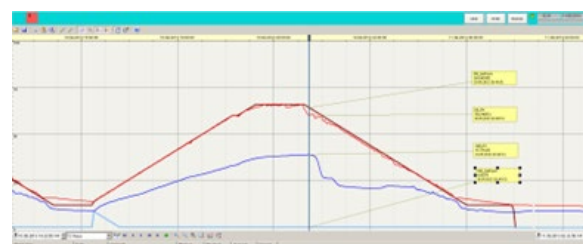


Chart of a process run