

INVESTIGATION REPORT

MAT MOISTENING IN MAKING MDF-BOARDS

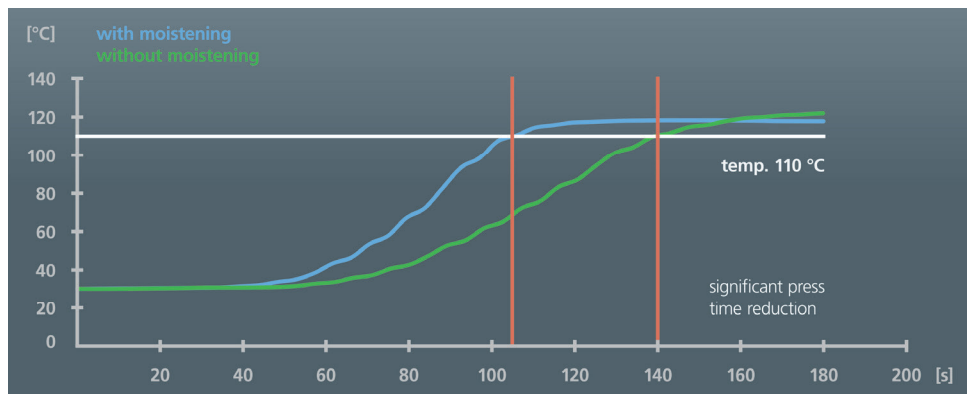
WEKO

Subject of the investigation:

WEKO has entrusted the **Buesgen-Institute** with the examination of the effect of the moisture content of the surfaces of the fiber mat before the pressing process on the board quality (density profile, strength properties and surface quality) and productivity (pressing time).

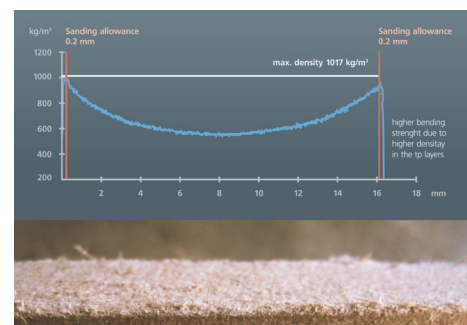
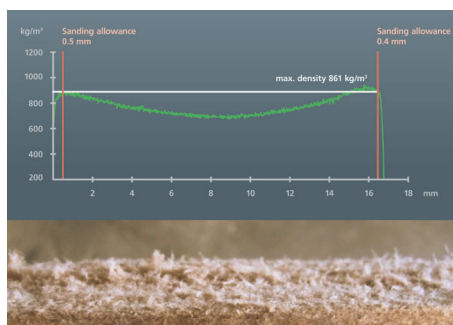
Results: Temperature curve in the middle layer

The MDF variants sprayed **with water** on the surfaces consistently reach the 60 °C, 90 °C and 110 °C mark earlier than the reference produced **without water**. The heating time up to 90 °C seems to decrease also significantly with increasing water application.



Results: Bulk density as a function of panel cross section

With increasing humidification of the fibre mat, the density maxima tends to increase.



Results: Bending strength

The results show, that all MDF variants in which the fibre mat was moistened before pressing have higher bending strengths than the reference MDF without fibre mat moistening. A high surface density should therefore result in a high bending strength. This can be derived from the density profiles determined.



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