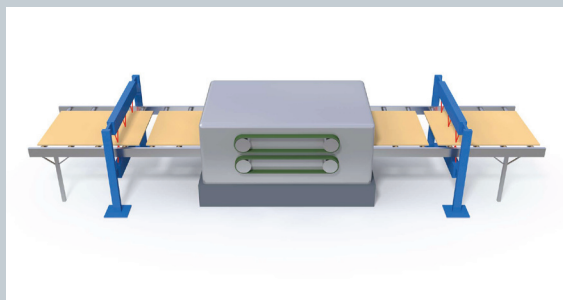


Application note PanelProfiler before and after sander(s)

LIMABs PanelProfiler is proven as the worlds leading non-contact thickness measurement system for all types of wood based panels. It provides real time process feedback which will help improve your product quality and production yield. This application note focuses on the advantages that can be achieved by combined measurement stations before and after sander(s).

System description

With PanelProfiler it is possible to place multiple gauging stations at various points in the production line with all stations connected to a single computer. Typically in wood based panel production a gauging station is mounted before the first sander, before the second sander and after the final sander. The operator is presented with a complete picture of all the board dimensions giving him the tools to optimize the sanding operations. The number of measurement tracks on each measurement station is freely selectable.

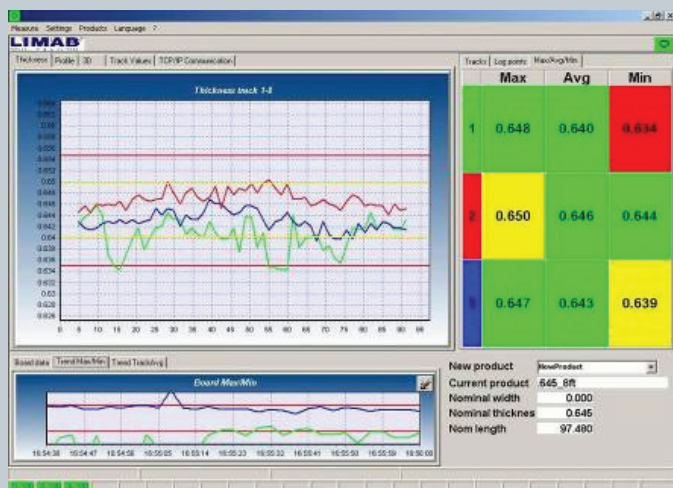


Benefits:

- Monitoring the thickness of panels on the entry of the sander will determine the source of any thickness problems providing critical feedback to the press.
- Prevention of over thickness, or double boards entering the sander eliminating the possible risk of damage or premature belt wear
- By knowing the incoming board thickness the operators can adjust the sanding speed to maintain a good surface finish, eliminating rough surfaces caused by sanding too thick board too quickly.
- Knowledge of incoming panel thickness avoids sanding off to much, reducing belt wear and stress on the sander. In addition thickness feedback to the press lowers raw material usage and saves cost.
- Allows operators to correctly set the sander parallelity by display of left and right thickness

Dynamic Width Adjustable (-DWA) option:

The PanelProfiler is available with dynamic width adjustment (-DWA), which will adjust the gauging positions for different panel widths and track the lateral position of boards, automatically moving the outermost pairs of sensors to the critical positions close to the board edges. This is an excellent choice in sanders with sideways incremental panel movements in order to increase life length of the sanding belts.



Advantages with non-contact measurement

- High accuracy +/- 0.03mm (+/-0.001")
- No wearing parts – lower maintenance costs
- No mechanical board contact – no board marking
- High measurement speed – unlike conventional mechanical contact rollers the PanelProfiler measures the whole panel from the very front edge, without mechanical bouncing problems
- Suitable for all types of boards and products

References

LIMAB has for more than 30 years been a world leading company in non-contact measurements for various industrial applications. PanelProfiler is installed in more than 100 plants worldwide, both in bigger company groups and smaller enterprises. It measures all types of panels, including MDF, HDF, particleboard, OSB, veneer and plywood. It is used after presses, at sanders and in finishing lines.