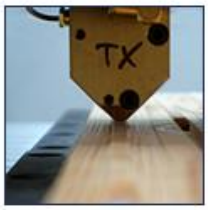
LIGNOSTATION™

Preparation and recording



LIGNOSTATION™ is a compact, high-resolution system for preparing wood surfaces and recording the tree ring parameters and the wood density. LIGNOSTATION™, developed in cooperation with the University of Freiburg, is based on an entirely novel concept.

A precision mill prepares the measuring radii on the wood surface. Then, precise scans are obtained using a high-frequency probe. At the same time, optical scans of the surface can be made and analyzed in comparison with the image. The entire system is computer-controlled and relieves you of a great deal of time-consuming routine tasks. You attach the sample, define the measuring radius on the PC screen, and LIGNOSTATION™ will do the rest, from preparation up to measurement. You can fully concentrate on the scientific evaluation.

Applications

- Dendrochronology
- Density measurement
- Dendroecology
- Dendroclimatology
- Forestry
- Geography

Benefits

- Direct high-frequency scanning system
- No development of film required
- Automated procedure
- Compact, space-saving system (300 x 100 cm base area/footprint)
- No X-ray emissions
- Moderately priced

Technical details

- Density measuring using a high-resolution high-frequency probe
- Optical scans using a high-resolution camera
- Sample material: cores or stem disks
- Maximum length of measurement: 450 mm x 450 mm
- Image resolution: <= 100 microns (= 1/10 mm)

Example of a complete system:

- LIGNOTRIM™: High-resolution surface mill
- LIGNOSCAN™: High-resolution electromagnetic scanner
- LIGNOSCOP™: Microcamera scanner
- LIGNOVISION™: Software for tree ring detection and evaluation of the density curves

Flexibility

The individual system components can be adapted to your specific needs:

- Surface treatment: LIGNOSTATION™ + LIGNOTRIM™
- Density analysis: LIGNOSTATION™ + LIGNOTRIM™ + LIGNOSCAN™ + LIGNOSCOP™
- Optical analysis: LIGNOSTATION™ + LIGNOTRIM™ + LIGNOSCOP™
- Optical and density analysis: LIGNOSTATION™ + LIGNOTRIM™ + LIGNOSCAN™ + LIGNOSCOP™