

Mission statement of the laboratory

The University of West Hungary, Faculty of Wood Sciences successfully applied for a grant program named GVOP announced by the Ministry of Economics and Transportation.

The subsidy came throughout the National Development Plan that Hungary has set up to be able to receive EU Structural Funds.

The obtained financial support serves opportunity for basic and applied scientific research and development, as well as technological innovation, and tuition regarding wooden structures.

Accredited testing laboratories - especially in the EU – play more and more important role in certifying quality and proof for timber structures as well as door and window structures.

This up-to-date testing laboratory brings forth such a testing basis, that has had neither the University, nor the region yet at all.

Testing full size structural elements can be obtained in the lab.

The aim of the lab is to provide assistance in widening the range of timber construction in Hungary, which means technologically modern, economical and aesthetic appearance of wooden structures.

Equipments of the lab

The loading apparatus consists of two servo hydraulic cylinder (25kN and 15kN capacity), power supply, and control panel.

Electronic multichannel data processing unit measures the analyzed mechanical properties, force, and displacement.

Multifunctional steel loading frame has been built to transfer the loading.

Detailed program of the event

10⁰⁰ – *Opening speech*

Dr. Sándor Molnár D.Sc. dean

10¹⁵ – Introduction of the lab

Dr. Tamás Fodor C.Sc.

11¹⁰ – Coffee break

11²⁰ – Professional presentation

13⁰⁰ – Lunch

14⁰⁰ – *Testing demonstration*

Dr. Tamás Fodor C.Sc.

Dr. Levente Dénes

15⁴⁵ – Coffee break

16¹⁰ – Free exchange of views

Testing abilities of the lab:

- Beam products' bearing and stiffness capacity testing up to 8-10 meters length.
- Fatigue and durability testing of structural elements.
- Bearing, stiffness, and dynamic capacity testing of connections of structural elements.
- Determination of bearing capacity of wall panels, and slabs by static and dynamic loading
- Determination of bearing and stiffness capacity and durability of furnitures, doors, and windows.
- Security testing of doors, and windows.
- Finite Element Model identification.