The Lab former is designed to form a mat in a simple and rapid manner to produce a 500 mm x 500 mm panel with a max thickness of 40 mm, for testing purposes and a maximum variation in density of 5%. The unit is equipped with a vibrating loader, the vibration intensity of which may be adjusted manually. The material is loaded by a belt, the speed of which may be set via the software. A set of speed-controlled comb rolls forms the mat homogenously. The speed at which the bottom tray moves may also be adjusted by means of the software to achieve an optimal longitudinal distribution of the material. Lastly a cylinder pre-presses the newly formed mat before it is conveyed to the hot press.