

Influence of boiling temperature on the panels lvl (laminated veneer lumber) quality made with oak (canariensis) algeria wood

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Description

The panels LVL (Laminated Veneer Lumber) are less used in construction, which are produced by peeling trunk of trees, undergone baking operation which one determined the quality of plating and LVL panels made by gluing. Our study here consist to vary the boiling temperatures ranging from 40C, 50 C, 60 C, to 70 C (two panels are drawn for each temperature, and 14 specimens (20* 20* 336mm) for each panels) that was secure settings peeling, speed of rotation of the lathe, pressure bar, clearance angle of the knife and the thickness of the veneer, as we fix the amount of glue 400g/cm², the pressure pressing the panels in order to clearly identify the influence of baking temperature logs of Algerian oak wood quality. Our controls are carried out by non-destructive testing after that the specimens are tested with destructive method under four point bending, according to the perpendicular direction and parallel plating, and we took into consideration the calculation of Young's modulus and stress at break for each series of panels.