Ireneusz Czmoch, *Probabilistic Modelling of Bending Strength of Timber Beams with the Help of Weak Zones Model* , Periodica Polytechnica - Civil Engineering, 65(4), pp. 1295–1305, 2021

on line>> https://pp.bme.hu/ci/article/view/19228/9231

Abstract
The variability of longitudinal bending strength of timber beams due to the presence of knots and other defects is analyzed. The weak zones model of timber beam bending strength used in the analysis consists of short weak zones (knots or group of them) and strong sections of clear wood. The load bearing capacity of timber beams is defined as an extreme (minimum) value problem or as a first downcrossing problem. (...)