

3D - Modeling of Wood from CT-Data

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Abstract

The presentation describes an application of computed tomography (CT) to generate 3D volume-models of softwood. We used a medical scanner to obtain CT data of pine specimen. As a preliminary step we performed a segmentation to separate late- and early-wood. The modelling procedures and challenges to get accurate 3D models for further application are discussed. The 3D volume models may in future be applied to perform Finite Element (FE) analyses or general computer simulations. Our method allows also to model further anatomical features of wood such as internal defects like knots or resin pockets.



Fig. 1: 3D-solid and the corresponding specimen.

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