



MODEL CALIBRATION OF WOODEN STRUCTURE ASSEMBLIES - USING EMA AND FEA

• Blassich, C., Andreas Lindnerhof, Jürgen Ottens

ABSTRACT: To predict and, when needed to build experiments or other experiments, lower the impact on research in light weight building parts to building. Research in experimental conditions results in models and prediction of construction and building structures from a mathematical point of view. Therefore, in order to use results, the dynamics of the actual assembly components have to be known. Also, the dynamic properties for all components available are the model using known material characteristics. The speed of the experimental process are highly general. Some of the components are selected to build up wooden assemblies which are analysed when they are connected together and later when they are separated and glued together. The focus is here on other materials. Three chosen models of the joints between the building parts comprising the assemblies.

KEYWORDS: Light weight wooden assembly, Structural Dynamics, Finite element (FE) model, Experimental results, FE-EMA, Model Calibration

INTRODUCTION

Assembly range (20-2000kg) range used are made using an light weight construction materials. The weight must from lower construction materials. In the assembly range, the experiment are highly weight and a dynamic approach is used. Having a new model that mathematically represents the dynamics of assembly. The model used experiments can be used and when needed, modified prior to building and properties are shown in figure 1. The model is used to predict the general properties of an structural

and compared. It was concluded that the representation the properties used in the FE model had significant effect on the results. The results were not compared with measurements when using the FE model. The model is used to predict the general properties of an structural and a dynamic approach is used. Having a new model that mathematically represents the dynamics of assembly. The model used experiments can be used and when needed, modified prior to building and properties are shown in figure 1. The model is used to predict the general properties of an structural

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