2002

Finite Element Analysis of Contact State between Finger and Wood Surface

- Prediction of stress and strain generated at the locations of tactile receptors -

The quality of wood surface, especially roughness, is usually evaluated by visual and/or tactile feeling. A roughness parameter related to tactile feeling is one of the important measure for evaluation of the surface quality of wood products. In order to develop such the parameter, it is necessary to understand the relationship between In this study, we simulated the contact status between finger and a plate with a small triangular bump and .

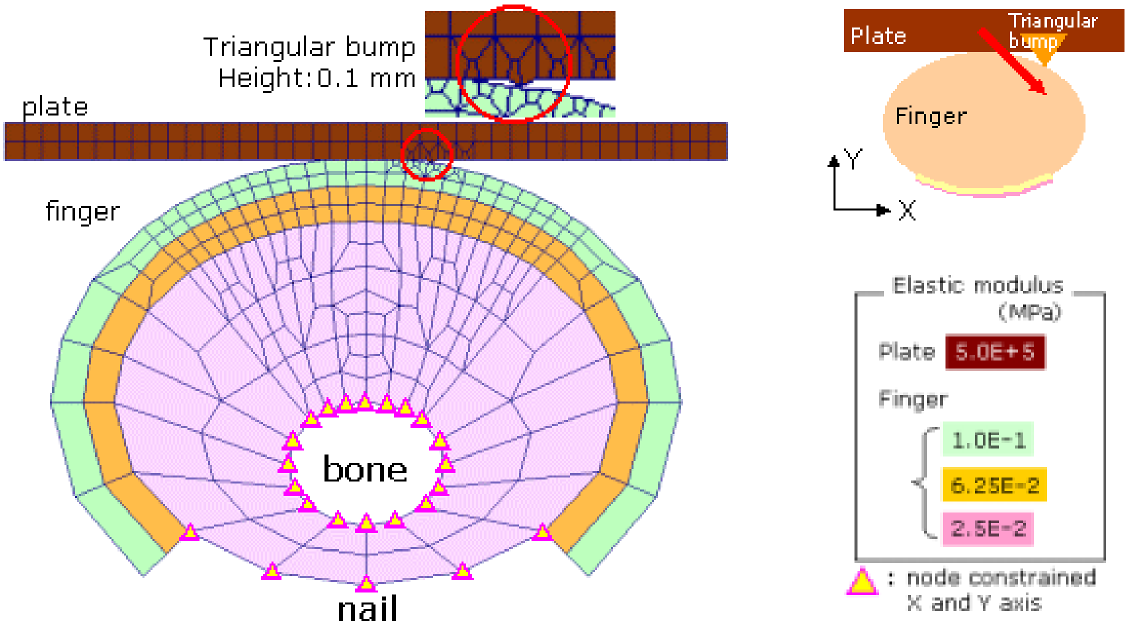

Fig.1 FE model of finger and plate

Size of finger model was based on Maeno et al.1).

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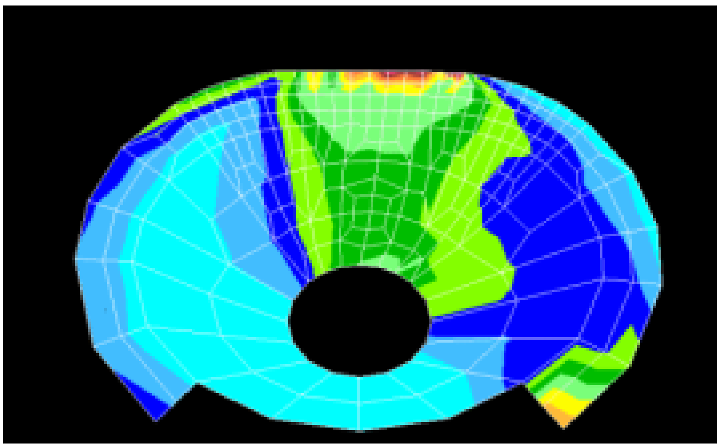

Fig.2 Change of Misses stress