

## Measure (wood)

In this chapter is described which demands are made upon the wood to be measured and how the wood must be placed.

### Wood

In order to measure the stiffness and strength class of wood correctly, demands are made upon both the wood as well as the support of the wood.

### Stress Wave Activator

The impulse of the “Stress Wave Activator” must enter the wood with sufficient force and the reflected vibration must be taken over correctly by the “Stress Wave Detector”.

### MTG with internal “Stress Wave Activator”

The internal “Stress Wave Activator” shoots against the wood end with a fixed quantity of energy. Due to the limited force only wood with a smooth end can be measured and wood dimensions may not exceed 115 mm in thickness and 250 mm in width. The maximum board length is dependent of the dimensions of the board end and may not exceed 8 metres.



### MTG with external “Stress Wave Activator”

The external “Stress Wave Activator” is a hammer with a certain weight. The weight classes of the appropriate hammers are 100, 200 and 300 grams. Dependent on the roughness of the beam ends as well as the cross section and length, one of these hammers can be used. The force of the stroke with the hammer does not make a difference for a good measurement! The maximum wood dimensions with an external hammer are 300 mm wood thickness, 400 mm wood width and 20 metres wood length.



## Wood ends



Wood with a smooth top-end



Wood with a rough top-end

## Support

One beam can be measured at a time. This is the reason the beam must be free from other beams and vibrations from the foundation may not be transmitted in the wood.



Several supports.



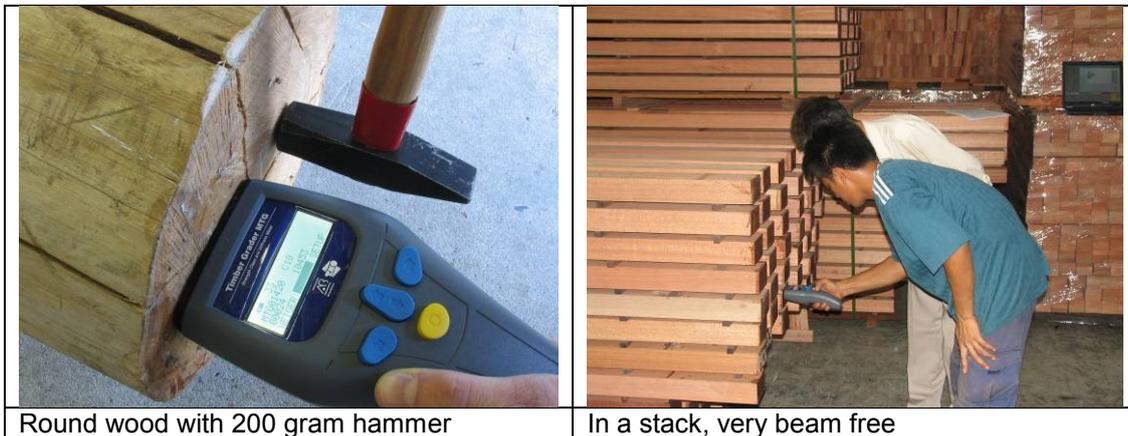
Support on wooden trestles.

## MTG (How to)

The MTG must be pressed against the wood perpendicular and with a light pressure. With the yellow button the measurement is activated, the “Stress Wave Activator” will hit the wood and the “Stress Wave Detector” will record the vibration (the sound). During this action the MTG may not be moved.



Special applications.





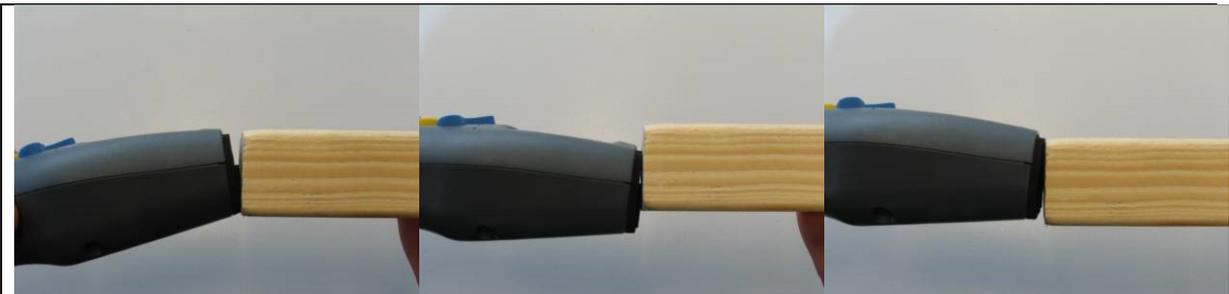
6500x300x300 mm with 200 gram hammer



7500x240x140 with 300 gram hammer

### MTG (How not to)

The MTG must be pressed against the wood perpendicular and with a light pressure. With the yellow button the measurement is activated, the "Stress Wave Activator" will hit the wood and the "Stress Wave Detector" will record the vibration (the sound). During this action the MTG may not be moved.



Inclination to below

Wrongly placed

Inclination to above



Not enough pressure

Inclination to the right

Inclination to the left