2000

Acoustic Emission (AE) Monitoring in the Wood Treatment with Polyethylene Glycol

The feasibility of Acoustic emission (AE) monitoring to detect abnormal shrinkage or crack in the specimen during PEG treatment and the techniques for the effective detection of AE wave were discussed.

Species and size of wood specimens

(Japanese chestnut, camphor tree, oak)

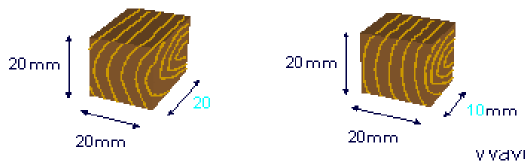
Cut end cross section 20 ×20mm, tangential length 10mm :3 pieces

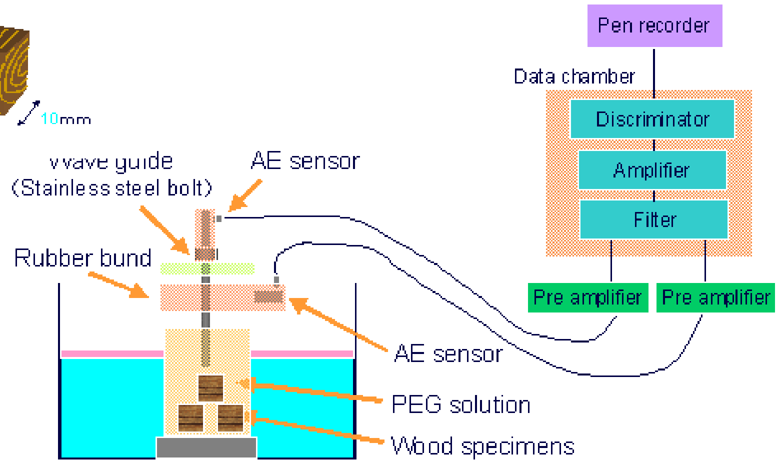
Cut end cross section 20 ×20mm, tangential length 20mm :3 pieces

(Japanese cedar)

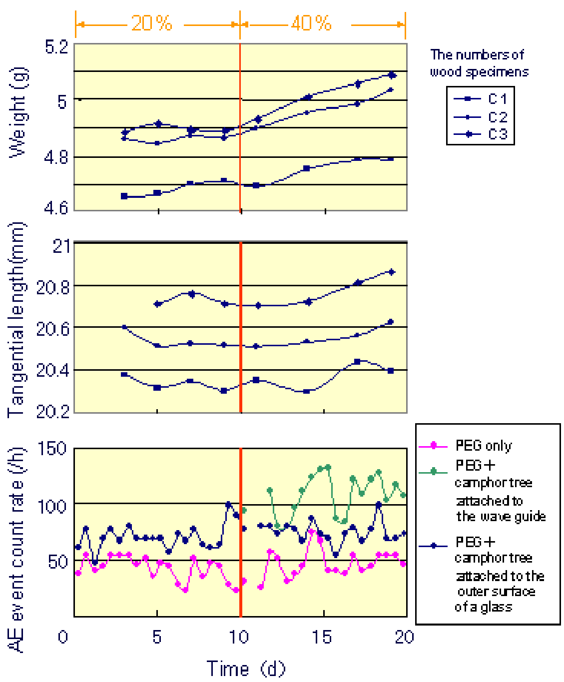
Heartwood :20 ×20 ×20mm :5 pieces

Sapwood :20 ×20 ×20mm :5 pieces

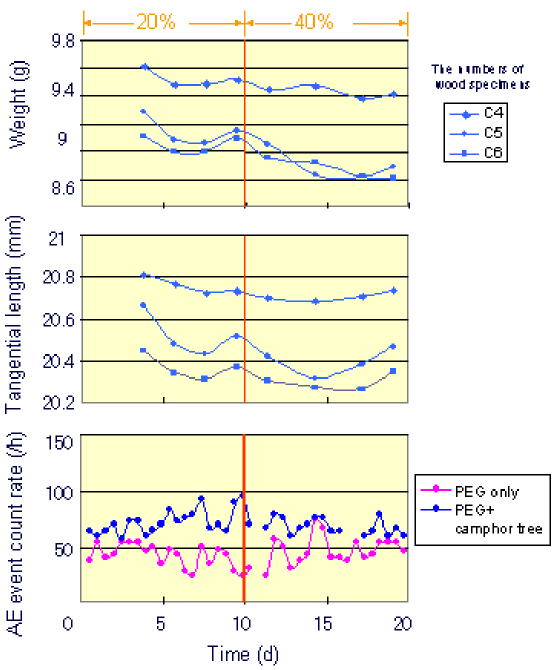




AE measuring method to PEG treatment



Camphor tree (length:10mm)



Camphor tree (length:20mm)