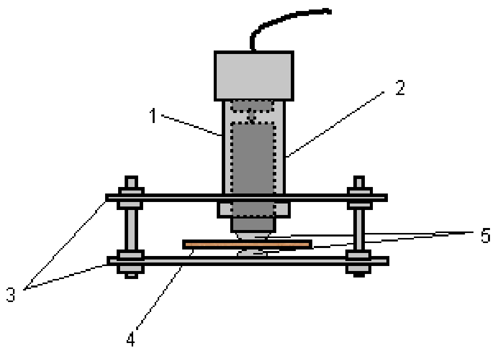
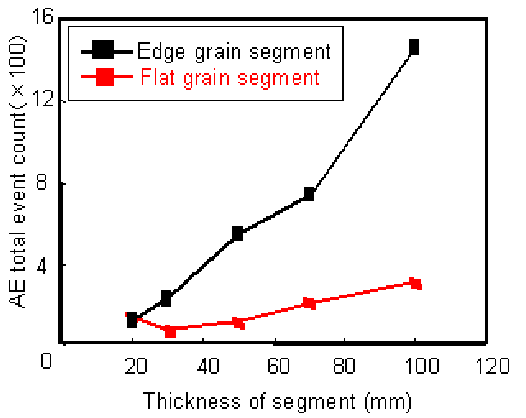
1999

AE Generation from Radial and Tangential Sections of Softwood during Drying

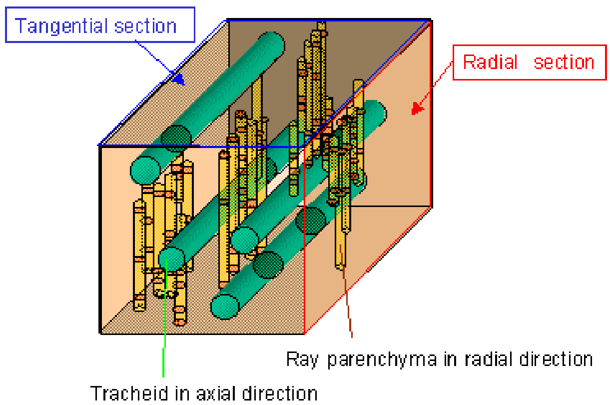
In order to examine the generation mechanism of acoustic emission, AE, during wood drying, AE event counts were measured during drying of radial and tangential sections with different thicknesses and lengths from hinoki, Chamaecyparis obtusa. Relations of AE total event count to thickness and length of a section strongly suggest that the withdrawal of water from ray parenchyma cells is responsible to AE generation from sections.



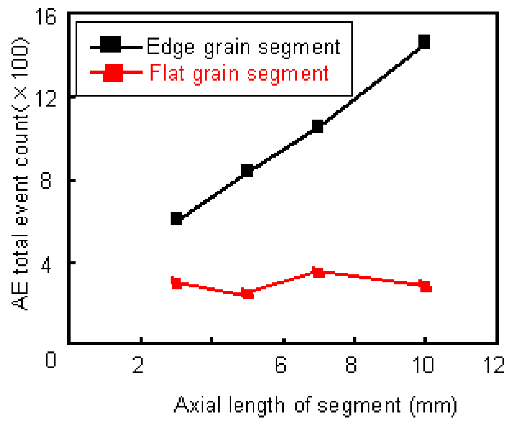
Mounting of AE sensors on specimens
1. AE sensor; 2. sensor holder; 3. aluminum plate;
4. specimen; 5. semisphere of duralumin.



Relationship between thickness of segment (μm)
and AE total event count



<Cell structure of *Chamaecyparis obtusa*>



Relationship between axial length of segment (mm)
and AE total event count