Superheated steam application to optimize the kiln drying of rubberwood (Hevea brasiliensis)

ABSTRACT

A study was conducted to optimize the kiln drying of 50 mm thick rubber wood boards using a combination of superheated steam and hot air. The results revealed that initial application of saturated steam at 100 °C, followed by a period of superheated steam application at 110 °C and finally drying in hot air at 65 °C as in the conventional kiln drying, gave the best result in terms of minimizing drying defects and also shortening the drying time.

Keyword: Steam; Superheated steam; Moisture gradient; Saturated steam; South East Asian region