

Kenaf fibre: its potential and review on bending fatigue of hollow shaft composites

ABSTRACT

The fast growing use of composite in many applications has been focused on sustainable and renewable reinforced composites. Natural fibres were introduced and increasingly used due to their availability and environmental issues. Kenaf is the most common natural fiber used as reinforcement in polymer matrix composites (PMC). Therefore, this study analyzes the bending fatigue for kenaf fiber hollow shaft composite. The wet filament winding technique was used to prepare the composite specimens for the bending fatigue test. Different orientation angles (45° and 90°) and reinforced with aluminum were studied.

Keyword: Filament winding; Kenaf fiber; Natural fiber; Rotating bending fatigue