

Conceptual design and prototype of an ergonomic back-leaning posture support for motorbike riders

ABSTRACT

This study presents a prototype of an ergonomic back-leaning postures support for motorbike in Malaysia. Motorbike riders are more exposed to musculoskeletal disorders such as lower back pain. Prototype consists of two basic components, flame and backrest cushion. Prototype back-leaning posture support is evaluated by comparing it with anthropometry data in terms of flexible range accommodations and by test runs on road with riders. Prototype has shown better comfort seating, adjustability, stability, solidity, durability and safety for riders.

Keyword: Back posture support; Ergonomic; Lower back pain; Motorbike