Abstract

This paper discusses the ergonomic improvements that can be incorporated in the design of a bicycle, a bike of rural people. The suggested design modifications for the improved ergonomics in the bicycle are lateral movement of the seat to ensure optimum distance between the rider's body and the handle, introduction of a back rest while simultaneously maintaining an industrial design. Human aspects play an important role in the ergonomic considerations. An effort has been made to understand the muscular problems faced by the riders while riding the bicycles. Optimum metrics were obtained for riders of different heights and a customizable design of the bicycle was proposed to enhance the
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ergonomics of the bicycle. All design modifications were made based on anthropometric data of an average Indian.

References

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