

Development of Multifunctional Uses of Ergonomic Sewing machine Table to Promote Sustainability

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Abstract

This research is about using ergonomic furniture in industrial work. It is used to fit employees posture, prevent arthritis and reduce the number of work-related injuries. Ergonomic furniture is the type of furniture that is widely used in the office and industry. People spend most of their day and life at work, so it is necessary to consider that they are comfortable working in their workplace. The ergonomic furniture allows workers to maintain the correct posture while being productive on the job. A hydraulic system is used to make the furniture ergonomically adjustable. A vibration sensor is also added to the furniture for better and safe observation of the furniture. Woods, plastic and metal parts are used to manufacture the product. This product will be helpful to the workers to work in the industry with comfort and save the environment. An ergonomic table is an adjustable and user-friendly table designed to prevent the user from getting injured or working at an uncomfortable angle. An ergonomic table provides maximum comfort for the user, high efficiency, and increased focus and works productivity. An ergonomic table can be set up at the right height for the individual and chair used. An ergonomic table and a sewing machine in the sewing section of a garment industry will provide comfort easier and faster working environment to the workers, which will finally result in higher industrial production and optimum efficiency. Ergonomic furniture not only increases comfort but also increases productivity and decreases stress.

Keywords

Ergonomics, Industry 4.0, Sustainability, Compliance, Environment

Biographies

Md. Rakibul Hoque his current research interest is in Product & Material Design, Ergonomics, Quality Management, Quality Control, Industrial Design & Architecture, Industrial Revolution, Process Architecture, Supply Chain & Sustainability. He has attended the seminar about textile machinery. His research interests are SolidWorks 3D modeling, Simulation, machineries design and maintenance. He has designed a sandwich machine by SolidWorks software.

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