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| <b>Title</b> | <b>Assessment of Working Conditions in Two Different Semiconductor Manufacturing Lines: Effective Ergonomics Interventions</b>   |
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| Keywords     | Semiconductors manufacturing; Musculoskeletal disorders; Productivity; Health  |
| Abstract     | <p>This article examines two manufacturing lines producing semiconductors using different technology concepts, namely Conventional Line (CL) and Lean Production Line (LPL). Both lines manufacturing the same products were compared using various factors, including working conditions, task risks and dangers of the job, and physical body stress. Ergonomic approaches were adopted in the investigation of the two lines. Survey questionnaires were administered to 30% of the workers, and multiple statistical tests were used to determine crucial predictors and to investigate the interactions between the factors. This research has shown that improved ergonomics factors will lead to better working conditions and thus increased job satisfaction. The observed ergonomic differences of these two production lines are compared, and appropriate managerial remedial action is recommended. The interventions to both the lines should reduce accident rates, minimize waste of resources, improve work effectiveness, and provide a better working environment that enhances employees' morale and maximizes productivity and profits.</p> |