

FABRICATION AREA ERGONOMIC CONTROL PRACTICES IN THE US SEMICONDUCTOR INDUSTRY

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ABSTRACT

Ergonomic risk factors have become an increasingly important issue in the semiconductor industry. Past studies of the semiconductor industry have found increased rates of cumulative musculoskeletal injuries among fabrication (fab) area workers in comparison to non-fabrication area workers, as well as a high percentage of lost work days due to musculoskeletal disorders among semiconductor industry workers. The Semiconductor industry has taken a very proactive approach to developing consensus guidelines on ergonomics practices and design through the Semiconductor Equipment and Materials Institute (SEMI) and the activities of SEMATECH. A survey of seven semiconductor manufacturing companies was performed to examine and characterize the different types of ergonomic risk reduction approaches presently being used in the industry. Six primary categories of ergonomic controls were established to group the responses of the companies surveyed. The survey results present an ordered view of the types of ergonomic controls currently in place in the industry, and can be used as a tool for the evaluation and future development of ergonomic strategies and practices in semiconductor fabrication areas.