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## Summary

### Arbete och Hälsa 2005:01

#### Ett produktionssystem under förändring

##### – ergonomisk och teknisk utvärdering

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#### A production system change

##### – ergonomic and technical evaluations

An evaluation of the impact of partial automation strategies on productivity and ergonomics at an electronics company was performed. This change included adoption of a serial line flow from a parallel batch flow strategy. The change process, which used both a project head group and a work organisation group, was also studied.

The partial automation of assembly operations reduced the total repetitive assembly work at the system level and increased productivity. At the remaining assembly stations however, the repetitive assembly work increased due to the automation of the transportation functions and increased work-pace. The operators found the mental work load was higher in the new system. They also experienced the manual assembly station in the beginning of the line as the worst job in the system .

Lack of management continuity at the department was identified as one of the largest process problems. The manager set his view on how the production and work environment goals should be met. Thus the manager set the work organisation without adopting the plan of work rotation that the work organisation group had presented. This contributed to dissatisfaction amongst the operators involved in the development process.

Keywords: Automation, change process, ergonomics, manual assembly, mental workload, productivity

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