

ABSTRAK

PT. Bintang Permata Sejati is a garment manufacturing company. In a five-month period, there were 11 occasions labor accidents at buttonhole stations due to workplace conditions. Workplace accidents cause the production process to be temporarily suspended, resulting in overtime. The corporation will be responsible for Rp. 44,055,000 for 5 months to cover overtime and hospital expenditures. Because the factory does not practice occupational health and safety management, there are no efforts in place to deal with incidents. The purpose of the HIRARC design is to analyze and solve problems. The work put in is the result of the analysis.

The HIRARC design is broken down into three stages. The initial stage is hazard identification, followed by risk assessment and risk control. A solution is the result of the HIRARC design. To fix the problem, the solution is implemented in the manufacturing.

The identification of issues at the buttonhole work station revealed 17 issues related to people, materials, methods, machines, and the environment. There are 8 problems at low risk, 3 problems at medium risk, and 6 problems at high risk, according to the risk assessment. Iron gloves, duct tape insulation, cable ties, taking advantage of relaxation breaks, and changing chairs were all used to solve the problem. The cost of the implemented effort is Rp. 1.620.000,- which is significantly less than the profit. The HIRARC paper must be kept up to date to remain current, and more research on the level of effectiveness of the effort is required.

Keywords:

Hazard identification risk assessment risk control, Occupational Accident and Health, Garment industry, *Safety Cost*