

## Safety and Health Management Implementation

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**Abstract**—The development of industry by empowering high technology is accompanied by an increase in players and technology users in the industrial era and globalization. So it is necessary to pay attention to work safety as an effort to improve human resources in the field of Occupational Safety and Health Management System. The theme of Occupational Safety and Health Management System is very interesting to study and continue to develop. So the purpose of this research is to know the implementation of Occupational Safety and Health Management System in accordance with the Standard Operating Procedure and to know the use of Personal Protective Equipment for employees in the maintenance department of a shoe-making company according to the rules and rules of Occupational Safety and Health Management System. The research method used is comparative quantitative research (comparing quantitatively). The research subjects were employees in the maintenance department of a shoe-making company which collected 60 people. The results of this study indicate that the Post-Test value > from the Pre-Test results. Therefore, the implementation of the Health and Safety Management System in the maintenance department has been implemented or in accordance with standart operation procedure and policies of a shoe-making company.

**Keywords** : *Occupational Safety and Health Management System, Maintenance, SOP*

### I. INTRODUCTION

In the industrial era and globalization which is marked by the growing development of industry by empowering high technology accompanied by an increase in actors and technology users by paying attention to work safety. According to (JUMALI & Partiwi, 2013) the rational and simultaneous paradigm of safety management is the basis for organizational

thinking towards the formation of work safety behavior based on safety perceptions and attitudes as well. So the theme about. So that in the era of industrialization 4.0 demands high work productivity, productivity, effectiveness and good work efficiency as a strong foundation for workers and companies in the main implementation of national development (Koto et al., 2019)

A shoe-making company that stands in Sidoarjo. Around a shoe-making company area, it has also been equipped with Occupational Safety and Health signs in almost all areas of the factory, and Occupational Safety and Health signs at the factory location have also provided emergency response equipment such as fire extinguishers, Occupational Safety and Health tools, all of which are placed in easy place affordable for workers (Choi et al., 2016). In a production system that is run by order (make to order) with 70% of its products sold abroad and the rest consumed by local and domestic companies (Ghoumrassi & Tigu, 2017).

The workers at Occupational Safety and Health are inseparable from work accidents but work accidents that occur do not interfere with the working day at the company, according to the initial survey work accidents occur when maintenance workers when repairing machines there are still workers who do not use personal protective equipment in accordance with Standard Operations Procedure (SOP) a shoe-making company (Alvira et al., 2015), this is proven by accidents occurring during the repair of the conveyor machine. Not only that, when using a hand grinding machine, workers are exposed to grinding sparks, and when repairing machines, workers are exposed to electric current, when repairing machines using The worker's hand electric drill is exposed to splashes of iron during drilling, during machine repair, limbs often hit objects from the machine and many other accidents. The implementation of Occupational Safety and Health Management System at a shoe-making company shows that

only most of the workers who work have used personal protective equipment. with very minimal standards such as the use of gloves, masks, safety shoes and head protection, but there are also some workers who do not use complete Personal Protective Equipment (PPE) for a very classic reason, namely inhibiting work (less freedom of movement / activity) (Supriyadi et al., 2017). With this background, researchers are interested in conducting researchers an with the title

## II. METHOD

The initial step is carried out before conducting the first research - the first research contains the steps carried out in research, the research method is described in detail the design, method or approach used in answering research problems to achieve research objectives, descriptions can include research parameters, models used, research design, data acquisition and data analysis techniques and theories to support the implementation of the research.

The first stage of this research is the formulation of the problem, namely the identification of the application of Occupational Safety and Health Management System whether it is in accordance with the SOP (Standard operating procedure) and whether the use of Personal Protective Equipment (PPE) is in accordance with Occupational Safety and Health plus literature studies and field studies in order to obtain further research objectives starting with data collection and the implementation of the Occupational Safety and Health procedures and then provide suggestions for improvements for the next trial process, then analyze the results of the research and then collect and make suggestions.

Data was collected through observation, filling out questionnaires and interviews. Initial observations were made by looking at employees in the maintenance department and the completeness of the use of PPE. To strengthen the initial observations, an initial interview method was carried out with superiors in the maintenance department including managers, supervisors and team heads in the maintenance department. From the results of observations and initial interviews, it was intended to formulate a questionnaire instrument. for the implementation of the Pre-test. Pre-Test results are tabulated and documented. And from the results of the Pre-Test, it is used as the basis for providing "intervention" / socialization of the use of PPE

according to regulations and Occupational Safety and Health according to SOPs referring to regulations that have been issued by the government and agreed by the company. After the socialization activities were carried out, another evaluation was carried out through the Post-Test. The Pre-Test data is compared with the Post-Test results, if the Pre-Test <Post-Test results, then the application of Occupational Safety and Health is as expected, if the opposite occurs then a re-scenario is needed in the implementation of the Occupational Safety and Health use intervention at a shoe-making company.

## III. RESULT AND DISCUSSION

Based on this research, the first step was to analyze. Collect data by observing, interviewing and filling out questionnaires for employees, interviews were conducted based on facts and perceptions of employees in the maintenance department. Asking employees' willingness to be interviewed and filling out questionnaires, Making research data in the form of: gender, education level, age level and length of work

Furthermore, at this stage the activities carried out are by conducting Pre-Test before implementing the Occupational Safety and Health Management System implementation intervention.

Results and pictures of distributing employee questionnaires in the maintenance department as follows:



FIGURE 1 Diagram of Results of Pre-Test and Post-Employee Questionnaire Distribution

Use for personal protective equipment and various kinds of equipment to work in the company, the use of personal protective equipment is as follows :

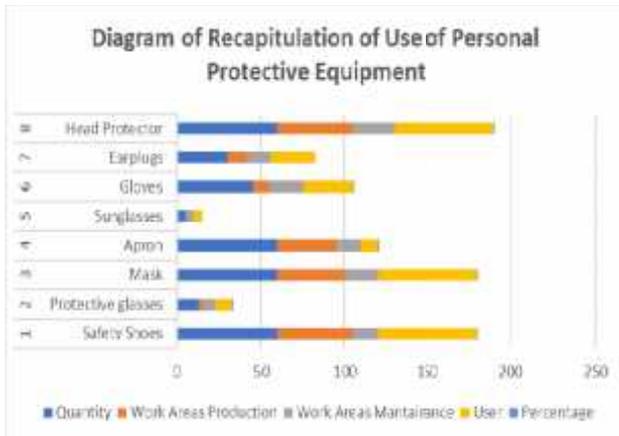


FIGURE 2 Diagram of Recapitulation of Use of Personal Protective Equipment

The following is a questionnaire table for the number and quality of personal protective equipment in the company :

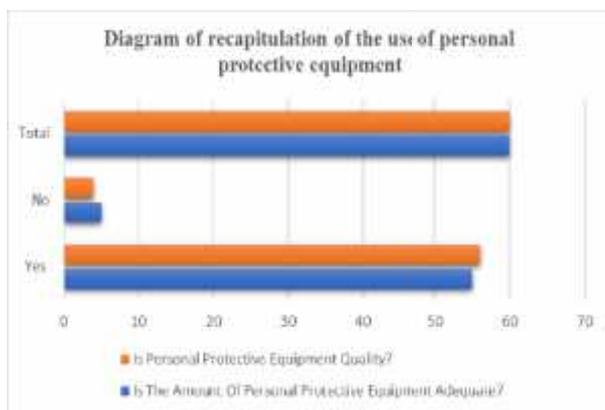


FIGURE 3 Diagram of recapitulation of the use of personal protective equipment

Employees or departments who have implemented the work program properly and correctly. Employees who fully implement the program, such as the use of personal protective equipment according to the rules that have been programmed by the company, will receive awards, additional incentives, and promotions/positions. And for employees who violate can be subject to sanctions.

Table 1 types of sanctions

No	Description	Data
1	Warning	47
2	Quit	1
3	Warning Letter	2
4	Unanswer	10
<b>Total</b>		<b>60</b>

Based on the company's data, there are 5 types of violations, namely:

Table 2 Detail of types sanctions

No	Description	Action
1	Not using personal protective equipment in accordance with work conditions	
2	Smoking in the work area and smoking while working	Warning
3	Throwing trash and spitting everywhere	
4	Gambling, drinking and rioting (fighting)	Quit
5	Steal company stuff	

#### IV. CONCLUSION

After the implementation of the Occupational Health and Safety Management System has been implemented in the maintenance department, it is proven that there has been a change in employees from what used to only wear when there is an audit, to now it is more orderly even though there are some employees who do not comply and are given sanctions for their actions that are negligent in wearing protective equipment. And the use of personal protective equipment in the maintenance department has been used in accordance with work safety rules. This is evidenced by the number of workers who use personal protective equipment with the following details: the percentage of using safety shoes is 100%, the percentage of using protective glasses is 16.66%, the percentage of using masks is (100%), the percentage of using Arpon is 18, 33%, the percentage of using earplugs is 43.33%, and the percentage of using head protection is (100%).

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