

Accident Analysiswork On Workers At The Glass Ambassador, Johan Pahlawan District, West Aceh Regency

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Abstract.

Accident is an event that cannot be predicted and suspected by someone who experiences it which often results in losses both in terms of material and human life. The research method is carried out using descriptive qualitative research methods carried out through in-depth interviews (indept interviews). The results of the research conducted there are activities that are risky on human, mechanical and environmental factors at every stage of work at Duta Kaca. In the human factor, workers use PPE only glasses and masks if there is a need, and negligence is one of the triggers in working, on the mechanical factor. The available equipment also does not meet work standards, unfavorable machine conditions can also cause work accidents at Duta Kaca, In terms of the work environment, workers feel comfortable with their work environment and are accustomed to noise, so the environment does not trigger work accidents at Duta Glass. So it can be concluded that the aluminum service activities at Duta Kaca have risks that can be detrimental to the workers. It is suggested to the owners of Duta Kaca to pay more attention to workers to wear Personal Protective Equipment.

Keywords: *Work Accident, Informal Sector, Human, Mechanical, and Environment*

I. INTRODUCTION

The International Labor Organization (ILO) suggests that work-related accidents are generally caused by 3 factors, namely human, occupational, and environmental factors. The causes of work accidents are classified into two, namely unsafe action and unsafe conditions. Unsafe action is an act or human action that does not comply with safety rules, for example not using a safety belt when working at heights. Meanwhile, unsafe conditions are conditions in the workplace environment that are not safe, such as a dirty and messy workplace¹. According to ILO estimates, more than 1.8 million work-related deaths occur annually in the Asia and Pacific region. In fact, two thirds of work-related deaths in the world occur in Asia. At the global level, more than 2.78 million people die each year due to accidents or occupational diseases.² In addition, there are approximately 374 million non-fatal work-related injuries and illnesses each year, which results in a lot of work absenteeism.³ The Central Statistics Agency (BPS) noted that the informal sector dominates employment in Indonesia quite high.

In 2015 there were 65 million people aged 15 years and over who worked in the informal sector, until 2019 there was a significant increase of 75 million people working in the informal sector. This proves that workers in the informal sector are quite in demand by the Indonesian population as a last alternative in getting a job. Of course, this also brings risks.⁴ Impact The increase in the number of workers is directly proportional to the number of work accidents and fatalities for the last 3 consecutive years. BPJS Employment data shows that in 2016 there were 101,367 cases of work accidents with 2,382 fatalities, in 2017 there were 123,000 cases of work accidents with 3,000 fatalities, and in 2018 there were 157,313 with more than 5,000 fatalities.⁵ Based on data from the BPJS Employment of Aceh Province in 2016, there have been 105,182 work accidents and in 2017 there were 80,392 cases, while in 2018 there were 157,313 cases. The cause of the work accident is not optimal supervision and implementation as well as safety and health behavior in the workplace⁶ Based on work accident data from Aceh Barat, work accident cases in 2016 there were 86 people who died due to work accidents, in 2017 there were 87, and in 2018 there were 9 people who died due to work accidents, and in 2018 there was a decrease.⁷

II. METHODS

This type of research is descriptive qualitative method research conducted through in-depth interviews (indept interviews). Moleong's opinion (2017) states that qualitative research is research that intends to understand the phenomenon of what is experienced by the research subject (for example behavior, perception, etc.) holistically, and by way of description in the form of words and language in a context. specifically natural and by utilizing various natural methods.⁸ This study aims to obtain in-depth information about the Analysis of Occupational Accidents in Production Workers at Duta Kaca, Johan Pahlawan District, West Aceh Regency.

III. RESULTS

a. Overview of the Informal Sector at Duta Kaca

Duta Kaca is an "industry" that is engaged in service aluminum that produces furniture products made from aluminum such as glass cabinets, steinless, dish rack cabinets, clotheslines, and sales carts. Duta Kaca is a self-owned business entity that was established from 1978 to 2004 and is no longer operating due to the Tsunami, then in 2008 Duta Kaca finally started operating again from zero until now as a large service aluminum on Jalan Singah Mata, Johan Pahlawan District. , West Aceh Regency, because it has a fairly large area with a high number of enthusiasts per month. Duta Kaca has a stock of finished goods, which later on, consumers can choose goods that are already in Duta Kaca, so that consumers no longer have to wait long for the goods to be purchased.

And if consumers want to make goods in accordance with the wishes it will take at least 5 days. Duta Kaca has 4 employees, one of which is the head of the worker, whose job is to check the finished products made by other members and to be involved in every product-making activity. In addition, 3 other employees are employees who have their respective responsibilities in their duties, 1 person is responsible for carrying out initial stage completion tasks, 1 person is responsible for installing or assembling finished goods and coloring, 1 person is responsible for installing glass. For the delivery of goods, there are no special employees because the employees at Duta Kaca are multifunctional. All employees have a standard educational background, ranging from high school, junior high, to elementary school graduates.

b. Production Process Stages

In general, there are five stages of the welding process at Duta Kaca, namely the raw material preparation stage, the initial completion stage, the painting stage, the glass installation stage, and the storage and delivery stage.

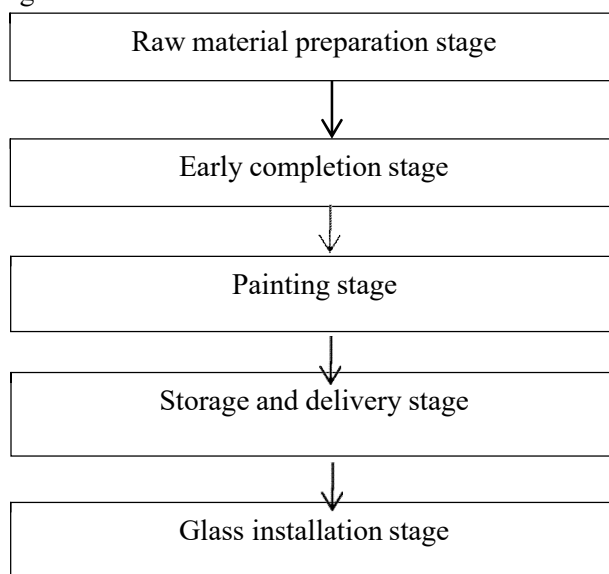


Fig 4.1. Stages of activities in Duta Kaca

c. Human Factor With Work Accident

One of the causes of work accidents is caused by human factors, such as the use of personal protective equipment, knowledge and behavior at work.⁹ Errors caused by workers due to unnatural attitudes

such as being too bold, careless, not heeding instructions, negligence, daydreaming, unwilling to cooperate, and lack of patience. In this study it can be said that the availability of PPE at Duta Kaca is complete such as welding goggles, gloves, shoes, helmets, masks, but the use of PPE is still not used, the results of interviews with key informants that the reason for not wearing personal protective equipment is because it will interfere with work, the work will take a long time if you use personal protective equipment, but they admit that it is better to use personal protective equipment when working but if it is not used it does not affect work accidents because if you are careful at work there will be no work accidents, while according to interviews with It is very important for key informants to use personal protective equipment because the work at Duta Kaca is very risky. They only use goggles for welding for fear of sparks getting into their eyes, apart from that they do not use them because they think it will interfere with their work.

While the supporting informants stated that the use of PPE when working must continue to be used, therefore appropriate PPE has been provided for workers but workers do not want to wear it because it interferes with their work and makes the work long. All workers said that they had experienced work accidents ranging from fatal to non-fatal, for example, being hit by a drilling machine, 1 person being hit by a cutting machine, 2 people getting scratched by glass, and tripping over a messy cable. The results of interviews with key informants about the knowledge of the difference between risk and danger, that is, all jobs must have a risk and danger in the workplace, there will always be. While interviews with key informants they also know what the difference between risk and danger is, for example every job has risks and every job must be thought about what the dangers are, while supporting informants state that the risk of work accidents exists in every job and every job has dangers. And the results of interviews regarding the dangers of aluminum service work, the main informant explained that he thought it was dangerous but because they are used to it and this is indeed their field, it is not dangerous but as long as they do it carefully, while the key informants said that this is their job and they are used to it. It all depends on the individual workers as well as the answers of the supporting informants. The research that the researcher did was relevant to Fitriana's (2021) research where it was found that the employees of the PT X MTH 27 Office Suite Project had a fairly good knowledge of PPE. But they don't all wear good PPE.¹⁰

d. Mechanical Factors With Work Accidents

One of the causes of work accidents is the condition of the machine. With machines and mechanical tools, production and productivity can be increased. The location of the machine has a reciprocal relationship between humans and machines.¹¹ The function of humans in the relationship between humans and machines in the production chain is to control the running of the machine. Also included in the layout is placing the machine position. The further away the machine is from the worker, the smaller the potential hazard that causes an accident. So it can reduce the number of accidents that may occur. The mechanical factor is one of the factors that not many people know about what accidents can result from this factor. The results of interviews conducted by the Main Informants are checking tools not only every 6 months but every time they start work or it can be said every day before work, so that if something is damaged it will be immediately caught and when the tool is damaged it will be repaired if it can be repaired. and if it can't be repaired, it will be sold to buy new equipment and the equipment does not have to be placed according to the size of the item but instead is placed where the workers want to put the item, and according to key informants, checking the tools doesn't have to be done every 6 months every time they want to.

Work must be checked first to prevent work accidents, if the equipment is scattered it does not necessarily cause work accidents because it all depends on the work itself if the worker works seriously and daydreaming then work accidents will not happen like that. On the other hand, if the condition of the machine is not good, it will cause work accidents. Meanwhile, according to supporting informants, checking tools also doesn't have to be done every 6 months because every time they work they will check the tools, and according to them messy equipment also triggers work accidents, for example messy cables will definitely cause tripping and messy laying of tools will definitely be dangerous for those who often pass in that place, and the condition of the engine is not good will result in work accidents because the engine is not good will definitely result in poor performance as well. The research that the researcher did was relevant to the research results of Prasetyo et al (2021) it was found that mechanical factors in the work environment were very

influential on work accidents. Machine observation was the most term of a means provided to protect workers effectively from harmful physical contact with parts. moving machinery or other hazardous conditions.

e. Environmental Factors With Work Accidents

One of the causes of work accidents is mechanical factors such as noise. In accordance with the Decree of the Minister of Manpower Number: KEP-51/MEN/1999 concerning Threshold Values for physical factors in the workplace, the recommended noise intensity is 85 dBA for 8 hours of work. As in Duta Kaca, air temperature also affects work accidents if the air in the workplace is too hot, the concentration of workers in carrying out production will be disrupted, coupled with splashes of fire from welding. Not all workers know that the work environment can affect their health. The results of interviews with key informants revealed that the workplace environment was safe and there were no problems at all, workers also did not have a problem with noise because they were used to the sounds of welding, cutting and drilling, and workers never complained about the weather at work, as well as with key informants said that they were comfortable in their work environment, and also said that they were not disturbed by noise at work because they were used to hearing everyday noise, as well as supporting informants said that they were comfortable with their work environment, the floor was not slippery and not slippery. feel disturbed by noise because they are used to it everyday. Based on the observations of researchers about the working environment at Duta Kaca based on the weather, if the weather is hot outside, it will also feel hot inside but the heat does not interfere with work. This observation is supported by Wildan's research (2014) the results of the study found that the work environment is very close to work diseases and accidents, where based on the results of the identification of hazards in spinning 1 in the carding process, there are 22 potential hazards, including hitting the card machine, fingers exposed to rotation. coiler, hands caught in machine roll exposed to cotton dust, exposed to noise. While in the ring spinning process there are 40 hazards, including exposure to hot temperatures, fingers hit by knives, falling groings, crashing work equipment, fires.

IV. CONCLUSION

One of the human factors is that the use of PPE does not work well at Duta Kaca. Then negligence is also one of the triggers for work accidents at Duta Kaca. The available equipment also does not meet work standards, unfavorable engine conditions can also cause work accidents at Duta Kaca. And on the work environment factor, workers feel comfortable with their work environment and are accustomed to noise, so that the environment does not trigger work accidents at Duta Kaca. So it is hoped that the owners of Duta Kaca will pay more attention to workers to wear good and correct PPE and pay attention to the worker's environment so that workers do not feel disturbed during the production process. And for workers to be able to use PPE completely and pay attention to environmental conditions by continuing to use PPE while at Duta Kaca.

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