

## **ABSTRACT**

*PT XYZ is a company engaged in the furniture industry where this company processes raw materials into furniture products that have added value and have benefits from before. In its operational activities, the company still has not implemented a good occupational health and safety system because of the many risks that must be faced by workers. This can be seen from the number of hazard events found during the production process. Based on the results of field observations, there are 9 hazard events where these incidents must be minimized in order to reduce the number of work accidents. Risk control is one of the first steps used in minimizing the occurrence of hazards by analyzing the risk control hierarchy. Analysis of the Risk Control Hierarchy is a form of process in analyzing the proposed K3 control in every event that occurs. The results of the risk control hierarchy analysis are suggestions for each hazard event that have been adjusted to the level of the risk control hierarchy. Of all the potential proposals given, some can be forwarded to the design in the form of providing safety signs in 2 hazard areas, namely the forklift area, slippery work area and smoke-free area. Before designing a safety sign, it is necessary to first evaluate the safety sign. Assessment of safety signs is an activity to assess the conditions or conditions of the field where safety signs will be installed to be able to find out the requirements or criteria for appropriate safety signs in the hazard area. And from this process it can be known about the installation location of safety signs, Signal Words to be used, height, model, minimum reading distance and materials used in the design of safety signs. The data used is antropometric data that has been filtered according to the criteria of users who will read Safety Signs. After evaluating the safety sign, the next step is to make a design using the Quality Function Deployment approach. QFD is a solution to design or develop a product in a structured manner by determining in advance the needs or desires of the target consumer in advance so that they are able to take into account systematically. In designing QFD there are 11 stages to be carried out. The results of the QFD are the final specifications that become the reference in designing safety signs. have carried out a safety sign assessment and Quality Function Deployment, the next step is to design a Safety sign that refers to the ANSI Z535.4 standard. The results*

*of the design are in the form of a safety sign design that will be placed in the forklift area and a safety sign design that will be placed in a slippery area..*

**Keywords:** *Safety signs, risk control, hierarchical analysis, occupational hazards, safety signs assessment, Quality Function Deployment, ANSI Z535.4 standard.*