ABSTRACT

CV. XYZ is a micro, small, and medium enterprise (MSME) that focuses on the Muslim fashion, producing items such as instant hijabs, square scarves, inner hijabs, and prayer garments (mukena). Conducting production activities to transform raw materials into finished products inevitably involves potential risk events that can impact the continuity of the production activities carried out. Based on collected data, there is currently a product complaint rate from CV. XYZ's consumers at 3.65%, which exceeds the established threshold. Additionally, in the year 2022, there were two instances of machine damage that led to temporary production halts. Given these issues, CV. XYZ has not yet taken measures to address the occurring risks. Therefore, the aim of this research is to conduct a risk assessment based on ISO 31000:2018 in the production process, to propose treatments.

The data used in this research pertains to the actual conditions in the potentially risky hijab production process, to perform a gap analysis based on ISO 9001:2015. This data is then employed to conduct a risk assessment based on ISO 31000:2018, involving stages such as risk identification, risk analysis, risk evaluation, and subsequently proposing risk treatments. Based on the results of the risk assessment, 9 risks were identified in the production process, categorized as high, medium, and low. The proposed treatments designed in this research focus on the risk of needle breakage, categorized as high. This involves designing a mitigation plan and a contingency plan. The mitigation plan includes periodic maintenance and monitoring of sewing machine conditions, maintaining the cleanliness of sewing machines and the surrounding environment, and regular needle replacement. On the other hand, the contingency plan entails allocating additional production time for needle replacement on the sewing machine and creating work instructions for rotary and needle settings.

Keywords: ISO 31000:2018, ISO 9001:2015, risk assessment, risk treatment