

Hazard and risk analysis of different sterilizer technology in palm oil mills

ABSTRACT

Background: This study is conducted to assess the hazard and risk of different sterilizer technology. Objective: The aim of this study was to compare the hazards posed by each sterilizer and their risk analysis. Results: The results highlighted that the highest percentage of hazards; Horizontal Sterilizer in Felcra Nasaruddin (25%), in Felda Sungai Tengi (27.5%). Vertical Sterilizer (19.2%), Compact Modular Continuous (CMC) (15%) and continuous sterilizer (CS) (13.3%). In terms of risk, majority of sterilizers have low risk rating, followed by medium and high risk categories the lowest. Conclusion: Based on the HIRARC assessment done, CS is generally the safer technology in term of hazards followed by CMC, vertical and horizontal sterilizer. Majority of the hazard falls into low risk, and then followed in the second place which was medium, and less hazards were grouped into high risk.

Keyword: Conventional; Continuous sterilizer; Compact modular; Vertical