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**AgSURS - Reviewer 1 View**

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| **Abstract Title** | Study on Wastage of Packing Materials and Workers’ Perceptions of Failures in Grain Flour Production Line: A Case Study on Harischandra Mills PLC, Matara. |
| **Abstract Body** | The Companies with grain mills have critical problems related to the efficiency of production process due to the failures and defects. This research aims to study the workers’ perception on factors affecting failures by identifying them in the grinding mill section. Plan-do-check-act (PDCA) cycle used in the industry to overcome these failures successfully. Data were analyzed using descriptive analysis, multiple regression, failure mode and effect analysis and Pareto analysis. Resources and education background of the employees have negative relationship with complaints on production failures that happen in processing line. Working stress and lack of experience showed positive relationships. Packing material wastage was a serious burden in the production line. High packing material wastage percentage has reported in Kurakkan flour production. It was 28.52 % from total weight of the packing material wastage. Packing material wastage of processing line was occurred due to several reasons. According to the results of FMEA, incorrect labelling, poor sealing, incorrect gas filling inside the package and quality failures of raw materials were shown high Risk Priority Number (RPN). Critical value of RPN was 107 in the production line. Failures which greater than critical RPN (107) value showed high risk in the section. As a results of the Pareto analysis, incorrect labelling, poor sealing, incorrect gas filling inside the package were contributed 80% risk in the processing line. FMEA recommendations and PDCA cycle can use to overcome the failures in the grain flour based product processing line. Kurakkan flour packing material wastage percentage was decreased by 13.38% and Ulundu flour packing material wastage percentage was decreased by 10.91%in the grinding mill section after implementing PDCA cycle procedures. These methods are suitable to apply in any production mills to keep minimize the wastage and the failures. |
| **Key Words (5 Words)** | factors, failures, fmea, grain flour, packing material wastage, pdca cycle, |
| **Abstract ID** | ABM0210 |
| **Findings of this study (r1)** | Make a marginal contribution to existing knowledge …………………………………………………..1. Make a significant contribution to existing knowledge
2. Make a marginal contribution to existing knowledge
3. Contain conceptual errors/faulty judgments
4. Confirm known results
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| **Title of the abstract(r1)** | Needs improvement …………………………………………………………………………………………………….1. Is appropriate to the thematic area and descriptive
2. Needs improvement
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| **If needs more improvements for****"Title" please specify here(r1)** | Comments were given in the abstract. |
| **The content of the abstract(r1)** | Needs improvements …………………………………………………………………………………………………………1. Is clear and concise
2. Needs improvements
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| **If needs more improvements for "Abstract" please specify here(r1)** | Please see comments. |
| **Recommendation(r1)** | Accept with minor corrections ……………………………………………………………………………………………1. Accept in the present form with minor editorial corrections
2. Accept with minor corrections
3. Accept with major revisions cited
4. Reject
 |
| **Please justify reasons for If rejection(r1)** | Not applicable.. |
| **Any Other****Comment(r1)** | Improve English. |
| **Any Other****Attachment(r1)** | None.  |

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