

Company Name: _____

Maintenance Forms & Logs

Date: _____

Log ID: _____

Version: 1.0

Failure Mode and Effects Analysis (FMEA) Worksheet Template

1.0 Form Objective & Asset Scope

This Failure Mode and Effects Analysis (FMEA) worksheet is used to systematically evaluate potential failure modes within a specific system, process, or piece of equipment. The objective is to identify failure causes, assess the severity, occurrence, and detection ratings, and calculate the Risk Priority Number (RPN) to prioritize corrective actions. This document is critical for proactive reliability engineering and compliance with ISO 9001 and IATF 16949 standards.

Scope: This worksheet is applicable to any critical asset or process within a manufacturing or facility operation. It should be completed by a cross-functional team including maintenance, operations, and engineering.

2.0 Administrative & Asset Details

Date of Analysis: _____

FMEA Team Members (Names & Roles): _____

System/Process/Asset Name: _____

Asset ID / Tag Number: _____

Revision Number: _____

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3.0 Failure Mode & Effects Analysis (FMEA) Table

Complete the following table for each identified function or component. For each potential failure mode, describe the cause, local and system-level effects, and assign ratings for Severity (S), Occurrence (O), and Detection (D) on a scale of 1 to 10 (10 being worst). Calculate $RPN = S \times O \times D$.

Function / Component Description: _____

Potential Failure Mode: _____

Potential Effect(s) of Failure: _____

Severity (S) Rating (1-10): _____

Potential Cause(s) of Failure: _____

Occurrence (O) Rating (1-10): _____

Current Control(s) / Detection Method: _____

Detection (D) Rating (1-10): _____

Risk Priority Number ($RPN = S \times O \times D$): _____

Recommended Action(s): _____

Responsible Person / Department: _____

Action Taken & Completion Date: _____

4.0 Action Plan & Risk Reduction Summary

For any failure mode with an RPN above the threshold (typically 100 or as defined by the organization), document the specific corrective actions, target completion dates, and re-evaluated ratings after implementation.

High-Risk Failure Mode Reference: _____

Corrective Action Description: _____

Target Completion Date: _____

Re-evaluated Severity (S): _____

Re-evaluated Occurrence (O): _____

Re-evaluated Detection (D): _____

New RPN: _____

5.0 Sign-off & Approval

The FMEA must be reviewed and approved by the responsible parties. Sign-off indicates that the analysis is complete and actions have been assigned.

FMEA Facilitator Signature: _____ Date: _____

Maintenance Manager Signature: _____ Date: _____

Operations Manager Signature: _____ Date: _____

Quality/Engineering Representative Signature: _____ Date: _____

Regulatory Disclaimer: This maintenance log is a generic template. The end-user assumes all liability for validating all inspection parameters, PM frequencies, and tolerances against specific OEM machinery manuals before active shop floor deployment.