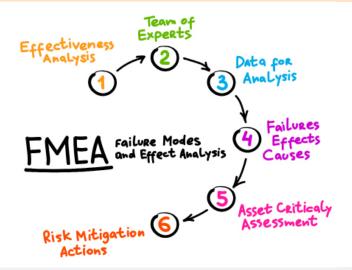
MASTERING RISK MANAGEMENT WITH FMEA: A FOCUS ON PREVENTIVE ACTION

Failure Mode and Effects Analysis (FMEA) is an analytical methodology used to ensure that potential problems have been considered, evaluated, and addressed throughout the product and process development. By predicting and eliminating failures before they happen, manufacturers can create products that are more reliable, safe, and of higher quality. The essence of FMEA is to break down processes or products to their most basic components and then systematically examine each one for possible ways it can fail. By determining the impact of each potential failure and its likelihood of occurrence, manufacturers can prioritize these risks and take preventative action. Whether it's design-based (DFMEA) or process-based (PFMEA), this approach is pivotal in avoiding costly late-stage changes and post-production issues. FMEA isn't merely about identifying problems—it's about preemptively solving them and driving towards manufacturing excellence.

POTENTIAL BENEFITS

- Enhanced Product Safety: By identifying potential hazards, FMEA can help enhance product safety, *reducing liability risks by up to 25%.*
- Decreased Warranty Claims: Through early identification of potential failures, *warranty claims can drop by up to 20%.*
- Higher Customer Retention: A reliable product leads to satisfied customers, potentially *increasing customer retention by 15%.*
- Efficiency in Resource Allocation: By prioritizing risks, resources can be allocated more efficiently, leading to a *potential 30% savings* in problem-solving efforts.
- Improved Product Launches: Adopting FMEA can lead to smoother product launches, *reducing launch-related delays by up to 18%.*
- **Reduced Recalls:** With a thorough analysis of potential failures, product recalls can be *reduced by up to 20%*.



Why Partner with TMEP:

Precision-driven Approach: TMEP believes in accuracy. Our meticulous application of FMEA ensures no detail is overlooked, guaranteeing superior product reliability.

Tailored Solutions: Our vast experience across diverse manufacturing sectors allows us to adapt FMEA methodologies to fit your unique processes and products perfectly.

Proactive Problem Solving: With TMEP, it's not just about identifying potential issues. We go a step further by providing actionable insights and strategies to address them head-on, ensuring your manufacturing remains top-notch.

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Center for Industrial Services

Tennessee Manufacturing Extension Partnership

