



## **SECTION INTRODUCTION**

**WHAT ARE THE  
BENEFITS AND  
SHORTCOMINGS OF  
USING FMEA?**

# FAILURE MODE & EFFECT ANALYSIS (FMEA)

WHAT IS FMEA?	STAGE 01: IDENTIFYING THE FAILURE MODE AND SPECIFYING ITS SEVERITY	STAGE 02: SPECIFYING THE OCCURRENCE OF FAILURE	STAGE 03: SPECIFYING THE DETECTABILITY OF FAILURE
SECTION INTRODUCTION	SECTION INTRODUCTION	SECTION INTRODUCTION	SECTION INTRODUCTION
WHAT IS A FAILURE MODE & EFFECT ANALYSIS?	WHAT ARE THE 6 DIFFERENT STAGES OF FMEA?	WHAT ARE THE POTENTIAL CAUSES?	WHAT ARE THE CURRENT PROCESS CONTROLS?
WHY AND WHEN TO USE FMEA?	PROCESS FMEA: TOP SECTION	WHAT IS THE OCCURRENCE RATING?	WHAT IS THE DETECTABILITY RATING?
THE HISTORY OF FMEA	WHAT ARE THE COMPONENTS OF STAGE 01? P1	ACTIVITY: STAGE 02	ACTIVITY: STAGE 03
WHAT ARE THE TYPES OF FMEA?	WHAT ARE THE COMPONENTS OF STAGE 01? P2	ACTIVITY SOLUTION: STAGE 02	ACTIVITY SOLUTION: STAGE 03
WHAT IS A PROCESS FMEA?	WHAT ARE THE COMPONENTS OF STAGE 01? P3	SECTION CONCLUSION	SECTION CONCLUSION
ACTIVITY: WHAT IS FMEA?	ACTIVITY: STAGE 01		
ACTIVITY SOLUTION: WHAT IS FMEA?	ACTIVITY SOLUTION: STAGE 01		
SECTION CONCLUSION	SECTION CONCLUSION		
STAGE 04 AND 05: QUANTIFYING RISK AND CORRECTING HIGH RISK SITUATIONS	STAGE 06: REEVALUATING THE RISK AND VISUALIZING YOUR FMEA	WHAT ARE THE STEPS TO CONSTRUCT AN FMEA?	WHAT ARE THE BENEFITS AND SHORTCOMINGS OF FMEA?
SECTION INTRODUCTION	SECTION INTRODUCTION	SECTION INTRODUCTION	SECTION INTRODUCTION
WHAT IS RPN?	CALCULATING THE RESULTING RPN	WHAT ARE THE STEPS TO CONSTRUCT FMEA? P1	WHAT ARE THE BENEFITS OF FMEA?
WHAT ARE ACTIONS RECOMMENDED?	CREATING A SPIDER CHART	WHAT ARE THE STEPS TO CONSTRUCT FMEA? P2	WHAT ARE THE SHORTCOMINGS OF FMEA?
WHAT IS RESPONSIBILITY, TARGET COMPLETION DATES AND ACTIONS TAKEN?	SECTION CONCLUSION		
SECTION CONCLUSION			

	Section
	Lecture
	Activity

# BENEFITS OF FMEA

1

**CONDUCTS A SYSTEMATIC  
REVIEW OF  
FAILURE MODES**

2

**DETERMINES THE IMPACT  
OF THE FAILURE MODE**

3

**DETERMINES THE PROCESS  
STEPS WHOSE FAILURE  
WILL HAVE CRITICAL  
EFFECTS**

4

**CALCULATES THE  
PROBABILITIES OF  
FAILURES**

5

**HELPS IN SETTING UP TEST  
PROGRAM REQUIREMENTS  
TO DECIDE FAILURE MODE**

6

**HELPS ESTABLISH TEST  
PROGRAM REQUIREMENTS  
TO CONFIRM EXACT  
FORECASTS OF RELIABILITY**

7

**HELPS COLLECT INPUT  
DATA TO UNDERSTAND  
THE IMPACT OF CHANGES**

8

**DETERMINES WHICH ARE  
THE COMPONENTS THAT  
HAVE A HIGH FAILURE  
RATE**

9

**HELPS ELIMINATE  
ADVERSE IMPACT THAT A  
BUSINESS OPERATIONS  
COULD CREATE**

10

**HELPS REVEAL  
OVERSIGHTS,  
MISINTERPRETATIONS,  
ERRORS OR EVEN  
BLUNDERS**

11

**HELPS TO REDUCE THE  
TIME TAKEN TO DEVELOP  
AND IMPLEMENT BAU  
OPERATIONS**