



# Sri Padhmam Consultancy & Training

Failure Mode & Effects Analysis ( FMEA )

Key changes to implement from Sept 2018

# Failure Mode & Effects Analysis ( FMEA ) : Key changes to implement from Sept 2018

#	Focus point / element	4 <sup>th</sup> Edition ( AIAG )	New version AIAG + VDA	Applicability	
				DFMEA	PFMEA
1	Manual contribution	Only in <u>AIAG</u>	Both in <u>AIAG</u> and <u>VDA</u>	Yes	Yes
2	System, Sub – system, <u>Product</u> , Component	Not applicable	<u>Product</u> is introduced and applicable	Yes	Yes
3	Function tree	Not needed	<u>Function tree</u> needed	Yes	Yes
4	RPN computation	Needed	Not needed but <u>Action priority</u> is based on SOD	Yes	Yes
5	Structural approach	Not focused much	It is very much focused on <u>six stepped approach</u>	Yes	Yes
6	SOD table	Not needed the corporate or product line examples	Needed and there are <u>many changes</u> including the corporate or product line examples.	Yes	Yes
7	Monitoring System Response (MSR)	Not needed	Needed. About <u>30 combinations</u> are possible now. Linked to <u>ISO 26262</u> .	Yes	Yes

#	Focus point / element	4 <sup>th</sup> Edition ( AIAG )	New version AIAG + VDA	Applicability	
				DFMEA	PFMEA
8	Scope definition	Focused to some extent	Scope definition is focused a lot and needed now	Yes	Yes
9	Process block diagram	Not needed	<u>Process block diagram</u> is needed now		Yes
10	Coverage of manufacturing process changes	Team to select which process to apply PFMEA analysis: <u>All process</u>	Team to select which process to apply PFMEA analysis: <u>Shipped product and selection</u>		Yes
11	Linkage between the structure, function and PFM	Not focused and not established.	Must be <u>focused</u> and to be clearly established.	Yes	Yes
12	Basic approach towards of FMEA activity	Team to guess fill the blank on <u>spread sheet shells</u>	Team to guess fill the blank on <u>Structured way</u>	Yes	Yes
13	4M way of thinking	Not focused	<u>4 M way of change</u> management is focused now		Yes

#	Focus point / element	4 <sup>th</sup> Edition ( AIAG )	New version AIAG + VDA	Applicability	
				DFMEA	PFMEA
14	Special characteristics identification	To be done for both <u>DFMEA</u> and <u>PFMEA</u>	To be done only for <u>PFMEA</u>		Yes
15	Structure analysis	Only one element ( In one column )	Broken into <u>three</u> elements	Yes	
16	Function analysis	Only one element	Broken into <u>three</u> elements		Yes
17	Failure analysis	The sequence was PFM, PE, SEV, classification and PC	The <u>sequence</u> under failure analysis is FE, SEV, FM and FC.	Yes	Yes
18	Risk analysis	The sequence was PC, Current process controls prevention, OCC, Current process controls detection, Detection	The <u>sequence</u> was Current prevention control (PC) of FC, OCC of FC, Current detection controls (DC) of FC or FM and Detection (D) of FC or FM	Yes	Yes
19	Special characteristics	To be done for both DFMEAs and PFMEAs	<u>Special characteristics</u> to be done only for PFMEAs	Yes	Yes

#	Focus point / element	4 <sup>th</sup> Edition ( AIAG )	New version AIAG + VDA	Applicability	
				DFMEA	PFMEA
20	Recommended actions	Both prevention and detection were considered together	Prevention action and detection action are <u>separated</u>	Yes	Yes
21	Status of identified recommended action	Not clearly defined	A <u>status</u> column is now introduced	Yes	Yes
22	Evidence for implementation of recommended action	Was present but not emphasised much	Action taken with <u>pointer</u> to evidence must be documented now	Yes	Yes

# Public Program – May 2018

## Program Topic

Advanced FMEA ( 2018 changes ) with a focus on auditing

## Resource Person

A V Manivannan, Principal Consultant & Trainer

## Program Objectives

- ✓ Expected changes in the 2018 version of FMEA ( FMEA – AIAG & VDA )
- ✓ To provide the skill sets on FMEA approach, identifying the Recommended actions ( Action Priorities ) and auditing the FMEA process through structured application of FMEA
- ✓ Also to familiarize on linkages to the IATF 16949:2016 requirements.

May 2018						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## Program Date & Time

19-05-2018 ( Saturday ) & 20-05-2018 ( Sunday ) [ 2 days ]

09.00 am to 05.00 pm

## Course Deliverables

- New proposed FMEA structure ( 2018 )
- Types of failures & faults
- Mapping of FMEA process wrt APQP & IATF 16949
- Linkages between Design FMEA & Process FMEA
- Vital FMEA related tools ( inputs for D & P FMEAs )
  - QFD
  - Boundary diagram
  - Parameter diagram
  - Characteristics matrix & Reverse FMEA approach
  - Interface matrix
- DRBFM : Interpretations & Implementation
- Proposed changes in the FMEA approach ( 2018 )
- SOD vs Action Priorities
- Strategies in identifying the Recommended actions
- How to measure the FMEA outputs ?
- Successful case studies
- Fault Tree Analysis – a close look
- How to audit & improve the FMEA process
- Automotive Process Approach on FMEA process

## Program Fee

~~Rs. 4,700/-~~ **Rs.4,300/- (incl. GST) per participant**

(Complementary Work book, Stationary, Refreshments & Lunch)

## Corporate offers

No. of participants	Program fee ( incl. GST )
3 employees from the <u>same</u> company	Rs.4,000/- per head
4 to 6 employees from the <u>same</u> company	Rs.3,800/- Per head

## Venue

### **JP HOTEL**

1131, Inner Ring Road, Koyambedu.

Opposite CMBT Bus Stop.

## Last date of Registration:

17-05-2018 (Thursday)

Note: Consultants & Trainers shall not be entertained please