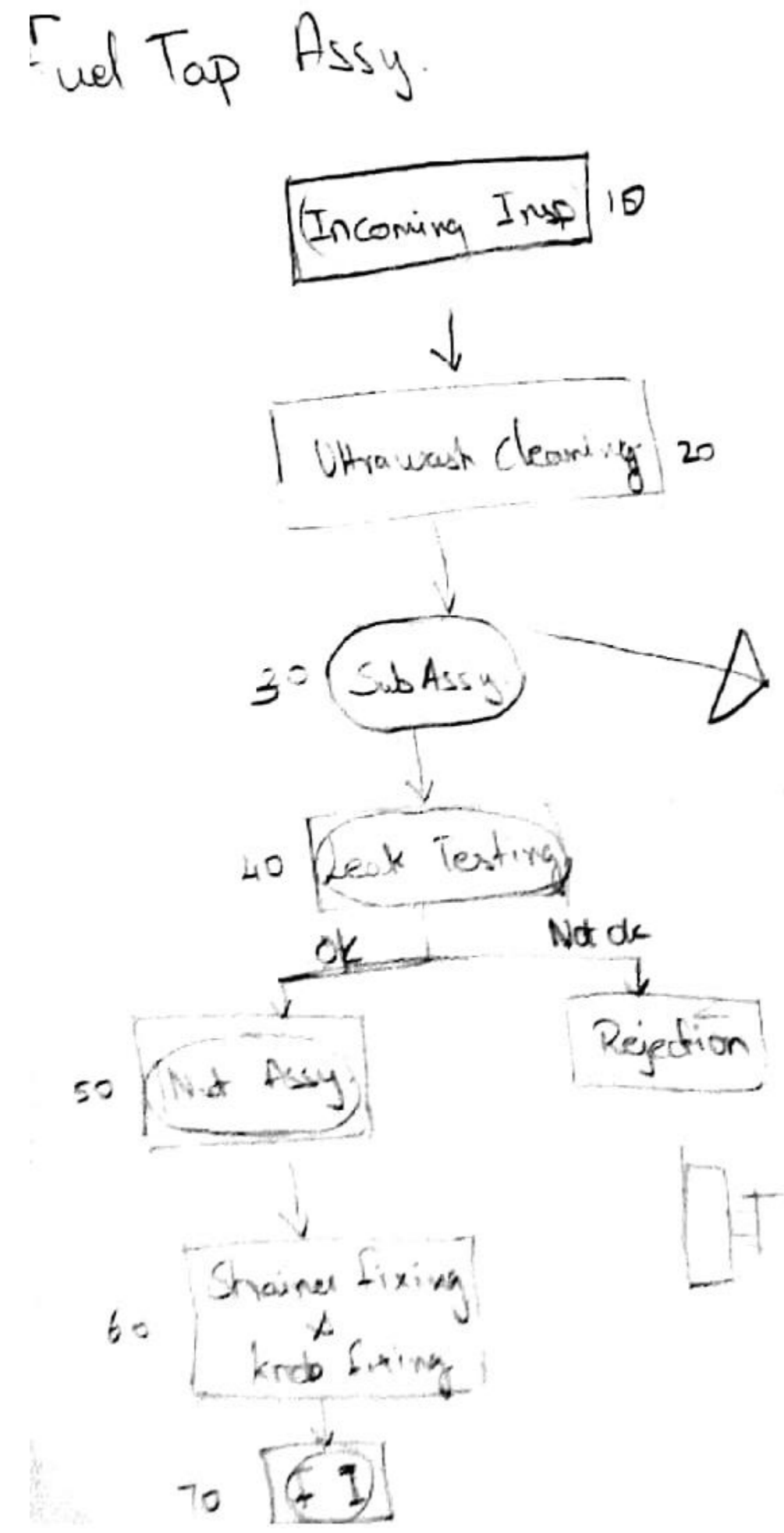


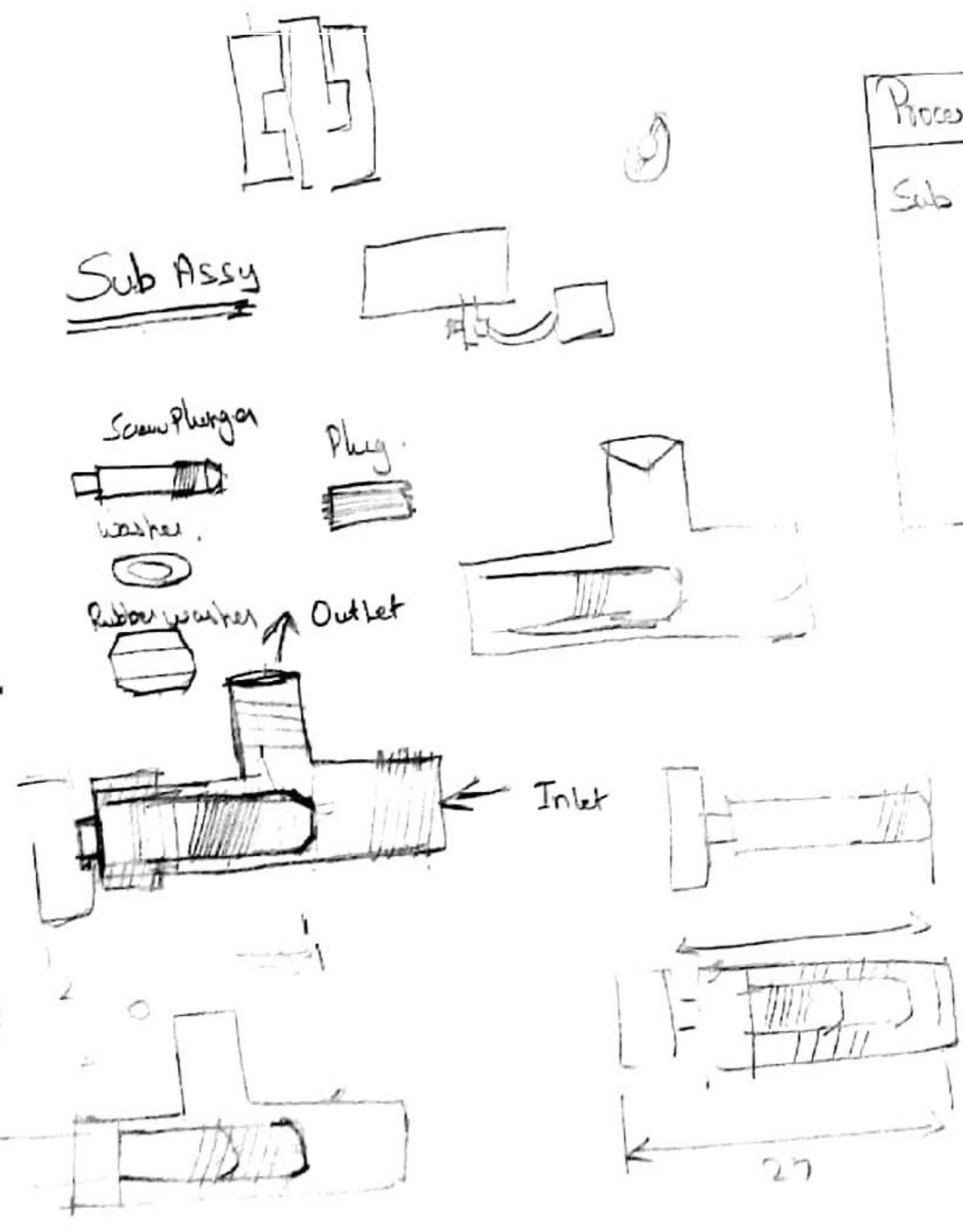
FMEA (AIAG - VDA) New version

Case Study

Process Flow



Component Drawings



Process Requirements

Process	Part	Out Put(s)
Sub Assy	Part No NZ85000 Fuel Tap Assy Customer: TAFE	<ul style="list-style-type: none"> • No Thread damage • Knobs Play smooth • Lock Plug torque 25 ~ 30 kg/cm² • Plug play 27mm max [when Open Lock] • No Part missing.

Analysis on New PFMEA template : (AIAG-VDA)



7/1/2017

Process block diagram and ST Approach 'what if' analysis

Company Name :
 Engineering Location :
 Customer Name :
 Model year / Platform : 2019 / 1024

Subject : N/A
 PFMEA Start Date : 24.07.2018
 PFMEA Revision Date :

Process Failure Mode & Effects Analysis : (P FMEA : AIAG - VDA)

II. STRUCTURE ANALYSIS		
1. Process item System, Subsystem, part element or name of process	2. Process step Station No. and name of Focus element	3. Process work element [Man, Machine, Indirect Material, Environment, etc.]
A	B	C
Input source: PID / Mandatorship	Input source: Problem Name	Input source: Influence factors - Process characteristics
Pedal Foot throttle Machining	OPN No: 10 Drill the Pedal (CD)	Drill jig Support Height Drill bit Hole

III. FUNCTION ANALYSIS		
1. Product & /or process function that the Process item creates (Product in plant, ship to plant, end user - when known)	2. Function or Outcome of the Process step & Characteristics description (Product characteristics - Quantitative value is optional)	3. Function or task of the work element and Process Characteristics
(A →) D (prod)	(B →) E (prod)	(C →) F
Input source:	Input source:	Input source:
Product function: (How this component / sub-assembly, final assembly - being produced by you will help the next level item to perform ?) To the accelerator rod.	Hole ϕ - 8.5 to 27mm Hole ϕ - 10.5 to 22mm CD - 10.5 to 20mm without burr	Drill bit Drill bit Drill bit Drill height 50mm Traveling length 25mm
Process function: (How this component / sub-assembly, final assembly - being produced by you will help next stage to perform ?) To Create the hole		

IV. FAILURE ANALYSIS		
1. Failure Effects (FE) (In - plant, ship - to - plant, process item, vehicle end user, when known)	2. Failure Mode (FM) of the process step	3. Failure Cause (FC) of the work element
(D →) G (H)	(E →) I (user)	(F →) J (orig)
Input source:	Input source:	Input source:
(i) 00s end' Hole ϕ o/s to be rejected 100% of product affected may have to scrapped. AT FASE	Hole o/s Drill bit worn out Drill bit run out Drill bit vibration Loose clamping	Drill bit worn out Drill bit run out Drill bit vibration Loose clamping
Segment Less than 100% of product affected short cut mtd. No live shield on.		
ON FIELD (MAGSON) Regulation of component function		

V. RISK ANALYSIS					
Current Prevention Control (PC) of FC	Occurrence (O) of FC	Current Detection Control (DC) of FC or FM	Detection (D) of FC/FM	AP	Special Product Characteristics
K	L	M	N	O	P
→ Tool life maintain	3	Attribute gauges	6	M	
→ Worn Instrument SOP →	4	Attribute gauges	6	H	
→ Setup approval SOP	5		6	H	

PFMEA ID Number :
 Process Responsibility : Mari Babu
 Confidentiality level :
 Timing : 1st Jan 2017
 Intent : Machining
 Tool : NA
 Task : OHS / PPR / 33 / 00

VI. OPTIMIZATION										
Prevention Action	Detection Action	Responsible person	Target completion Date	Status : (Unouched, under consideration, In progress, Completed, Discarded)	Action taken with pointer to evidence	Completion date	Severity (S)	Occurrence (O)	Detection (D)	AP
Q	R	S	T	U	V	W	X	Y	Z	AA

Course deliverables & Voice of the learners

PFMEA (AIAG – VDA) workshop Course deliverables

- New proposed FMEA structure (2018)
- Mapping of FMEA process wrt APQP & IATF 16949
- Linkages between Design FMEA & Process FMEA
- Vital tools (inputs for P FMEA)
 - PFD
 - Characteristics matrix & Reverse FMEA approach
 - 5 T analysis
 - Process block diagram
- Real case analysis on PFD & Process FMEA
- Changes in the FMEA approach (2018)
- Successful case studies
- Advanced learning on Process FMEA & sustenance of

Voice of the Learners

- Reverse FMEA concept for identification of Potential failure modes are very good !
- The assignments given during workshop were very innovative and conceptual
- Analysis through various photos and Videos was very much useful !
- Linkages between PFMEA and PFD is mind blowing !



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