

Smith Manufacturing
 Unit 12
 Tenbury Industrial Estate
 Tenbury Wells
 Worcs
 WR15 6QW

FAILURE MODE AND EFFECTS ANALYSIS for PROCESS

FMEA Number : FN00027 FMEA Type : Assembly FMEA First Created : 05/09/2004

Customer :AERO COMPONENTS LTD
 Plant :
 Customer Part Number :AC4567
 Customer Reference :RT

Customer Drawing Number :ACD-4567-03
 Customer Drawing Issue :08
 Customised Number :AABCCDD11223344
 Internal Reference :A1

Material :Mild Steel
 Material Specification :EN1A
 Warrant/ISIR :
 Description :STEEL PIN

FMEA Number :FN00027
 Component :ABCD1234
 Model Year(s)/Vehicle(s) :

Issue Number : 1
 Process Responsibility :John Smith
 Key Date :
 Core Team :Graham Black

Latest Issue Date :05/09/2004
 Prepared By :Robert Powell
 First Issue Date: 05/09/2004 Latest Issue Date: 05/09/2004

Failure Mode	Effect Of Failure	S e v	y	Cause Of Failure	O c c	Process Controls Prevention	Process Controls Detection	D e t	R P N	Proposed/ Corrective Action/Status	Result				Action Date + Responsibility
											S	O	D	RPN	

Process Number : 1
 Process Name : Moulding
 Process Description : Injection Moulding Nylon

Outside Supplier Not Affected

Material cracks	Component breaks	6		Wet granules	4	Dry polymer before use	Visual inspection by operator	3	72	Record all sample checks	6	2	2	24	M.Bradbourne 12-06-01
	Unightly appearance	4		Polymer not reground properly	4	Use grain gauge on regrind	UV inspection by packer	2	32	Write regrind certificate number on batch sheet	6	1	1	6	T.BOULTON QC ENGINEER

Process Number : 2
 Process Name : Moulding Setup
 Process Description : Injection Moulding Preparation & Setting

Outside Supplier Not Affected

Material cracks	Component breaks	8		Polymer not reground properly	3	Use grain gauge on regrind	UV inspection by packer	2	48	Write regrind certificate number on batch sheet	8	1	1	8	PLANNED MAINTENANCE SHEETS UPDATED 30-03-2004
-----------------	------------------	---	--	-------------------------------	---	----------------------------	-------------------------	---	----	---	---	---	---	---	---

FMEA Number :FN00027	Issue Number : 1	Latest Issue Date :05/09/2004
Component :ABCD1234	Process Responsibility :John Smith	Prepared By :Robert Powell
Model Year(s)/Vehicle(s) :	Key Date :	First Issue Date: 05/09/2004 Latest Issue Date: 05/09/2004
Core Team :Graham Black		

Failure Mode	Effect Of Failure	Severity	Cause Of Failure	Occurrence	Process Controls Prevention	Process Controls Detection	Detection	RPN	Proposed/ Corrective Action/Status	Result				Action Date + Responsibility
										S	O	D	RPN	

Process Number : 3	Outside Supplier
Process Name : Moulding	Not Affected
Process Description : UEV Foam	

Mould lines	Unightly appearance	Y	Environmental condtions		Store raw material in cool dry stores	Visual inspection by operator			Record all sample checks				Quality Control to perform Cpk.Studies
	Dirt Ingress	Y	Environmental condtions		Store raw material in cool dry stores	Visual inspection by operator			Record all sample checks				Quality Control to perform Cpk.Studies
Blisters	Injury - scratch/cut skin		Debris on a face		Use air line to clean tool after each moulding	Visual inspection by operator			Record all sample checks				Quality Control to perform Cpk.Studies
Voids	Dirt Ingress		Environmental condtions		Improve weather tightness of building Re-roof electric doors Aircon New heaters	UV inspection by packer			Record all sample checks				Quality Control to perform Cpk.Studies

Process Number : 4	Outside Supplier
Process Name : Trimming	Not Affected
Process Description : Final trim of moulding	

Material cuts	Unfit for purpose		Operator error		Improve lighting	UV inspection by packer			Record all sample checks				Quality Control to perform Cpk.Studies
---------------	-------------------	--	----------------	--	------------------	-------------------------	--	--	--------------------------	--	--	--	--

FMEA Number :FN00027
 Component :ABCD1234
 Model Year(s)/Vehicle(s) :

Issue Number : 1
 Process Responsibility :John Smith
 Key Date :
 Core Team :Graham Black

Latest Issue Date :05/09/2004
 Prepared By :Robert Powell
 First Issue Date: 05/09/2004 Latest Issue Date: 05/09/2004

Failure Mode	Effect Of Failure	S e v	y	Cause Of Failure	O c c	Process Controls Prevention	Process Controls Detection	D e t	R P N	Proposed/ Corrective Action/Status	Result				Action Date + Responsibility
											S	O	D	RPN	
Process Number : 5 Process Name : Door furniture Process Description :															Outside Supplier Not Affected
Material cuts	Unsightly appearance			Operator error		Improve lighting	Visual inspection by operator			Record all sample checks					Quality Control to perform Cpk.Studies