



Control Plan

WE/CP
Rev : 01
Date : 24-09-2015

Prototype

Prelaunch

✓ Production

Part No. / Ch. Lvl : KF140033
Part Name / Desc. : O Ring
Supplier / Plant : Wriston Elastomers, Mogappair
Supplier code : -

Key Contact / Phone : Mahadevan.P (9940574297)
Core Team : P.M/K.M/M.G/K.D/S.A/M.S.P
Sup. Plant App. / Dt :
Oth. App. / Dt (if req.) : N.A.

Date (Org) : 9/30/2015
Cust. Engg App. / Dt. (if req.) : N.A.
Cust. Qual App. / Dt. :
Other App. / Dt. (if req.) : N.A.

Process No. & Description	Machines, Devices, Jigs & Tools	Charecteristics		S P L C H A R	Methods								Reaction Plan / Corrective Action
					Product / Process		Evaluation / Measuring Technique	Sample		Control Method			
		Product	Process		Specification	Tolerance		Size	Freq	Responsibility	Prevention	Detection	
010 - Material Receipt & Storage	Weighing Scale / Air Conditioner	Material Grade/Quantity	Storage Condition		As per PO / Dustfree free under 30 degree centigrade	± 10% of PO quantity.	Visually checking the packing, test certificate/ Weighment and Temperature Sensor	100%	Every GRN/ Daily	Stores - InCharge	Stores Incharge to prepare GRN/ Keep Raw Material Room Closed	Checking	Reject the material and inform Head - Purchase
020 - Incoming Quality Clearance	Supplier TC	Polymer, Filler, Plasticiser and Additives	Incoming Quality Check		As per Master specification	As per master spec	Test Certificate	-	Every GRN	Stores - InCharge	Source only from approved vendors	Checking	Quarantine the material. Inform Head - Purchase
030 - Weighment & Issue	Weighing Scale, Bale Cutter & Saw	Polymer, Carbon, Oil and Additives	-		As per compound receipe	± 5% of advised qty except ± 2% for Additives.	Weighing Scale	Batch Qty	Every batch	Stores - InCharge / Kneader Operator	Batch Card	Weighment	Stores Incharge / Kneader Operator to reweigh & issue
040 - Kneading	Kneader	Compound	Kneading Sequence / Pressure / Temperature / Time		As per work instruction/ Batch Card	As per batch card	Visual Checking / Pressure & Temperature sensor/ Time counter	Batch	Every Batch	Kneader Operator	Batch Card	Visual	Stop mixing. Train the kneader operator / Set the time, temp & pres. Check the cooling system.
050 - Maturation	Air conditioning Chamber	Compound	Chamber Temperature / Maturation Time		Dustfree free under 30 degree centigrade for 24 hrs	± 5 degree,± 6 hrs.	Temperature Sensor	Batch	Twice everyday	Compund Store - incharge	Temperature Log	Sensors	Check the maturation, if required allow more maturation.
060 - Milling	Mixing Mill	Compound	Cross Mixing		Sufficient cross mixing as per Work Instruction	N.A.	Visual Checking	Batch	Every Batch	Mill Operator	Dispersion Analyser	Dispersion Analyser	Train the Mill Operator. Remill the batch.
070 - Compound QC	Kneo / Durometer / Tensile / Compression etc	Compound	Compound Testing		As per Master specification	As per master spec	As per standard	One slab & Pellet	As per Quality Plan	Head - R&D	Calibrate gauges / Test Equipments	Testing Equipments	Stop issue of compound. Recall components. Arrange for rework.
080 - Preforming	Sheeting Mill / Extruder / Autocut / Driller	Compound	-		As per Master specification	As per master spec	Weighing Scale / Dial thickness gauge / ruler	Every blank	Every Key	Preforming Operator	Calibrate gauges	Checking	Re mill the batch, adjust the die and autocut cut width
100 - Moulding	Hydraulic Press / Compressor / Tool / Lever	Components	Pressure / temperature / time		Pressure - 150 Kg/CM², Temp - 170°C, Time - 3 mins	Pressure - ± 5%, Temp - ± 5°C, Time ± 1 mins	Pressure & Temperature sensor. Time counter	All paramter s	Every 4 hrs	Moulding Operator/ Quality Inspector	Preset and programme lock	Sensors	Stop prodn, reset temperture, Check temp controller & train Operator
	Bench									Deflashing			



Control Plan

WE/CP
Rev : 01
Date : 24-09-2015

Prototype

Prelaunch

✓ Production

Part No. / Ch. Lvl : KF140033	Key Contact / Phone : Mahadevan.P (9940574297)	Date (Org) : 9/30/2015
Part Name / Desc. : O Ring	Core Team : P.M/K.M/M.G/K.D/S.A/M.S.P	Cust. Engg App. / Dt. (if req.) : N.A.
Supplier / Plant : Wriston Elastomers, Mogappair	Sup. Plant App. / Dt :	Cust. Qual App. / Dt. :
Supplier code : -	Oth. App. / Dt (if req.) : N.A.	Other App. / Dt. (if req.) : N.A.

Process No. & Description	Machines, Devices, Jigs & Tools	Charecteristics		S P L C H A R	Methods								Reaction Plan / Corrective Action
					Product / Process		Evaluation / Measuring Technique	Sample		Control Method			
		Product	Process		Specification	Tolerance		Size	Freq	Responsibility	Prevention	Detection	
130-Deflashing	Grinder, Stones & Scissors	Components	-		As per Master sample	N.A.	Visual	100%	Every stage	Operator / Deflashing Incharge	-	Visual Checking	Rework the products and train operator
140-Quality Inspection	Magnification Glass, limit samples/ GO-NOGO/Taper gauge, DTG/Vernier	Components	-		As per AOI	As per AOI	Visual / Magnifier/ GO-NOGO/ Taper Gauge, DTG/Vernier	100% Visual	Every Lot	Inspection Incharge/ Quality Engineer	Head - QC, test recheck.	Visual / Magnifier/ GO-NOGO / Taper gauge, DTG / Vernier	Reject the piece & inform Head - Quality.
150-Packing & Storage	Bins/Carton	Components	-		As per Packing standard	Nil	Visual	100%	Every bin/ Carton	Quality Inspector	Head - QC, test recheck.	Visual despatch	Repack into another Bin/carton
160-Despatch	Third party	Components	-		N.A.	N.A.	N.A.	N.A.	N.A.	Stores - InCharge	Stores - InCharge	Invoice	-

Prepared By:	Approved By:
--------------	--------------