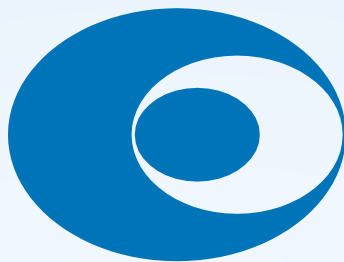


**In Support of Endurance Business Vision, Mission and Strategy, This manual describes the process followed at Endurance to identify and select suppliers and their involvement in Product Life Cycle Management through APQP Integration to assure “Quality At Source”. This manual also covers the expectations, requirements, guidelines and practices expected by suppliers doing business with Endurance.**

# **Supplier Quality Assurance Manual**



**ENDURANCE**

*Complete Solutions*

Second Edition

## Our Purpose

"Continuous value creation for Customer, Employees, Vendors and all other stakeholders"

## VALUES

Customer Centricity



Integrity



Transparency



Teamwork



Innovation



## Pledge



- I am proud to be associated with Endurance
- I am privileged to have the opportunity to create the Endurance of tomorrow
- I will align my actions to the Vision and Values of Endurance
- I know it begins with ME and requires persistence, hard-work and passion EVERYDAY
- I commit to live ENDURANCE VALUES EVERYDAY

## Message to Supplier

Dear Supplier,

We are pleased to present you this Supplier Quality Assurance Manual.

It not only specifies quality expectations of our company but also guide how to meet those.

This manual contains Endurance requirements for the supplier's Quality System and provides a foundation for assuring the quality of bought out components purchased by Endurance Technologies Ltd.

We expect concerned employees in your organization to refer and follow this in letter and spirit.

If you have any questions please contact our representatives from SQA function.

Your commitment and support in providing Endurance with high Quality parts is greatly appreciated.

Sincerely,



Mr. Rajesh Jain  
GM- Group SQA  
Endurance Technologies Ltd.



Mr. Sanjay Sanghai  
VP-Group Purchase  
Endurance Technologies Ltd



## Preface

In order to realize our Goal, “Endurance to become first Choice Supplier to all its OEM customers”. It is not only imperative to sustain and build on our current Business practices, but also we must continuously improve on systems being followed to reach desired mile stone.

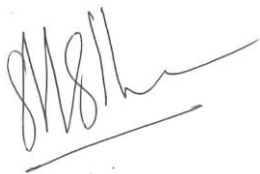
In the highly demanding auto component domain in which we operate, this would only remain a distant dream unless we maintain consistently high quality performance not just to the satisfaction of our OEM customers but also to their delight. We need to create, demonstrate and maintain an edge over others in terms of Quality performance to achieve this proactively.

Considering our large dependence on bought out components, we will not be able to achieve and maintain high quality performance with our customers unless it is matched by an equal or better quality performance by our suppliers. Ensuring such consistent high performance by our suppliers demands an undivided attention and focus with unambiguously defined goals.

With increasingly demanding customers, growing volume of business and ever increasing number of products and models, this has become a large and critical area needing immediate attention.

Therefore we are herewith releasing the “**Supplier Quality Assurance Manual**” as a reference guide which will certainly help you to fulfill the Quality expectations of Endurance.

Sincerely,



Mr. Sunil Kolhe  
President & Chief Sourcing Officer  
EnduranceTechnologies Ltd



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## 1. Overview of Endurance group

**Endurance Technologies** is one of India's leading automotive component manufacturing companies. Anurang Engineering Company Private Limited which merged into our company in 2006, commenced manufacturing of aluminium castings in Aurangabad, Maharashtra, India in FY 1986. Over time, we have grown organically in India and diversified our capabilities by introducing suspension products, transmission products and braking systems. Starting with two aluminium casting machines in FY 1986, we have grown to operate 16 plants in India and 9 plants in Europe. Today Endurance Technologies is the largest aluminium die casting manufacturer\* in India and one of the leading automotive component manufacturers in aluminium die casting (including alloy wheels), suspension, transmission and braking systems. We are a complete solution provider from design to after-market service. Our products and services in India include:

- Raw and machined aluminium castings such as high pressure die castings, low pressure die castings and aluminium alloy wheels for motorcycles
- Suspension products such as shock absorbers for scooters, motorcycles and 3 wheeler, front fork for motorcycles & scooters, hydraulic dampers for quadricycles
- Transmission products such as clutch assemblies, cork and paper based friction plates for motorcycles & three wheelers and Continuous Variable Transmission (CVT) assemblies for scooters
- Braking systems such as hydraulic disc brake assemblies including calipers, master cylinder and rotary disc brake for motorcycles & scooters and hydraulic drum brake assemblies and tandem master cylinder for three wheelers - After-market services to cater to the replacement market.

In Europe we predominantly cater to four wheeler OEMs, focusing on engine and transmission components. Our products include raw and machined aluminium castings (high pressure and gravity die castings products) and steel, cast iron and engineering plastic parts.

**Company Purpose, Vision, Goal, Mission and Philosophy:-**The Quest to stay ahead in a rapidly evolving market has made Endurance constantly develop new products and upgrade its manufacturing capabilities. Over the years we have rapidly expanded our product portfolio across markets and brands while maintaining the highest quality standards. Each new component made for our customers is an inspiration that drives us further to make Endurance globally a recognized and leading automotive component partner.



## 2. Basic Requirements

### 2.1 Performance Expectations:-

The table below defines the target performance level for Endurance suppliers. All suppliers should strive to meet and exceed these target values. The Performance of minimum level-2 as mentioned in vendor rating policy is mandatory.

MESUREMENTS	TARGET	
	Category	Target
<b>Rejection at receipt (GRN Stage) and at Line of Endurance</b>	Proprietary	Less than 100 PPM
	Castings	Raw-Less than 20000 PPM
		M/ced- Less Than 3000
	Press Parts	Less than 500 PPM
	Tubes	TFF- Less than 10000 PPM
		M/c Tubes. bush, cut tubes -Less than 2000 PPM
	Forged, Machines & Turned	Less than 2000 PPM
	Plastic, Rubber	Less than 1000 PPM
	Springs	Less than 1000 PPM
	Sintered	Less than 500 PPM
	Fasteners	Less than 500 PPM
	Sub-contractors	Less than 5000 PPM
	Outsourcing Casting - PDC	Less than 30000 PPM
<b>Defect Occurrence at Endurance's Customer</b>	No. of Occurrences	0 Occurrence
<b>EFR (Early Failure Returns)/Warranty</b>	No. of Occurrences	0 Occurrence
<b>Responsiveness to Quality Problems</b>	<b>Activity</b>	<b>Timeline</b>
	Problem identified and Containment action to be initiated	Within 24 hours
	Containment action to be implemented	Within 48 hours
	Root Cause Analysis and action to be implemented	Within 10 Days
	Effectiveness verification by Endurance QA/SQA.	Within 20 Days
<b>Delivery</b>	Line Loss Occurrences against confirm schedule	No line loss
	Packaging	As per agreed norms

## 2.2 Management System Requirements:-

Area	Requirements	Reference
<b>Quality Management System</b>	Minimum ISO 9001-2015 Certification, Goal should be for IATF16949 (Based on Risk Assessment)	Time to time submission of Valid Certificate along with NCR & Closure Report for QMS / EOHS Audits by 3 <sup>rd</sup> Party
<b>Supplier Evaluation</b>	For New Suppliers : ETL Evaluation Score –Minimum 75%	FT-PUR-SQA-04 –Supplier System Evaluation
	For Existing Suppliers : Min Level 2	Vendor Rating Policy
<b>Raw Material Controls</b>	Raw Material Buying from Endurance Recommended / approved Source along with declaration on country of Import in case of usages of imported material	As agreed during PPAP / List of Approved supplier by ETL
	Submission of in house / third party Material test reports to Endurance QA	As agreed during PPAP
<b>ETL Customer Specific Audits</b>	Compliance to Customer Specific Requirements like QAV1 (System audit), QAV2 (Process Audit)	QAV and PQCS Formats of Customer
<b>Critical process Audits (surface treatment)</b>	Audit Score Min.75%	FT-PUR-SQA-14 - Wet Process Audit
<b>Packing Standard</b>	Mutually agreed during Initial development or as per time to time communication from ETL	FT-PUR-SQA-20- Packing Standard
<b>IT System and Communication</b>	E-mail, internet facility for effective two way communication and access to Endurance Vendor Portal / Advanced Shipment Notice (ASN)	<a href="http://www.endurancegroup.com/vcs/vendor/login.aspx">http://www.endurancegroup.com/vcs/vendor/login.aspx</a>

## 3. Supplier Evaluation and Approval



### 3.1 Management System Requirement:

All Potential suppliers must comply with Quality management System (ISO 9001-2015). Certified by recognized agency and renewed time to time in line with requirement. Goal should be for IATF16949 Certification.

### 3.2 Supplier's Primary Assessment:-

Potential Supplier shall contact Endurance Strategic Sourcing/VCD Buyer & shall provide required information in RFI format (FT-PUR-SQA-01), along with company profile including quality and delivery performance with existing customers to Endurance Sourcing/VCD Buyer.

This provides a simple way for potential suppliers to share their standards and capabilities with Endurance.

### 3.3 Eligibility Assessment:-

Based on primary assessment by Endurance VCD/Sourcing buyers potential supplier shall be evaluated on eligibility criteria's like Financial Capability, Succession Planning, Statutory Compliance and Business Ethics and if supplier qualifies then will be offered to ETL CFT ( SQA, Plant QA, sourcing and VCD) to initiate the process to meet new / alternate source requirement.

### 3.4 Confidentiality Agreement (Non-Disclosure Agreements)

Endurance realizes that maintaining an effective supplier relationship may require Sharing information, communications, data or technology that is sensitive in nature. Before establishment of business relationship with Endurance, suppliers are required to sign and return a Non-Disclosure Agreement (NDA). The supplier shall treat all information and data related to the business relationship with Endurance in strict confidence and report any intentional or non-intentional breach of confidentiality to Endurance management.

The Non-Disclosure Agreement (NDA) format, will be sent by the Endurance buyer.

Same shall needs to sign by potential suppliers with paying of appropriate franking charges to make this a legal document to be signed by either party.

### 3.5 Purchase Agreements & Code of Conduct:-

Simultaneously Endurance Buyer shall also share a format, of Purchase Agreements containing clauses like, Confidentiality, Purchase Order/Contracts, Prices, Share of Business, Payment terms, Quality, Delivery, Packing, Logistics, Material accounting, General terms, Environment safety, Process controls, Prohibitions etc.

Same shall needs to sign by potential suppliers with paying of appropriate franking charges to make this a legal document to be signed by either party.

Signed code of conduct and self assessment to be submitted by potential suppliers to Endurance.

### 3.6 Onsite Evaluation by ETL CFT:-

The Endurance CFT has been developed CFT Evaluation Model (FT/PUR-SQA/04), using its history of working with suppliers, lessons learned and “Best in Class” practices, This audit normally takes one full day at suppliers site, depending on the size of the organization and is required for each supplier manufacturing location that will shipping material to Endurance Site.

### 3.7 Criteria for Supplier Approval

Following is the criteria for selection of Supplier as potential supplier to Endurance.

<b>Audit Score</b>	<b>Supplier Classification</b>
75 -100	Approved
60 – 74.9	Eligible to submit action plan and re-audit
Less than 60	Rejected

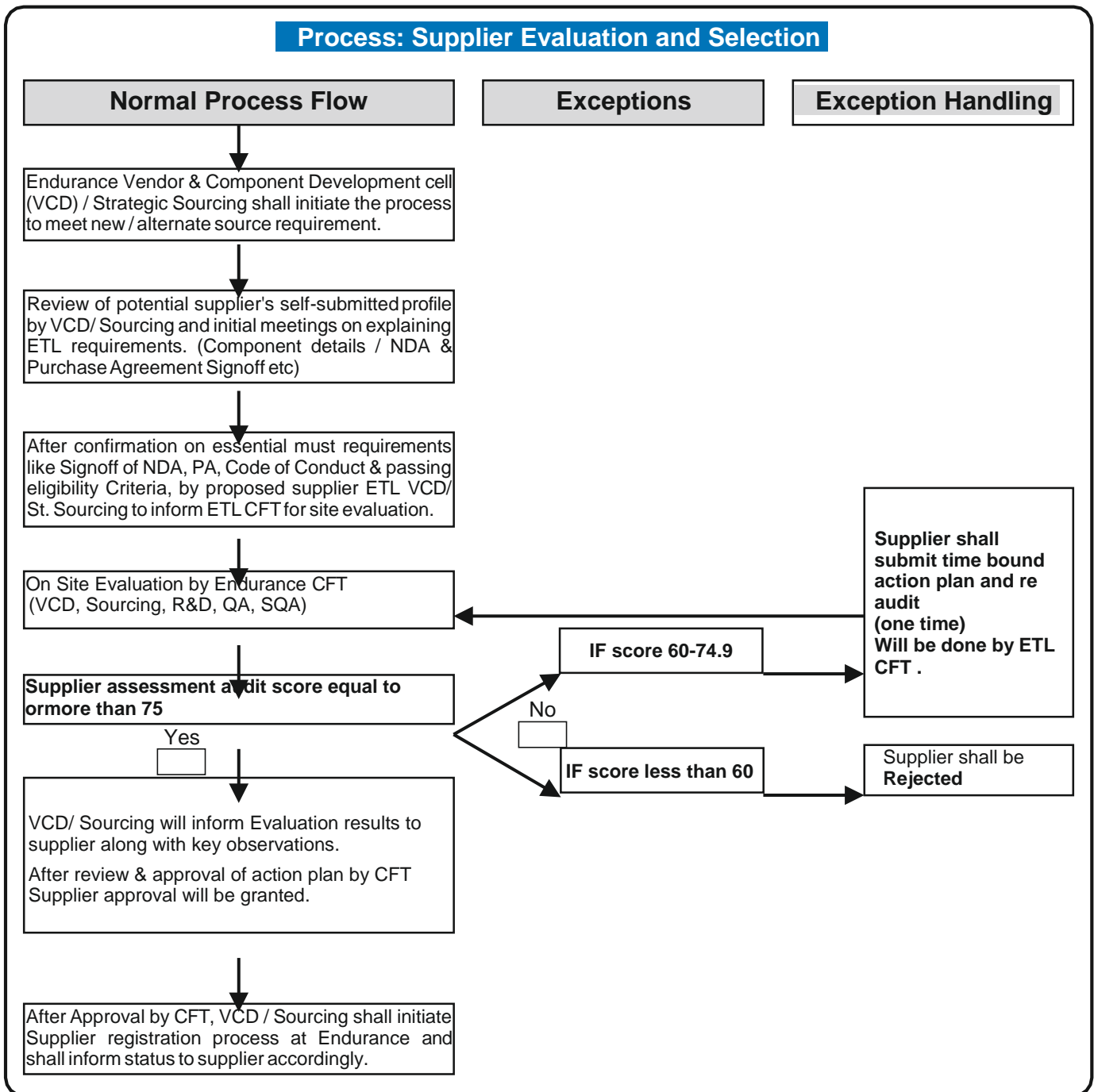
For all checkpoints from (FT/PUR-SQA/04) supplier must score minimum marks as categorized below,

1. Points marked with # are must compliance requirements where supplier can score either 3 or 0 marks. In case of '0' score in any of these points supplier will be disqualified.
2. Points marked with \* are critical requirements where supplier must score Min. 2 marks (In addition to overall score of 75) to get approval status.
3. Action plan from supplier is mandatory for points with score 0 and 1

With these conditions overall score should be equal to or more than 75 Marks.

Supplier scored less than 75 but more than 60 shall submit time bound action plan on non conformities observed during audits. Follow-up audit will be done by ETL CFT to ensure supplier achieves the acceptable score limit (Min.75).

Suppliers scored less than 60 shall not be considered for any business with Endurance.



### 3.8 Supplier Registration:-

On successful completion of CFT evaluation Endurance VCD / Sourcing Buyer shall initiate the supplier registration process SAP which will be routed through multilevel approval process within Endurance and on Final Approval by Chief Sourcing Officer a Supplier Code will be generated in SAP.

On generation of Supplier Code Endurance Buyer shall start Procurement Process

Any future business transaction with suppliers shall be w.r.t to his unique supplier Code Only.

## 3.9 Sample / Pilot lot Approval Process: - Common for New and Existing Suppliers

For sample/ Pilot lot approval refer below defined stages and authority matrix.

Sr. No	Type	Facilitator	Approving Authority	Approved Documents to flow at each stage
1	Sample Submission, Inspection and Feedback to Supplier	VCD *	Plant QA	1. Sample Inspection Report (SIR)
2	Audit / visit by ETL CFT for system evaluation and ensuring readiness for ETL customer visit / audit. (If required)	VCD *	ETL CFT	1. SIR 2. Validation Report as applicable 3. Customer Specific report as applicable (Control plan / PQCS, PFD)
3	Supplier visit by ETL customer (If Customer Demands)	VCD & Plant QA	Customer	1. SIR 2. Validation Report as applicable 3. Customer Specific report as applicable (Control plan / PQCS, PFD) 4. Evidences and documentation for closure of observations by ETL CFT audit (above Sr. No-2)
4	Joint Component / Assembly Level Inspection by Customer (If required)	Plant QA & VCD*	Customer	1. SIR 2. Validation Report as applicable 3. Customer Specific report as applicable (Control plan / PQCS, PFD)
5	Product & Process Audit by ETL CFT for ensuring readiness for ETL customer audit. (If applicable)	VCD*	Plant QA / SQA	4. Evidences and documentation for closure of observations by ETL CFT audit (above Sr. No-2 & 5)
6	Product & Process Audit by ETL Customer (If applicable)	Plant QA & VCD*	Customer	5. Component/Assembly wise joint SIR 6. Customer Approval report
7	PPAP Approval	VCD*	Plant QA	PPAP Docket and all above

\* For existing parts in place of VCD, responsibility lies with Strategic sourcing.

## 3.9 Sub Supplier Evaluation and Approval

**Objective:** - To have clear guidelines for selection, evaluation and approval of sub suppliers who are indirect sources to Endurance.

**Scope:** - Raw Material sources of identified critical part categories and sub suppliers for all types of surface Treatment & Heat treatment suppliers as described in below table.

Sub supplier Category	Critical Process / Part category
Raw Material	Springs, Tubes, Piston Rod, Extruded Aluminum Tubes.
Surface Treatment	Powder Coating, All types of Plating (NiCr, Alzn, Zinc Nickel, etc.), CED Coating, and Anodizing.
Heat Treatment	Nitriding

Scope does not include overseas suppliers.

**Trigger:** - Endurance Vendor Component Development (VCD) / sourcing team shall initiate request for new source (indirect) addition in particular category as mentioned above to,

- Meet new part process/RM requirement,
- Develop alternate source, for capacity expansion
- Develop new facility/ capacity expansion by existing supplier
- Develop alternate source in case of poor quality performance by existing supplier
- Meet cost reduction or Commercial targets
- Evaluate customer recommended source

**Supplier's Primary Assessment** – Potential supplier shall contact Endurance Sourcing / VCD buyer and shall provide required information in RFI format (FT-PUR-SQA-01), along with company profile including Quality and Delivery performance with existing customers.

**Eligibility Assessment** - Based on primary assessment by Endurance VCD/Sourcing potential suppliers shall be evaluated on eligibility criteria's like Financial Capability, Succession Planning, Statutory Compliance and Business Ethics and if suppliers qualifies will be offered to ETL CFT (SQA, Plant QA, sourcing/VCD) to initiate the process to meet a new/alternate source requirement.

**Onsite Evaluation by ETL CFT-** Suppliers system and quality controls shall be evaluated onsite by CFT with process specific audit checklists / suppliers own process standard / CP/PQCS.

### Criteria for Supplier Approval –

Audit Score	Supplier Classification
75 ~ 100	Approved
60 ~ 74.9	Eligible to submit action plan and re- audit (Onetime)
Less than 60	Rejected

After approval, concern plant of ETL shall conduct Process/ product validation as applicable before start of mass supplies.

**List of Approved Sub Suppliers** – Approved Suppliers shall be added to the list of Approved suppliers which will be reviewed once in 6 months for addition / deletion required if any



## Process: Sub supplier Evaluation and Approval

Endurance Vendor & Component Development cell (VCD) / Strategic Sourcing shall initiate the process to meet new / alternate source requirement/new facility/capacity expansion of by existing supplier

Supplier primary assessment by VCD / Sourcing function

YES

NO

Supplier shall be rejected

Eligibility assessment for Financial Capability, Succession Planning, Statutory Compliance, Environmental compliance and Business Ethics

VCD/Sourcing to offer supplier for Evaluation by CFT (VCD/Sourcing, QA, SQA)

Onsite Audit by ETL CFT and if supplier assessment audit score equal to or more than 75

IF score 60 – 74.9

NO

IF score is less than 60

Supplier shall be rejected

YES

Supplier shall submit time bound action plan and re audit (One time) will be done by ETL CFT

NO

YES

Supplier shall be rejected

VCD/ Sourcing will inform Evaluation results to supplier along with key observations.

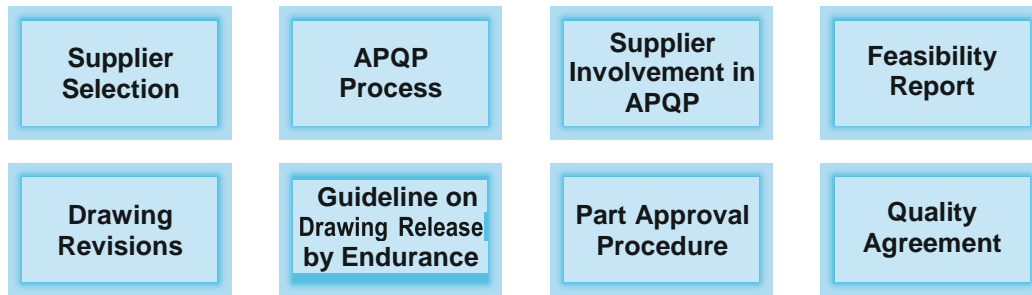
Supplier re assessment score  $\geq 75$

After Approval by CFT, supplier name shall be added to Endurance Approved list of Suppliers for Raw Material, Surface Treatment & Heat treatment

After approval, concern plant of ETL shall conduct Process/ product validation as applicable before start of mass supplies.

List of Approved Suppliers shall be shared with all direct sources by Sourcing/VCD to follow.

## 4. New Product Development



Staying competitive in the markets where ENDURANCE operates requires continuous development of new products and regular improvements to existing product.

Supporting the introduction of new products requires a well-defined and organized process for project planning and launch.

Endurance organizes all new product introductions into projects. Suppliers are required to have an effective project planning process that is capable of supporting the Endurance process and timing for project management.

Suppliers are expected to develop a detailed Advanced Product Quality Plan for the development and prove-out of processes used to produce Endurance products.

Endurance expects suppliers to create product launch plans to support:

- Launch of new components intended for serial production.
  - Significant changes to existing products, or process
  - Development of new manufacturing processes

### 4.1 Supplier Selection:-

The list of suppliers (Existing + New if needed) with whom New Part development planned shall need to be prepared by Endurance VCD team and proposed to CFT for review and Evaluation of source selection process to ensure Quality at Source. Same shall need to be signed by concern authorities like SQA Head, VCD Head, Sourcing Head, and QA Head if needed.

During internal signing process existing suppliers shall be evaluated based on their existing QCD performance at Endurance, capacity and capability, available infrastructure, attitude, willingness to grow with Endurance etc.

If proposed source is new then it will follow Supplier Evaluation and Selection Process as described in ChapterNo-3.

### 4.2 APQP Process:-

The objective of the planning process is to deliver the project on time, at cost and at the highest level of quality. The initial development of the APQP should begin upon receipt of the RFQ.

**APQP identifies the tasks to be completed, the expected timing, assigned responsibility for completion and the critical path.**

## 4.3 Supplier Involvement in APQP:-

**Scope:** - APQP shall be applicable for all new components being developed for Endurance.

**Objective:** - To deliver product on time with ensuring First Time Right.

APQP Phase	Activities	Responsibility		Expected Supplier Involvement	Ref. Document to be used
		Endurance	Supplier		
<b>Plan and Define</b>	Design Goal (Reliability & Quality Goal)	✓		Supplier Shall Provide Input if asked by Endurance	-----
	Preliminary Process Flow	✓			
	Preliminary listing of Special Product & Process Characteristics	✓			
<b>Product Design and Development</b>	Design FMEA	✓		ETL Shall Consult with Suppliers if required	-----
	Design Verification	✓			
	Design Reviews	✓			
	Prototype Building	✓	✓	AT Suppliers	Feasibility Confirmation
	Engineering Drawings	✓		Feasibility Confirmation	
	Material Specification	✓			
	Special Product & Process Characteristics	✓			
	Gauge/Testing Equip. Requirements	✓			
<b>Process Design and Development</b>	Floor Plan Layout		✓		Submission of PPAP and Quality Agreements
	Process Flow Chart		✓		
	Process FMEA		✓		
	Characteristics Matrix	✓	✓		
	Process instructions		✓		
	Product/Process Quality System review	✓	✓		
	Pre-Launch Control Plan		✓		
	Measurement System Analysis		✓		
	Preliminary Statistical Process Controls		✓		
	Packaging Standards Defining	✓	✓		
<b>Product and Process Validation</b>	Production Trial Run		✓	Submission of PPAP and Quality Agreements	Standard PPAP Document Kit is available on Endurance Vendor Portal
	Measurement System Evaluation	✓	✓		
	Preliminary Process Capability Study	✓	✓		
	Production Part Approval	✓			
	Production Testing and Validation	✓			
	Packaging Evaluation	✓			
	Production Control Plan		✓		
	Quality Agreement Signoff	✓	✓		

## 4.4 Feasibility Report:-

On receipt of Drawing from Endurance Suppliers shall needs to review for its manufacturing feasibility considering below criteria.

- Dimensions and tolerances – Achievable or Non achievable
- Can it be inspected for all the dimensions
- Is there any need of special equipment
- Are sufficient stocks are available for next operations
- Can it be standardized with existing available similar product
- Is the part nomenclature is clear enough
- Is Specified material can be made available in required size
- Is it possible to use any alternate material for the same
- Is any special facility installation is needed to manufacture the same
- If yes then is it available or needs to be established.

Above is the representative questioner it can be extended with other suitable applicable review check point based on product requirement?

You may get a feasibility format from Endurance VCD Buyer (FT/PUR-SQA/05), If not it is available at Endurance vendor Portal under Format Section.

Supplier's early confirmation with above or with addition of other applicable check points shall help Endurance to freeze design specification which best suits to ease of manufacturability.

## 4.5 Drawing revisions w.r.t Feasibility Report submitted by Suppliers:-

Endurance VCD Buyer shall review the feasibility confirmations same shall be shared with R&D by VCD.

After R & D review if anything needs to be changed shall be adopted with new release of drawing same shall be shared with suppliers through VCD.

If required same cycle of feasibility confirmation and subsequent review by Endurance Concerns (VCD, QA and R & D) can be repeated.

## 4.6 Guideline on Drawing Release by Endurance:-

**4.6.1** Endurance Drawings for Development shall carry prefix letter as “X” and revision number A, B,C and so on i.e. (XA, XB, XC,.....) till freezing of design specifications.

**4.6.2** Suppliers are expected to involve themselves with the input on manufacturability concerns / improvement suggestion to freeze the design specifications at minimal iterations.

**4.6.3** Final drawing with revision number A shall be considered as final approved one and supplier shall start PPAP Submission at this level of design. Endurance VCD Buyer will notify the supplier that a PPAP is required.

**4.6.4** Any further revision from A to B or B to C shall require to raise ECR (Engineering Change Request) and on approval ECN (Engineering Change Note) shall be created by Endurance R&D and new release of drawing shall be shared with suppliers through Sourcing buyer.

## 4.7 Part Approval Procedure (PPAP Requirement):-

**Scope:** - PPAP Submission shall be applicable for all new components being developed for Endurance.

**Objective:** - To create a reference of initial process followed /approved and later on creating its linkage with Process Change Management if any and actions under policy frame work.

**4.7.1** Suppliers shall ensure that the PPAP document and sample submissions are in accordance with the requirements of the Automotive Industry Action Group (AIAG) PPAP Manual (latest edition)

**4.7.2** Supplier need comply with Level-3 given in below table, For Submission use PPAP Template , which may be changed time to time as per changes by AIAG

SN	Requirements	Level-1	Level-2	Level-3	Level-4	Level-5
1	Design Record	R	S	S	*	R
	For Proprietary Components/Details	R	R	R	*	R
	For all other components Details	R	S	S	*	R
2	Engineering Change Documents, if any	R	S	S	*	R
3	Customer Engineering approval, if required	R	R	S	*	R
4	Design FMEA	R	R	S	*	R
5	Process Flow Diagrams	R	R	S	*	R
6	Process FMEA	R	R	S	S	R
7	Control Plan	R	R	S	S	R
8	Measurement System Analysis Studies	R	R	S	*	R
9	Dimensional Results	R	S	S	*	R
10	Material, Performance Test Results	R	S	S	S	R
11	Initial Process Studies	R	R	S	S	R
12	Qualified Laboratory Documentation	R	S	S	*	R
13	Appearance Approval Report (AAR), if applicable	S	S	S	S	R
14	Sample Product	R	S	S	*	R
15	Master Sample	R	R	R	*	R
16	Checking Aids	R	R	S	*	R
17	Records of Compliance with Customer-Specific requirements	R	R	S	*	R
18	Part Submission Warrant (PSW)	S	S	S	S	R
19	Bulk Material Checklist	S	S	S	S	R

**S: - Submission to Endurance, R: - Retention at Suppliers Place, \*- Retain at Supplier Place Submit to Endurance on request**

**4.7.3** PPAP can only be approved based on “A” release of the drawing and document package, unless there is a clear agreement with Endurance QA and an approved deviation.

**4.7.4** PPAP Submissions date must be planned as a milestone in supplier's APQP plan. Any delays or changes to the PPAP target date should be communicated to the Endurance VCD Buyer and QA.

**4.7.5** Upon satisfactory completion of all required measurement and tests the supplier shall complete the required information on the Part Submission Warrant (PSW).

**4.7.6** Endurance QA will review PPAP package and assign one of the following,

- Fully approved in compliance with all specification.
- Conditional or interim Approval
- Not approved.

In the case of conditional approval is given, it must be supported with an approved Deviation. All deviation requests require review and approval by Endurance VCD, Sourcing and QA.

PSW shall be signed at this stage supplier shall retain copy of the same for future reference.

## **4.8 Quality Agreement:-**

In addition to the PPAP Quality agreement is a document to be signed off between Supplier, Plant QA, and VCD to ensure all the process and product requirements are captured and sustenance will be ensured by adhering to methods defined & agreed by both parties. (Supplier & ETL)

### **Quality agreement shall contain**

1. Purpose
2. Scope of Supply
3. Quality Expectations (PPM)
4. Raw Material Specification, Supplier, Inspection – Test certificates frequencies
5. Casting / Forging / Tubes Inspection and acceptance standard
6. Surface Treatment standards (Plating, Powder coating, Phosphating, Heat treatment Etc.)
7. Machining Resting, Fitment & Function references
8. In process Inspection / SPC requirements
9. Final Inspection Requirements – Quality Plan with uniformity in checking methods, PDI format and contents.
10. Visual / Aesthetic acceptance criteria
11. Identification and traceability- To ensure how parts will be differentiated in case of Supplier, RM Supplier, Process, Inspection status.
12. Packaging Standards - (Stage wise- In-process, Transit, Final)
13. Process validation requirements – Testing's & samples frequencies- SST, CASS, and OVENTTR.
14. General terms and conditions
15. Sign off with Plant QA / VCD / Supplier / SQA (As required)

## 5. Process Change Management

Information of Proposed Change

Change Approving Authority Matrix

Change Approval Process

Punitive Action Against Unapproved Change

Matrix : Non - Conformance Vs Punitive

In accordance with the IATF 16949 standard, the PPAP guidelines and Endurance Purchasing conditions, a supplier cannot implement a change to a product or production process after PPAP approval without notifying to Endurance.

### 5.1 Information of proposed Change:-

If the supplier desiring or requiring a change for betterment shall submit a complete Product and Process Change Notification form (FT/PUR-SQA/08) through Vendor Portal as soon as the modification project is identified, and at least 8 weeks prior to the intended Start of Production. Suppliers may be required to submit additional information to support evaluation of the proposed change.

Process Change request form (FT/PUR-SQA/08) is available on Vendor Portal under Change Mangt.

The purpose of this requirement is to prevent quality & delivery issues resulting from unapproved, untested changes or modifications after PPAP approval. This applies, but is not limited to the following.

- Transferring of the production line: partly or totally to a new or existing location, plant or building.
- New production layout or changes to production line
- Change of your sub-tier supplier
- Changes of a process at a contract supplier, (surface treatment, machining.....)
- Packaging changes or repackaging operations
- Change at sub-tier suppliers that affect fitment, function & aesthetic of the product
- Renewal of current tooling
- Changes in the raw material grade, size, shape etc.
- Outsourcing of all or part of production to a sub-tier supplier
- Request for change to product design including dimensions, tolerance, function, appearance

## 1.2 Change Approving Authority Matrix:-

Below table describes on whom to inform and who will approve the proposed change by supplier prior to intended start of production.

Approving Authority Matrix					
Sr No	Process change	R&D	VCD & Strategic sourcing	Plant QA	SQA
1	Usage of raw material 1.1 Of different grade than specified 1.2 from un approved source 1.3 Of different specification (Dia., length, billet size etc)	I & A	A	A	I & A
2	Non adherence to (wrt PPAP/CSC), 2.1 Agreed Process flow/sequence, machines, equipment, Tooling, Dies, Mold, Mfg. Fixtures etc. 2.2 Process parameters and controls defined in Control plan/PQCS/QAV/IPO or any other document defining the same 2.3 Transferring of the production line- partly or totally to a new or existing location, plant or building, change in layout 2.4 Omission or skipping of agreed operations / addition of process 2.5 Agreed Inspection method and frequency leading to Quality defect at ETL/ETL Customer 2.6 Cycle time as mentioned in CSC by means of cost saving efforts leading to Quality defect		I	A	A/I
3	Change in an approved sub supplier for, 3.1 Any component, operation 3.2 Supplier for surface treatment 3.3 bought out parts	I	I & A	A	A
4	Outsourcing any of the component/operation fully or partially to sub vendor		I & A	A	A
5	Change in, 5.1 Transporter 5.2 Local ware house location, 5.3 Agreed Packaging, 5.4 Infrastructure and facility at ware house for inspection, bin management etc.		A	A	I

**A: - Approval, I: - Information**



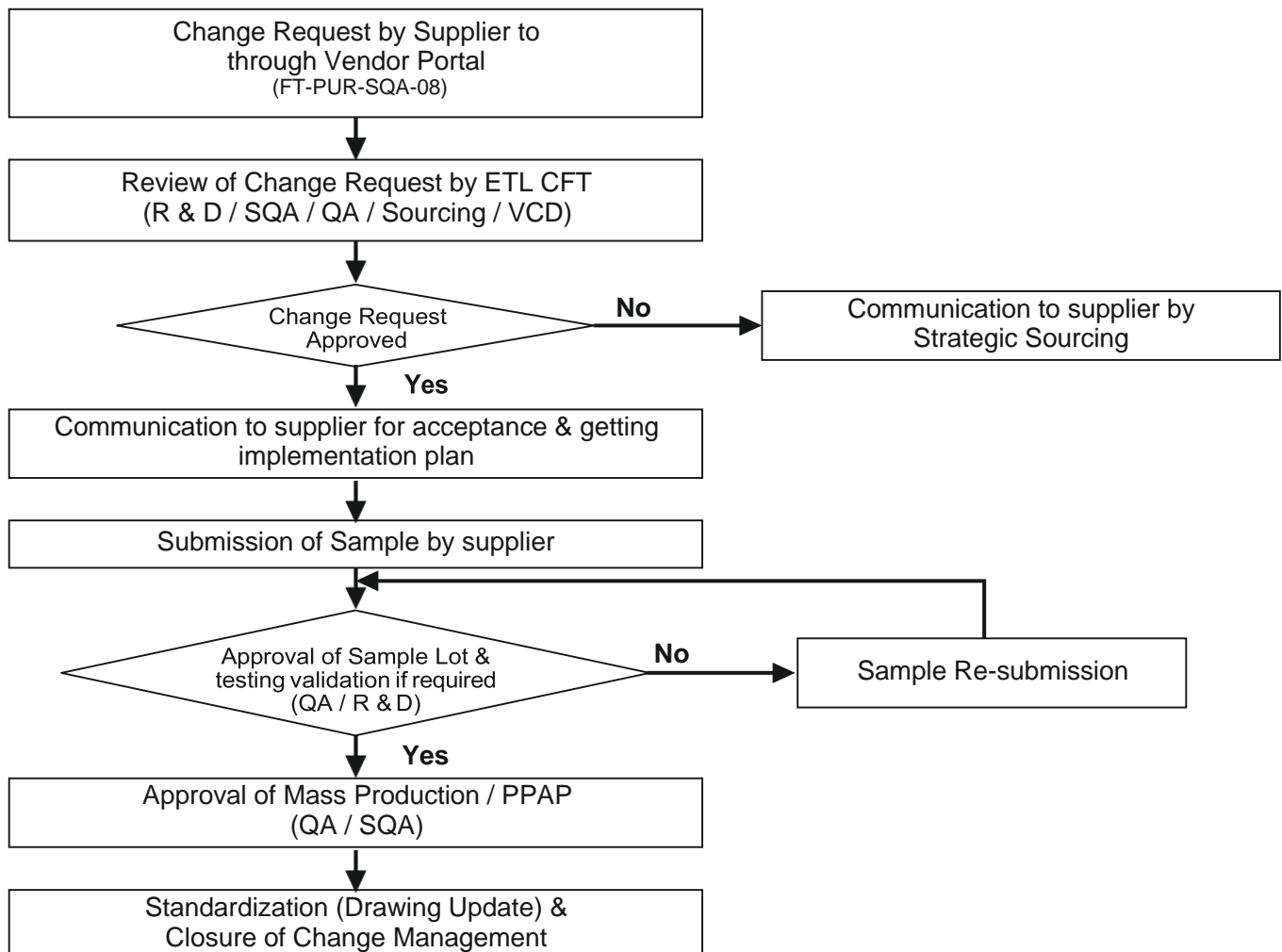
## 5.3 Change Approval Process:-

After receipt of such request by Endurance, same shall be shared with CFT team for analysis. Based on the impact to Endurance and the risk associated with the change it may have one of the following decisions.

- Authorize the supplier modification
- Ask to adopt the content of the supplier modification.
- Ask the supplier to delay the implementation until extra actions/verification are performed.
- Ask the supplier to cancel the proposed modification.

Once approved by Endurance supplier will be notified by concern officials. Upon receipt of such approvals only supplier should implement the modification project according to the agreed implementation plan.

The level of PPAP documentation required to support the introduction of the change will be determined by QA if needed. Authorization to start shipping (with the changes implemented) is only granted via return of signed PSW following PPAP approval.



### 5.4 Punitive actions against unapproved Change:-

Any changes in process/activities as mentioned without Endurance approval shall be liable for appropriate disciplinary actions by Endurance under Change Management Policy Frame Work.

Suppliers are liable for penalties and strict punitive actions by Endurance as below,

Please note proposed quantification of punitive actions would be,

SN	Punitive Action	Penalty details
1	Incidence Specific Penalty	Amount of Penalty to ETL by end customer if any and/or 5% of values of supplies after implementation of unapproved change plus actual expenses incurred to segregate, rework, visit to customer etc by ETL team
2	Downward revision of SOB	SOB shall be restricted to maximum 30 %
3	Restriction to NPD- New part development	With Immediate effect (To restart need action plan to establish system for process change management)
4	Discontinuation of Supplies	Decision based on severity of unapproved change plus Action No.1

Action point No. 2 & 3 shall be reviewed after one year of action taken.

In addition, any penalty or punitive action on Endurance from our customer due to vendor supplied parts and attributable to defect in raw material or process at vendor or sub vendor, shall be passed on to the concerned vendor inclusive of the consequential losses

For further details refer our Change Management Policy in Policy Section.

**5.5 Matrix: Nonconformance VS Punitive:** - ETL reserves the right to add/review the process change scenario and related punitive actions.

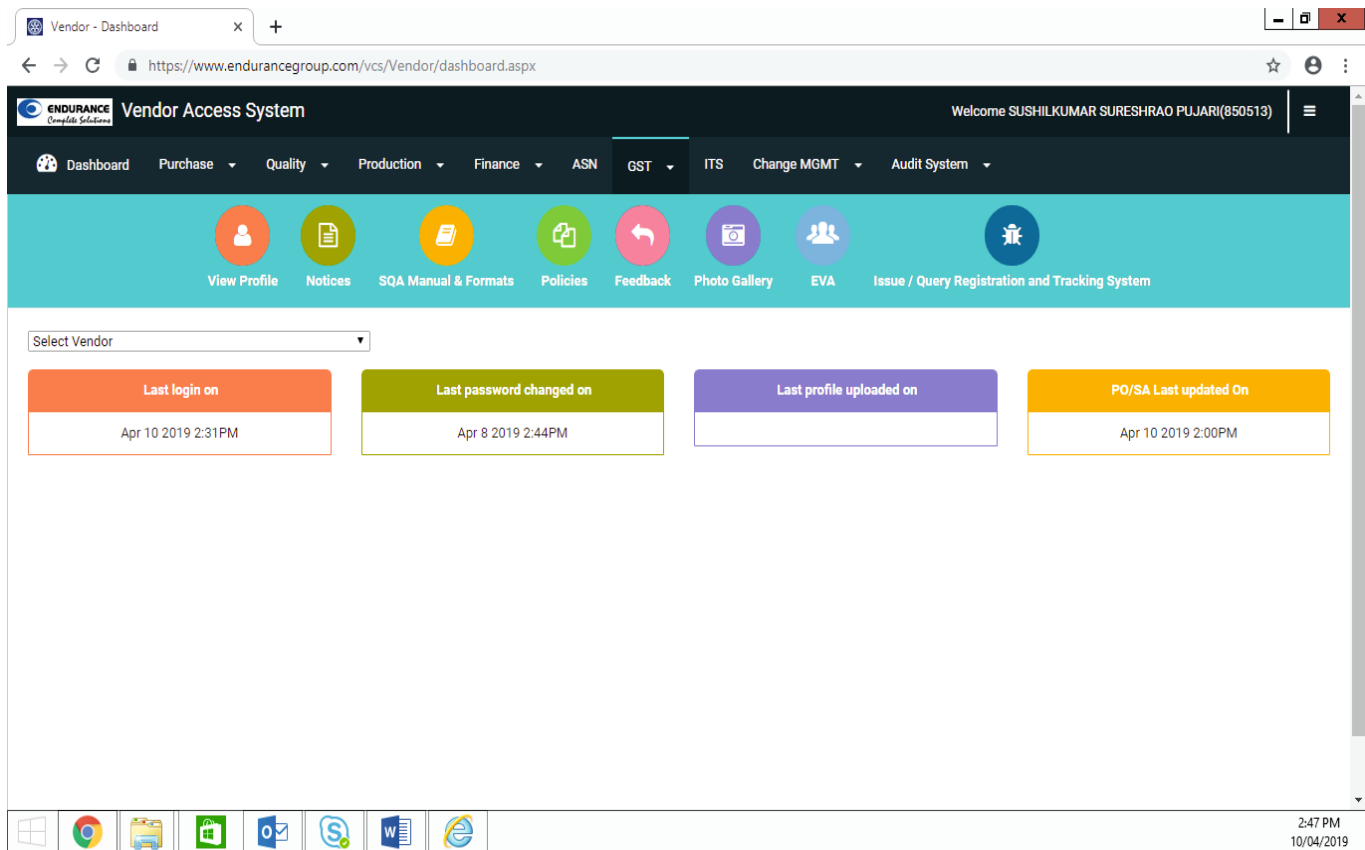
SN	Non Conformance scenario	Punitive Action
1	Usage of raw material 1.1 Of different grade than specified 1.2 from un approved source 1.3 Of different specification (Dia., length, billet size etc)	1. Incidence specific penalty with discontinuation of concern part till restoration and 2. If severity of problem is high then Discontinuation of Supplier
2	Non adherence to (wrt PPAP/CSC), 2.1 Agreed Process flow/sequence, machines, equipment, Tooling, Dies, Mold, Mfg. Fixtures etc. 2.2 Process parameters and controls defined in Control plan/PQCS/QAV/IPO or any other document defining the same 2.3 Transferring of the production line- partly or totally to a new or existing location, plant or building, change in layout 2.4 Omission or skipping of agreed operations / addition of process 2.5 Agreed Inspection method and frequency leading to Quality defect at ETL/ETL Customer 2.6 Cycle time as mentioned in CSC by means of cost saving efforts leading to Quality defect	1. If non adherence lead to quality issue at actual or potential quality problem at ETL/customer end then incidence specific penalty with discontinuation of supplies of concern part/part family till restoration of observed non conformity. 2. In case of repeated non adherence, supplies of part shall be discontinued with restriction for new part development 3. Revision of CSC if No impact on quality
3	Change in an approved sub supplier for, 3.1 Any component, operation 3.2 Supplier for surface treatment 3.3 bought out parts	1. Incidence specific penalty with discontinuation of supplies of concern part/part family till transfer of operation / parts from approved supplier 2. Revision of CSC if applicable
4	Outsourcing any of the component/operation fully or partially to sub vendor	1. Incidence specific penalty with discontinuation of supplies of concern part/part family till In-sourcing of concern component / operation 2. Restriction to NPD
5	Change in, 5.1 Transporter 5.2 Local ware house location, 5.3 Agreed Packaging, 5.4 Infrastructure and facility at ware house for inspection, bin management etc.	Penalty in case of quality issues at ETL discretion

## 6. Performance Monitoring and Corrective Action



Endurance recognizes that the performance of the supplier base has a direct and immediate impact on organizational performance. In response to this, Endurance has developed a system for the measurement and evaluation of supplier performance. The indicators resulting from this process are compiled every day and are reviewed and evaluated at Plant QA/Group SQA function of Endurance.

These measurements are available for review on the supplier portal under section of Quality.



In addition to performance, Endurance shall measure a supplier performance based on their cooperation in aggressively seeking to resolve problems.

Suppliers are evaluated on the promptness in response when notified of a problem, the timeliness of their response, and the effectiveness of actions taken to resolve the problem.

Endurance invites suppliers to work as partners in the problem solving process.

## 6.1 Non Conformance Handling:-

**6.1.1** Suppliers are expected to respond immediately to any non-conformance and ensure that all receiving plants are protected within 24 hours. Suppliers are required to notify Endurance QA immediately if it is suspected that non-conforming material has been shipped to Endurance facility.

**6.1.2** Depending on the type of non-conformance and material status, supplier parts may be sorted, reworked for that supplier representatives will be allowed to perform such task after approval by concern Plant QA/PPL representatives at Endurance.

To record such instance a Deviation / Sorting Note shall needs to be filled by attending supplier's representative to take approval by Endurance concerns same shall be made available at Endurance Material receipt Stage (Inward QA).

It is required before any rework or adjustment will be performed. Suppliers should be prepared to take any or all of the following actions after nonconforming material are identified at Endurance facility.

- Replacement nonconforming material to fulfil the requirement of OK material
- Provide resources to perform required sorting or rework immediately.
- Provide instructions, acceptance criteria and required gauges / instruments to their representatives performing inspection, sorting or rework.

## 6.2 Corrective Action Response Timings:

It is of vital importance that the supplier starts the problem solving process upon notification.

It is critical that appropriate actions occur immediately to contain the problem and avoid any further disturbances to production or potential quality hazard.

When notified of a non-conformance suppliers are requested to react in accordance with the following timeline:

Time Line	Expected Action
Immediately	To Acknowledge the rejection communicated by Endurance
Within 24 Hours	Containment action including sorting internally, in-transit and at Endurance and Problem analysis should start.
Within 48 Hours	Containment action completed and short term corrective action should be fully implemented.
Within 10 working days (Timing starts after confirmation of non-conformance)	Root Cause analysis complete for both occurrence & non-detection, permanent corrective action defined and implemented.
Within 20 working days	Effectiveness of permanent corrective action checked and recurrence prevented and communication with Endurance on Sustenance Mechanism.

## Supplier Quality Assurance Manual

Suppliers Responsiveness in line with above time line given shall be tracked by Endurance and Suppliers Performance shall be evaluated in Quarterly Vendor rating as per Vendor rating Policy. For Submission of CAPA Supplier shall use appropriate formats like 8D- (FT/PUR-SQA/9) / 6W2H- (FT/PUR-SQA/10) /QFR--(FT/PUR-SQA/11)

### 6.3 Stages of Rejection booking and communication with supplier.

S N	Stage of Rejection	Procedure	Authority	How it will be informed to Suppliers
1	Receipt (GRN)	Nonconformance on Sampling Basis	Plant In ward QA	Through Vendor Portal
2	Line/Assembly	Non confirmation during product usages (Further processes/final assembly)	Plant Production/Process QA	
3	Rejections at Endurances OEM Customers	Such rejection if any if attributed to Supplier shall be punched in SAP	Plant QA	
4	EFR/Warranty			

Suppliers Quality Performance in Parts per Million (**PPM**) shall be inclusive of all these rejection stages, calculated as under,

$$\text{PPM} = \frac{\text{Rejection Qty.}}{\text{Total Supplied Qty.}} \times 10,00,000$$

Suppliers Quality Performance in Parts per Million (**PPM**) shall be inclusive of all these rejection stages, same shall be available on Vendor Portal on real time basis against each of Endurance Plants.

Supplier shall need to monitor own performance to meet our performance expectation as described in section 2.1.

## 6.4 Performance Evaluation System: (Vendor Rating Policy)

The table below defines criteria for performance evaluation and supplier's performance shall be evaluated on **Quarterly Basis**.

**Scope:** - All Suppliers associated with Endurance and supplying BOP (BOM) Parts

**Objective:** - To identify real time performance levels of each suppliers and take Reward/ Punitive measures against each.

S N	Parameter	Wt%	Sub Parameter	Wt%	Criteria		Marks					
					Category	PPM Target	100% Marks	80% Marks	60% Marks	40% Marks	20% marks	0% Marks
1	Quality-1.1 Performance at ETL & Customer End	85	Rej. in PPM at receipt (GRN Stage) and at line of Endurance	25	Category	PPM Target	100% Marks	80% Marks	60% Marks	40% Marks	20% marks	0% Marks
					Proprietary	100	0 to 100 PPM	101 to 150 PPM	151 to 200 PPM	201 to 250 PPM	251 to 300 PPM	PPM greater than 300
					Castings	20000	0 to 20000 PPM	20001 to 25000 PPM	25001 to 30000 PPM	30001 to 35000 PPM	35001 to 40000 PPM	PPM greater than 40000
					Press parts (powder coated/plated)	500	0 to 500 PPM	501 to 1000 PPM	1001 to 1500 PPM	1501 to 2000 PPM	2001 to 2500 PPM	PPM greater than 2500
					Fork Pipe	10000	0 to 10000 PPM	10001 to 12500 PPM	12501 to 15000 PPM	15001 to 17500 PPM	17501 to 20000 PPM	PPM greater than 20000
					Tubular parts	2000	0 to 2000 PPM	2001 to 2250 PPM	2251 to 2500 PPM	2501 to 2750 PPM	2751 to 3000 PPM	PPM greater than 3000
					Forged & machined	2000	0 to 2000 PPM	2001 to 2250 PPM	2251 to 2500 PPM	2501 to 2750 PPM	2751 to 3000 PPM	PPM greater than 3000
					Plastic, Rubber	1000	0 to 1000 PPM	1000 to 1250 PPM	1251 to 1500 PPM	1501 to 1750 PPM	1751 to 2000 PPM	PPM greater than 2000
					Springs (Plated / powder coated)	1000	0 to 1000 PPM	1001 to 1500 PPM	1501 to 2000 PPM	2000 to 2500 PPM	2501 to 3000 PPM	PPM greater than 3000
					Sintered	500	0 to 500 PPM	500 to 750 PPM	751 to 1000 PPM	1001 to 1250 PPM	1251 to 1500 PPM	PPM greater than 1500
					Fasteners (Bulk Rej. Commodity)	500	0 to 500 PPM	501 to 2000 PPM	2001 to 3000 PPM	3001 to 4000 PM	4001 to 5000 PPM	PPM greater than 5000
					Outsourcing PDC	30000	0- 30000 PPM	30001 to 35000 PPM	35001 to 40000 PPM	40001 to 45000 PPM	45001 to 50000 PPM	PPM greater than 50000
Proprietary/Outsourcing casting Machining	3000	0 to 3000 PPM	3001 to 4000 PPM	4001 to 5000 PPM	5001 to 6000 PPM	6001 to 7000 PPM	PPM greater than 7000					

# Supplier Quality Assurance Manual

S N	Parameter	Wt%	Sub Parameter	Wt%	Criteria	Marks			
1	Quality-1.1 Performance at ETL & Customer End	85			--	0% Marks	50% Marks	75% Marks	100% Marks
			EFR / Warranty complaint/ due to vendor part No. of Occurrences	10	---	3 or more occurrences in Quarter	2 Occurrences in Quarter	1 Occurrence in Quarter	0 Occurrence in Quarter
			Customer complaint due to vendor part. No. of Occurrences	15	---	One occurrence in a Qtr.	-	-	No Customer complaint in Qtr.

S N	Parameters	Wt %	Sub Parameters	Wt. %	Criteria	Marks				
						0% Marks	25% Marks	50% Marks	75% Marks	100% Marks
1	Quality 1.2 Supplier Audits	85	System Audit (FT-PUR-SQA-04)	10	System Audit Score	Audit score <40 %	40.1~ 55	55.1 ~ 70	70.1~80.0	Audit score >80.0 %
			Process Audits	20	Process Audit Score	Audit score <60 %	60.1~ 70	70.1 ~ 80	80.1-90	Audit score >90 %
	1.3 Supplies as per agreed packaging standard			Adherence to packaging standard	5	No. of Occurrences of supplies in non-agreed packing standards	0% Marks	50% Marks	75% Marks	100% Marks
						10 or > 10 occurrences in Quarter	6 to 10 Occurrences in Quarter	0 to 5 Occurrence in Quarter	Zero Occurrence in Quarter	
2	Delivery	15	Line Loss Occurrences against confirm schedule	15	--	0% Marks	50% Marks	75% Marks	100% Marks	
						More than 2 occurrences in Qtr.	Two occurrences in Qtr.	One occurrence in Qtr.	No line loss in a quarter	
Total		100		100						

**Performance Levels:** - Below table describes level of performance based on evaluation score.

L1	L2	L3	L4
If Score equal to or more than 90	If Score 70 to 89	If Score 50 to 69	If Score less than 50

**Performance Expectation:** - Supplier shall maintain min of performance of **Level-2**

Rating Frequency: - Quarterly



## 6.5 Supplier Audit System

Endurance employs a number of audit tools in its Supplier Quality Assurance Process. This starts with the assessment of a potential new supplier who desires to enter a business relationship with Endurance.

- A. **New Supplier Assessment** – An audit conducted with a potential direct supplier or indirect Raw material supplier for identified categories and sub suppliers for all surface Treatment & Heat treatment processes
- B. **Readiness for Customer Audit** – An audit conducted to assess a supplier's readiness for Customer Audit / Customer Specific Requirement
- C. **System and Process Audit** – An audit conducted to assess a supplier's process and quality system specific to a mature part w.r.t. High rejection /Customer Complaint /Critical Component.
- D. **Surprise Audits** – An audit to check compliance to agreed norms (compliance to processes in line with predefined control plan/PPAP), along with confirmation for usage of raw material from approved suppliers.

There shall be specific formats being used for such audits by Endurance QA and SQA as below,

1. System Evaluation Audit -(FT/PUR-SQA/04)
2. Surface treatment supplier Audit - (FT/PUR-SQA/14)
3. Process Audit - (FT/PUR-SQA/15)
4. New Product & Mass Production Process Approval - (FT/PUR-SQA/16)

### 6.5.1 Supplier Audit Guidelines

**Objective:** - To Provide clarity on Supplier audit methodology and its linkage with Vendor Rating.

- E. **Scope:** - All suppliers supplying BOP (BOM) Parts to Endurance and indirect Raw material supplier for identified categories and sub suppliers for all surface Treatment & Heat treatment processes will be audited as per ETL's Supplier Audit Plan.

### Performance Evaluation Criteria: (Part of Vendor Rating Policy)

The table below defines criteria for performance evaluation based on audits which carries 25% weightage in Vendor Rating. (Refer Annexure -1, Vendor Rating Policy)

Parameters	Sub Parameters	Wt.	Input Criteria	Marks				
				0% Marks	25% Marks	50% Marks	75% Marks	100% Marks
Supplier Audits	System Audit (FT-PUR-SQA-04)	10%	System Audit Score	Audit score <40 %	40.1~55	55.1~70	70.1~80.0	Audit score >80 %
	Marks out of 10			0	2.50	5	7.5	10
	Process Audit	20%	Process Audit Score	Audit score <60 %	60.1~ 70	70.1 ~ 80	80.1~90	Audit score >90 %
	Marks out of 20			0	5	10	15	20

# System /Process Audit Score of immediate last audit will be considered.


# In case of Process Audit by more than 1 plant of ETL then Average score of all audits performed by respective plants will be considered.

## Audit Scope:-

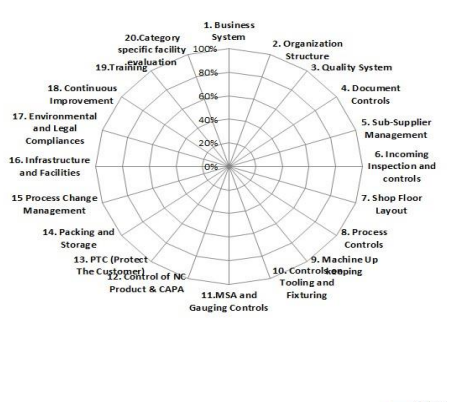
- System Audit** shall be conducted with comprehensive checklist (FT-PUR-SQA-04) covering 20 system areas.
- Process audit** shall be conducted w.r.t Approved Control Plan/PQCS/IPO/PPAP of critical part chosen by Plant CFT based on current rejection level /issues which will be referred for scoring & to judge level of process controls across all parts by respective supplier. Based on observations of process audit, a system audit score shall be revised and revised score shall be considered for calculation of vendor rating.

In addition to above audit no. 1 & 2 observations in issue specific visits / audits for any other reason, shall be considered for revision of system audit score if any and revised score shall be considered for calculation of Vendor rating.

## System Audit format

		Supplier System Evaluation		Doc.No.: FT/PUR-SQA/04		
				Rev. No : 06		
				Date.: 15.10.2019		
<b>Supplier Information</b>						
Supplier Name:- _____		Certification:- _____		Date:- _____		
Location:- _____		Certificate No.:- _____		Assessed By:- _____		
Contact Person:- _____		Expiration:- _____		_____		
Phone Number:- _____		Registrar:- _____		_____		
<b>Nature Of Business</b>						
Foundry _____		Die Casting _____	Forging _____	Stamping _____		
Spring _____		Machining _____	Plastic Moulding _____	Rubber Moulding _____		
Proprietary _____		Assembly _____	Other _____			
<b>Nature of Material or Service to be Provided to ETL</b>						
Supplier Proprietary Design _____			Sub Contracted service _____			
Commercial hardware _____			ETL Design _____		Other _____	
<b>Scoring Guideline for the Auditors</b>			<b>Criteria</b>			
Sr No	Score	Remark	Wtg.	% Score Achieved	Mark Achieved	
1	3	System is in place (Complying)	3	#DIV/0!	#DIV/0!	
2	2	System is in place but needs improvement	3	#DIV/0!	#DIV/0!	
3	1	System is in place but not evident	10	#DIV/0!	#DIV/0!	
4	0	No Compliance	5	#DIV/0!	#DIV/0!	
<b>Note</b>			7. Shop Floor Layout			
1.Points marked with # are must compliance requirements where supplier can score either 3 or 0 marks.In case of '0' score in any of these points supplier will be disqualified.			8. Process Controls			
2.Points marked with * are critical requirements where supplier must score Min.2 marks (In addition to overall score of 75 ) to get approval status.			9. Machine Up keeping			
3. Action plan from supplier is mandatory for points with score 0 and 1			10. Controls on Tooling and Fixturing			
<b>Judgement on eligibility Criteria</b> (Applicable in case of new supplier only)			11.MSA and Gauging Controls			
<b>Eligibility Criteria</b>	Financial Capability	OK <input type="checkbox"/> Not OK <input type="checkbox"/>	12. Control of NC Product & CAPA	7	#DIV/0!	#DIV/0!
	Succession Planning	OK <input type="checkbox"/> Not OK <input type="checkbox"/>	13. PTC (Protect The Customer)	10	#DIV/0!	#DIV/0!
	Statutory Compliance	OK <input type="checkbox"/> Not OK <input type="checkbox"/>	14. Packing and Storage	3	#DIV/0!	#DIV/0!
	Business Ethics	OK <input type="checkbox"/> Not OK <input type="checkbox"/>	15 Process Change Management	3	#DIV/0!	#DIV/0!
<b>On Site Audit Score</b>	75 ~ 100	Approved <input type="checkbox"/>	16. Infrastructure and Facilities	3	#DIV/0!	#DIV/0!
	60 ~ 74.9	Approved with Conditions <input type="checkbox"/>	17. Environmental and Legal Compliances	3	#DIV/0!	#DIV/0!
	Less Than 60	Rejected <input type="checkbox"/>	18. Continuous Improvement	2	#DIV/0!	#DIV/0!
<b>Evaluated By :-</b>			19.Training	3	#DIV/0!	#DIV/0!
GM - SQA		VP- Sourcing	20.Category specific facility evaluation	5	#DIV/0!	#DIV/0!
Signature & Date			100	#DIV/0!	#DIV/0!	

System Audit sheet



## Process Audit Format

Supplier Information		Part Information		Audit Information				
Supplier Name:-		Model		Audited By:-	Date:-			
Location:-		Part Name		Name	Dept.	Signature		
Contact Person:-		Part Number		1)				
Phone Number:-		Rev.Number & Date		2)				
		ETL Plant		3)				
		End Customer		4)				
				5)				
SN	Check point	Observations			Not Ok	Allotted Marks	Marks received	O - IF OK Δ - Improvement Point X - Minor NC XX - Major NC
<b>Raw material Inspection</b>								
1	Raw material procurement from approved sources.					2		
2	Availability of Manufacturers TC for every lot, grade. Insp of every batch of incoming raw matl of all suppliers.					1		
3	In case of non-availability of in-house insp facility - Insp being done & records available					1		
4	Traceability of raw materials with component production batch exists.					1		
<b>Inward Inspection</b>								
1	Received parts, under inspection parts and parts approved for use have appropriate tags and are kept in defined area to avoid any mix up possibility. Stores - parts are well kept(to avoid damages) & not subjected to dust, moisture & rust prone environment.					2		
2	FIFO system is followed for RM , BOPs , Chemicals and consumable items.					1		
3	Inward inspection plan is available and components (Including parameters related to special process) are checked as per plan & check sheet (containing CTQ parameters). Part drawings are available with highlighted CTQ parameter and classified as Safety, Function, Fitment and Aesthetic. Same CTQs are appearing in Inward Check Sheet check points.					1		
4	Control on Tier 2 and 3 vendors through Audit mechanism is in place.					1		

Process Audit Observation Recording Sheet - Sheet 1

Supplier Information		Part Information		Audit Information									
Supplier Name:-		Model		Audited By:-	Date:-								
Location:-		Part Name		Name	Dept.	Signature							
Contact Person:-		Part Number		1)									
Phone Number:-		Rev.Number & Date		2)									
		ETL Plant		3)									
		End Customer		4)									
				5)									
O - OK		Improvement point ___ Nos		X Minor NC ___ Nos		XX Major NC ___ Nos (Refer audit guidelines)							
No	Process Sequence	Process Name	Control Item		Specification	Observations	Check result	Countermeasure	Responsibility & Target		Counter measure completion confirmation ( ETL)		
			Process	Product					Person Responsible	Target Date	Name of Person	Date	Result
1													
2													

Annexure for Audit w.r.t IPO/Control Plan PQC -

**Audit Plan:** - Audit will be conducted as per ETL's audit plan considering Safety /Functional /Fitment/Aesthetic criticality of parts and/ or Field Issue/Weak Vendors / Previous audit Score and Vendor rating.

Sr No	Vendor Code	Vendor Name	Location	Audit Score FY 18-19	SQA Owner	Months											
						Apr-1	May-1	Jun-1	Jul-1	Aug-1	Sep-1	Oct-1	Nov-1	Dec-1	Jan-2	Feb-2	Mar-2
1			AURANGABAD	63	YLA		P										
2			AURANGABAD	34.85	YLA			P									
3			UDHAM SINGH NAGAR	74.81	HRT						P						
4			MUMBAI	74.81	HRT												
5			FARIDABAD	68.49	YLA					P							
6			AURANGABAD	72.29	YLA							P					

**Audit Team:** - Preferably audit team shall be Cross Functional (SQA + Plant QA+ Sourcing) and R & D as required

System Audit will be performed by ETL Corporate SQA along with CFT and Process Audits will be conducted by respective Plant QA Teams

**Audit Plan Communication:** - ETL SQA/QA shall communicate audit schedule in advance depending upon type of audits and audit responsibility as mentioned above

**Supplier team:** - During the audit presence of concern HOD's along with Senior Executive / Owner / MD is must.

**Audit NC reporting:** - Audit NC shall be identified if non-conformance observed in the areas mentioned below as examples but will not be limited to following only.

- Any non-conformance in a) CTQ (Critical to Quality) Characteristics of component/product b) parameters contributing to Customer complaint, EFR and warranty shall be treated as NC.
- Non-conformance observed against approved PPAP / Control Plan /PQCS/IPO/TPM practices like,
  - Usage of raw material of different grade than specified, from UN approved source, of different specification (Dia., length, billet size etc.)
  - Non-adherence to Agreed Process flow / sequence, machines, equipment, Tooling, Dies, Mold, and Mfg. Fixtures etc.
  - Non-adherence to Process parameters and controls defined in Control plan/PQCS/IPO/PPAP or any other document defining the same.
  - Transferring of the production line- partly or totally to a new or existing location, plant or building, change in layout
  - Omission or skipping of agreed operations / addition of process
  - Non-adherence to Agreed Inspection method and frequency leading to Quality defect at ETL/ETL Customer.
  - Non adherence to checking and correcting of process/machine parameter (as per JH/PM check list) which are critical for quality of parts
- Non availability / non-operational Must Have facilities required for part manufacturing, Inspection, Testing and Validation.
- Change in an approved sub supplier for any component, operation, Supplier for surface treatment, special processes (Welding, Heat Treatment etc.) bought out parts, agreed packaging etc.

5. Un approved Outsourcing of any of the component/operation fully or partially to sub vendor
6. If No Valid QMS Certification (ISO9001:2015 / IATF16949) or certificate is expired or certification activity not processed as planned
7. If no Valid Consent to operate from state pollution board / National Green Tribunal and all applicable facilities and requirements as mentioned in consent.
8. Observation in rest all areas shall be categorized as Improvement points.

**Audit NC Categorization:** - NC's shall be classified as Major, Minor and Repeated.

**Definition of Major NC/Defect:** - Non-conformance observed in the areas as mentioned above Sr No 1 to 7 as examples shall be categorized as Major NC but will not be limited to mentioned areas only.

**Definition of Minor NC/Defect:** - Non-conformance observed in the areas which is one of case across System and Non-conformance on CTQ if getting arrested in subsequent stage during inspection/Poke-Yoke shall be categorized as Minor NC. If spread of minor NC is wide and repetitive in nature then minor NC can be treated as Major at discretion of audit CFT and Head SQA

**Definition of Improvement Points:** - Observations/ evidences meeting the requirements but there is scope of further improvement and if time bound action Plan for self-identified NCs presented during Audit.

**Definition of Repeat NC:** If same NC observed on Same Stage / Different Stage / Cell / Machine for same characteristics in subsequent audit.

**NC Reporting:** - Minutes of meeting shall be signed off during closure of audit. Endurance SQA person shall share System Audit Score along with detailed observation report within 8 working days, however supplier shall initiate the actions immediately after the audit.

SN	Month	Audit Date	Audit done by (CFT)	Category	Vendor Name & Location	Audit Check point as reference	Audit observations	Corrective action decision (details)	Category (Major NC/ Minor Improvement Point)	Target Date	StatusG/Y/R
<b>Sample Audit observation tracking sheet</b>								To be updated by Respective suppliers			

**Closure of NC:** - Closure of NC shall be responsibility of supplier. ETL CFT shall support if any clarification or further details are required.

- Major NC's shall to be closed within 2 days, till its closure supplier shall ensure defect free supplies by mutually agreed actions like 100% inspection, Mistake proofing etc.
- Action Plan on all minor NC's and Improvement points shall submitted within weeks' time from date of audit, NCs to be closed in max. 10 days barring NCs where major investments and business decision is required, in such cases mutually agreed time bound action plan shall be submitted in weeks' time from date of audit
- Supplier also need to share consolidated closure report with evidences to ETL CFT
- In case of delay or noncompliance to NC closure wrt plan, QMS Certification, MPCB Certification, Investments related to Infrastructure and Must Facilities (Manufacturing, Inspection and testing), competent organization Structure etc., ETL sourcing shall be responsible to take it with supplier for closure.

**Review Mechanism for NC Closure:** - Concern auditor from SQA/ Plant QA need to get the closure update from respective supplier, if closure is not within stipulated time w.r.t type and severity of NC by respective supplier audited then need to be escalated with Plant QA heads and SQA team.

Review with such supplier shall be planned with ETL senior team (SQA Head / Plant QA heads) where in suppliers will be asked to present NC/ observations closure w.r.t audit by ETL team.

**Revision in Audit Score:** - Endurance shall revise system / Process audit score if satisfied with evidences submitted or else shall plan onsite verification. Score will be revised only if all audit observations are implemented in true sense including its horizontal deployment in applicable cases.

## 6.5.1 Penalty Guidelines:

SN	Defects/Major NCs noticed at	Customer / ETL	Occasions			Remark
			1 <sup>st</sup> Audit	2 <sup>nd</sup> Audit	3 <sup>rd</sup> Audit	
A1	Vendor Process Audit * (Refer page No.3 and 4 of supplier audit guidelines for NC/Defect details)	Audit by ETL	Rs. 0.20 Lakh	Rs. 1 Lakh + No New Product Development (NPD)	**Rs. 2 Lakhs + No New Product Development (NPD) + SOB revision	Any severe un approved change observed during audit will be liable to applicable penalty as per clause No. 5.4 of change management policy, or whichever is higher
		Audit by Customer	If Endurance Customer audits ETL supplier and imposes penalty to ETL an account of Defect/Major NC observed at supplier then same shall be debited back to back to supplier			
A2	Field Safety/ Function Related	ETL	Back to back cost as debited by Customer + 15 % Admin. Charges OR at discretion of ETL (case to case basis )			
A3	Plant Product verification – dismantling + Rework	ETL	1. Issue at Customer – Back to back Cost as debited by Customer + 15 % Admin. Charges 2.1 Issue at ETL where in Assembly/Sub assembly need to scrap at ETL- *Cost of Material + Labor +15% Admin. Charges 2.2 Issue at Endurance where in supplier parts are rejected at line – Debit as per current policy 9.3 Policy for Rejection handling of vendor parts mentioned in SQA manual page No.45. Refer Annex.2			* Cost of material-cost of assembly/ sub assly rejected /consequential damages due to supplier part which cannot be reworked
A4	Rework or segregation of BOP at ETL	ETL	Quality issue at ETL-BOP need rework or segregation in case of line stoppage possibility (else complete lot to be rejected ) (subject to ETL plant QA discretion) – Upto2 times Actual Cost of manpower utilized (depending on severity ,defective Qty& incidence Nos) , will be debited for detectable defects & supplier process related issues in line with agreed acceptance criteria & method , debit with prior discussion with supplier			This debit is in ETL Plant Purview (Approval authority CBUH )

For Repeated Quality issues – a) Apart from penalties as mentioned above, Plant and Corporate Purchase will raise additional penalties based on severity and impact b) Even after multiple penalties if there is No improvement observed next action of SOB reduction, Part category deletion and No new development will initiated by corporate Purchase based on Q performance

**Head SQA shall be approval authority for exercising the penalty for audit (A1)**

\*\* No New Product Development (NPD) and SOB revision cases shall be reviewed after one year of action based on Supplier Performance.

## 6.6 Continuous Improvement

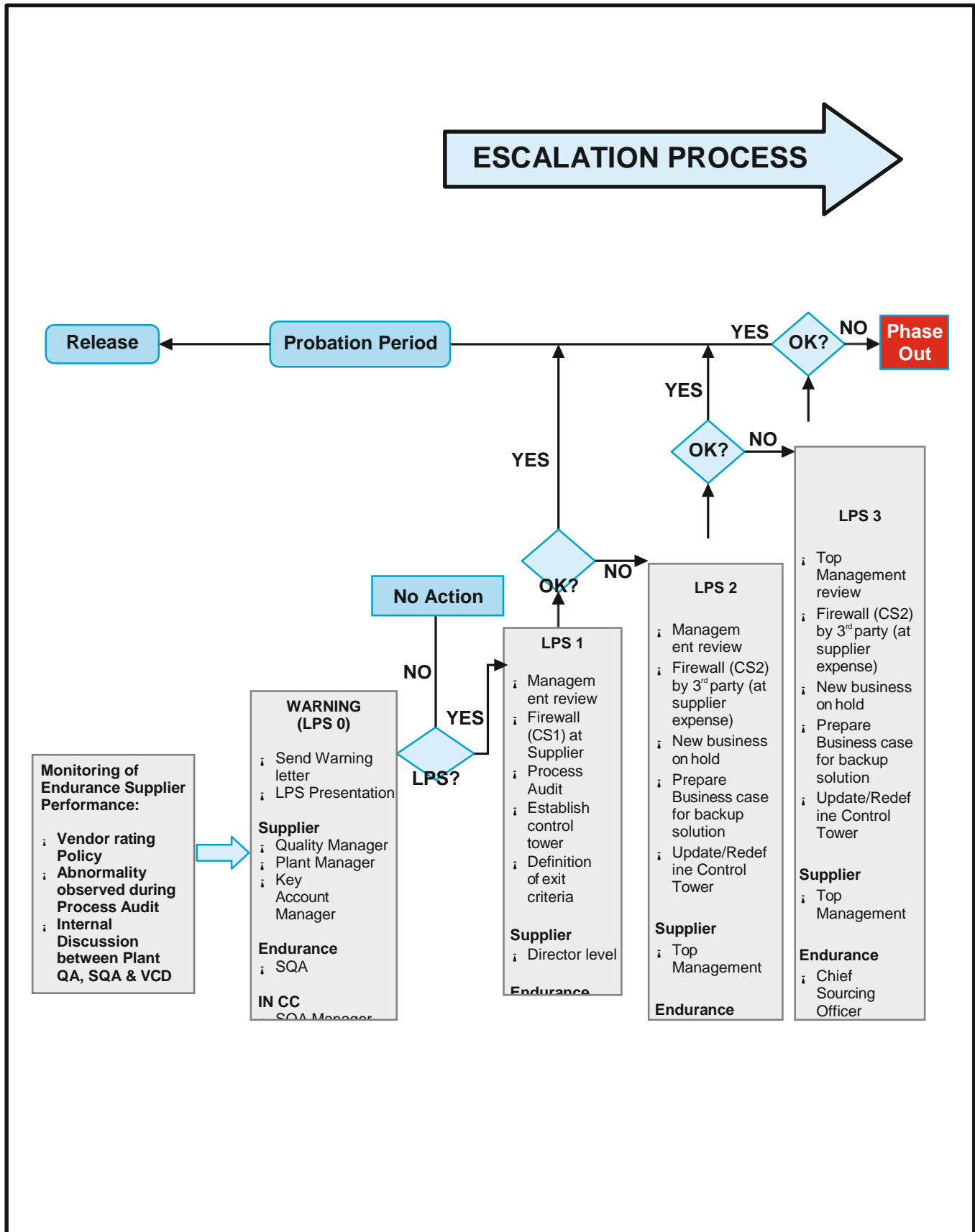
- 6.6.1** Suppliers are expected to use the lessons learned from each incident to improve production process, product design, or underlying business systems. The goal is to eliminate the possibility of similar incidents, not only by making procedural and processes adjustments on the manufacturing floor, but by removing the environment that allowed the issue to surface. Lasting improvement requires correcting the systems and strategies that support the production process.
- 6.6.2** In addition to isolated events, suppliers shall use statistical data to continually evaluate and refine their processes. This evaluation should include analysis of quality incidents, PPM, scrap, downtime, and warranty failures. The clear objective of this analysis must be reduction of variation with the finished product. The supplier shall have on-going, active improvement projects that target two or three of the largest problem areas and be able to demonstrate a positive trend in reducing incidents and repeat occurrences.

Whenever applicable, Supplier has to take approval for continuous improvement project from Endurance and timely update the status to Endurance.

## 6.7 Low performing suppliers

- 6.7.1** ENDURANCE monitors supplier performance on a monthly basis. When any of the monitored measurement parameters indicate negative performance trend or significant abnormality, the supplier is considered for elevation into the Low Performing Supplier process.
- 6.7.2** Suppliers will be notified of the potential inclusion in the LPS process by a warning letter sent to the supplier's quality department. The letter will include the reason or reasons a supplier is being considered for entry into the LPS process.
- 6.7.3** The LPS procedure provides a clearly defined guide to the analysis, actions and monitoring that will take place while a supplier is engaged in this process. Supplier improvement activities are initiated and monitored through a three-stage elevation process. Each stage has defined criteria for entry and exit and identified actions to be completed during the stage. Exit criteria are based on improved performance results and implementation of process improvements. Suppliers that do not meet the criteria for a stage by the target completion date are elevated to the next LPS stage level.
- 6.7.4** Each time the supplier is elevated to a higher stage, the actions required will be those of all previous stages, plus the additional actions required by the new stage. At any time that the exit criterion is met for a specific stage the supplier is moved to the "Monitoring" status. A supplier can be placed in the LPS based on performance for an individual part number, multiple part number bases or organizational performance. Supplier performance is tracked based on the ENDURANCE assigned Vendorcode.





## 6.8 Awards and recognition for high performing suppliers

### 6.8.1 Quality Awards: Quality awards are classified in seven levels as under ,

- 1) 1) BRONZE 2) SILVER 3) GOLD 4) PLATINUM 5) PLATINUM SUSTENANCE 6) SPECIAL AWARD 7) SPECIAL ACHEIVEMENT
- 2) The performance evaluation period for these awards will be respective Calendar Year.

SR. NO.	CATEGORY	TYPE OF AWARDS			
		BRONZE	SILVER	GOLD	PLATINUM
		4 Months	8 Months	12 Months	36 Months
1	PROPRIETARY (Sintered / Oil seals / Springs/ Electricals /Brake hoses.)	0 PPM	0 PPM	0 PPM	0 PPM
2	<b>CASTINGS</b> a) Ready to assemble. ( Machined castings)  b) Semi - finish casting.	< 100 PPM & (For leakage )  < 5000 PPM (For blow hole /Pin hole & Leakage)	< 100 PPM & (For leakage )  < 5000 PPM (For blow hole /Pin hole & Leakage)	< 100 PPM & (For leakage )  < 5000 PPM (For blow hole /Pin hole & Leakage)	< 100 PPM & (For leakage )  < 5000 PPM (For blow hole /Pin hole & Leakage)
3	<b>PRESS / FABRICATION</b>	0 PPM	0 PPM	0 PPM	0 PPM
4	<b>TUBES</b> a) Ready to assemble. (Machined Tubes)  b) Semi - finish Tubes.	< 50 PPM & (For Weld line defects)  < 5000 PPM (For material defects)	< 50 PPM & (For Weld line defects)  < 5000 PPM (For material defects)	< 50 PPM & (For Weld line defects)  < 5000 PPM (For material defects)	< 50 PPM & (For Weld line defects)  < 5000 PPM (For material defects)
5	<b>FORGED /MACHINED / TURNED COMPONENTS</b> a) Ready to assemble.  b) Semi - finish .	0 PPM  < 100 PPM (For material defects)	0 PPM  < 100 PPM (For material defects)	0 PPM  < 100 PPM (For material defects)	0 PPM  < 100 PPM (For material defects)
6	<b>PLASTIC / RUBBER</b>	0 PPM	0 PPM	0 PPM	0 PPM
7	<b>FASTENERS</b>	0 PPM	0 PPM	0 PPM	0 PPM
8	<b>PLATING / POWDER COATING</b>	< 300 PPM	< 300 PPM	< 300 PPM	< 300 PPM

- 1) The above criteria covers incoming, line rejection, customer complaints, warranty and early failures.
- 2) To qualify for the award, quality performance should be as per mentioned criteria for consecutive 4/8/12/36/48/60 &  $\geq 72$  and more months.
- 3) Award will be given to Vendors who are supplying with material basis, No award will be given to subcontractors.
- 4) Quality performance data is available on our "Vendor Access System"
- 5) Best performing vendors will be recognized and honored during annual vendor meet.

## 6.8.2 Award for “Significant overall improvement”

### Criteria:-

- Suppliers not meeting vendor rating threshold (Minimum 70) for 50 % or more Quarters supplied in last year but demonstrated significant improvement and meeting threshold continuously in 3 or all quarters of current year.
- Up gradation of infrastructure and facility in line with endurance requirement
- System audit Score above 75
- No major Quality issues at ETL.

## 6.8.3 Award for “Consistent Vendor rating Performance”

### Criteria:-

- Suppliers consistently maintaining vendor Rating Score above 70 for last 8 Quarters.
- Significant improvement in PPM
- System audit Score above 75
- No customer complaint or major Quality issues at ETL in a year.

## 7. Production Requirements



### 7.1 Process Requirements:-

**7.1.1** The production and supply of fully conforming products to the Endurance group companies is the supplier's responsibility and is part of the supplier's contractual commitment governed by Purchase Agreement and Non-Disclosure Agreement signed while establishing business relation with Endurance.

**7.1.2** Any assistance provided by Endurance does not in any way limit the supplier's responsibility to supply parts that conform to all technical specifications, standards, regulatory and contractual demands.

**7.1.3** For supplier's having design responsibility (Proprietary Suppliers) safety critical special characteristics must be clearly identified within their design specifications, Verification/Validation plans, drawings and technical documentations. Suppliers who are responsible for design are required to develop system, sub system, Design and Process failure mode effect analysis to assist Endurance in the analysis and identification of potential failure mode on final product of Endurance.

**7.1.4** Capability requirements for parts identified with special characteristics are described below

	Critical Characteristics	Special Characteristics
Process under statistical control Normally distributed	<p><b><math>C_p / C_{pk} \geq 1.67</math></b></p> <p><math>C_{pk} \geq 2.0</math> for Safety &amp; regulatory Components</p> <p>Checking frequency adequate to demonstrate</p> <ul style="list-style-type: none"> <li>On-going process control</li> <li>Compliance to capability requirement</li> </ul>	<p><b><math>C_p / C_{pk} \geq 1.33</math></b></p> <p>Checking frequency adequate to demonstrate</p> <ul style="list-style-type: none"> <li>On-going process control</li> <li>Compliance to capability requirement</li> </ul>
Control not achieved Preferred alternative	Poka Yoke & its Effectiveness verified once per shift	Poka Yoke & its Effectiveness verified once per shift
Control not achieved Accepted alternative	Process 100% automatic check 100 % control / inspection Full traceability	Process 100% automatic check

## 7.2 Traceability:-

**7.2.1** Supplier should adopt mutual agreed part identification for applicable components and shall needs to update on internal system for part traceability from raw material lot up to end use.

Endurance Plant QA shall notify on required component wise identification to respective suppliers.

**7.2.2** Traceability shall be required for following but not limited to,

- Raw Material/ source of Raw Material Being used.
- Shift/Day/Month and Year of Production
- Inspection of critical parameters
- Visual Check Inspection performed by etc.

## 7.3 Sub supplier monitoring and controls

Suppliers of Endurance shall have capabilities to manage their respective suppliers (regardless of how directed) including APQP disciplines, supplier scoring/rating and as appropriate periodic auditing. Endurance, when it deems necessary, will audit the critical processes of the sub-tier suppliers to assure that proper controls are in place throughout the entire supply stream. Suppliers of Endurance shall ensure they audit and manage critical processes such as heat treatment and surface treatment processes.

Sub-tier suppliers have a tremendous impact on the quality of the final component. Whether they provide raw materials, services or sub-components their influence is so profound that it is critical for each of Endurance's suppliers to have a supplier management system in place. This system shall include a function that tracks and reports on their supply base quality and delivery performance. Supplier shall be able to demonstrate that they manage their suppliers' issues through documented corrective actions and verification activities

## 7.4 Packing Standards

ETL adopts certain packaging procedures, identification methods for any operation involving part supply to any ETL manufacturing site in India and export procedures for part supply to ETL manufacturing site. This will be applicable for existing and new parts.

### Requirements

- All part quotations shall assume packaging, according to the criteria defined by ETL
- The supplier is responsible for the development, design, procurement and maintenance of the packaging.
- Production material packaging shall accompany the part up to its point of use in plant floor, ready for use in production and free of any damage condition, assuming normal in-house moving, storage and handling operations.
- The packaging shall satisfy all applicable transport regulations in the country of destination.

Suppliers shall submit details of packing standard finalized and get approved from ETL concerns, Format to be used is available at Endurance vendor Portal (FT/PUR-SQA/20)

## 7.5 Warranty

**7.5.1** Responding to field warranty claims remains a top priority at ENDURANCE. When Field failures are determined to be the result of a supplier's product, suppliers will be notified through receipt of a warranty claim. It is expected that suppliers will fully participate in the investigation, root cause analysis and corrective action when field failures are identified. Suppliers should have an established process for the handling, analysis, investigation, reporting and corrective action of customer field returns. ENDURANCE has developed and conducts a Warranty specific process audit of supplier's capability to manage customer field returns.

**7.5.2** If the non-conformance is generated by a supplier, an ENDURANCE warranty department may call the responsible supplier for immediate correction or replacement of products. The conditions defining response and responsibility are included in the Purchasing conditions, purchasing agreement.

## 7.6 After Market Requirements

Endurance has the same level of quality requirements and expectations for parts produced for service and aftermarket as required for production parts when service parts are identical to the production parts.

## 7.7 Laboratory Requirement

**7.7.1** All suppliers' laboratories or contract laboratories used to evaluate Endurance products must comply with NABL approved laboratory.

**7.7.2** In particular, laboratory and measurement reports shall include:

- The identity and location of the laboratory used
- References to the test methods used
- Any deviation to the test method shall be noted

## 7.8 Record Retention:

DOCUMENT TYPE	EXAMPLES	MAINTENANCE INTERVAL
<b>PPAP Documentation</b>	Drawings, Process Flow Charts, Control Plans, FMEAs, PSWs, Manufacturing Instructions, etc	<b>Duration of production and service activity Plus 1 year</b> Unless otherwise specified by ENDURANCE
<b>Quality Records</b>	Inspection Records, Functional Test Results, Material Certifications, Torque Records Other Test Results (Cleanliness, etc)	3 years from date of production
<b>Quality System Documents</b>	Internal quality system audits, Product Audits, Management Reviews	3 years from date of creation
<b>Product Safety Related Records</b>	Inspection Records, Test Results, Material Certifications, Torque Records, Traceability Records	15 years from date of product manufacture

## 8. Supplier Up Gradation and Appreciation

Endurance is committed to support their suppliers for up gradation of manufacturing and quality systems to cater defect free and cost competitive parts in line with ETL requirements.

Endurance believes in TPM (Total Productive Maintenance) as a tool for up gradation since it is being used at all plants of ETL and proven effective for improvement and sustenance of P (Productivity), Q (Quality), C (Cost), D (Delivery), M (Moral).

For implementation of TPM at identified suppliers ETL has established structured methodology and guidelines. ETL has also define the pillar wise clear guideline with roles and responsibilities for effective implementation along with review mechanism.

Find below is the guidelines for TPM Implementation.

### 8.1. TPM Progress Execution Plan

Sr No	Cat/ Pillar	Parameter	Activity	Month-1	Month-2	Month-3	Month-4	Month-5	Month-6	Month-7	Month-8	Month-9	Month-10	
				W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	W1 W2 W3 W4	
Phase - I	1	TPM Policy	a) TPM Declaration with TPM policy	█										
			b) Education to all Employees	█										
	2	1S-2S	a) No unwanted Material		█									
			b) Prefix location , Prefix quantity		█									
	3	MH	Material Handling	a) Handling as per agreed norms in container/trolley		█								
				b) Elimination of quantity shortages - container should have visual countability		█								
	4	QM	Customer Complaint	a) Study of fitment , function and aesthetic Parameters and implementation of perfect inspection system for all parts.		█								
				b) Cause side Kaizens and poka-yokes implementation and sustenance		█								
	Phase - II	5	In-house Defects	a) Defect stratification by ABC way			█							
				b) Implementation of counter measures Kaizens			█							
		6	JH	Jishu Hozen	a) Training on JH to employees					█				
					b) Selection of model m/c					█				
7		KK	Kobetsu Kaizen	c) Implementation of Step 1,2 & 3 on model m/c						█				
				d) JH master plan prepared & Horizontal deployment of Step 1,2 & 3 on all m/cs							█			
8		PM	Planned Maintenance	e) One point lessons are made & being followed					█					
				a) Training on 16 losses to employees					█					
9		E & T	Education and Training	b) Capturing benchmark data on losses						█				
				c) Kaizens on loss elimination & horizontal deployment of Kaizens					█					
10		SHE	Safety, Health and Environment	a) Break down phenomena are recorded & know to operator						█				
				b) Why why analysis of Break down						█				
11	DM	Initial Control	c) Kaizens on MTBF & MTTR					█						
			a) Identification of training need					█						
12	OTPM	Office TPM	b) Imparting training						█					
			c) Effectiveness monitoring					█						
12	OTPM	Office TPM	a) Recording and analysis of accidents						█					
			b) Actions to prevent the accidents						█					
12	OTPM	Office TPM	c) Training on health hygiene and environment							█				
			a) Monitoring the progress as per development plan					█						
12	OTPM	Office TPM	b) Focus on reduction of tong lead activities						█					
			a) Training on office related losses						█					
12	OTPM	Office TPM	b) Capturing the losses							█				
			c) Implementation of kaizens to eliminate							█				

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## 8.2 Guidelines for Self-Assessment : Performance Levels

			Performance Levels →	
SN	Parameter	Weightage	Level 1	Level 2
1	Sustenance of 1S-2S	5%	* Factory premises has been divided in various zones using location map/layout (5)	* Zone wise Team has been formed * Training given to all employees related to 1S & 2S * No unwanted material lying on floor (10)
2	<b>Material Handling:-2.1</b> Handling as per agreed norms in container / trolley  2.2 Elimination of Qty. Shortages-Container should have visual countability	5%	* Material handling in gunny bags, wooden containers etc with metal to metal contact. * Qty shortage incidences are observed at customer end (5)	* Awareness given to employees regarding effect of poor material handling * Few complains of shortages are still there (10)
3	<b>Quality Maintenance (QM)</b> Customer Complaints 3.1 Study of Fitment, Function & aesthetic parameters and implementation of perfect inspection system for all parts	10%	* CC every month * No tracking of customer complaints (10)	* Customer complaints known to every body - display board on floor * No fitment, function, aesthetic wise categorization of CC (20)
	3.2 Cause side Kaizens & pokayokes implementation & sustenance	5%	* Defect phenomenon wise details are available for customer complaints (5)	* For each defect phenomenon root cause analysis has been done (10)
	In house Defects 3.3 Defect stratifications by ABC way. 3.4 Implementation of Counter measures/Kaizens following PM analysis way	10%	* No stage/operation wise recording of defects * Overall rejection % being calculated without any analysis (10)	* Stagewise rejection being captured * Defect wise categorization of rejection is done * Prioritization of defects (20)
4	Jishu Hozen (JH)	15%	* Training to concern employees on JH implementation * Collection of machine wise past data for Breakdown, Defects, output/hour, accidents etc (15)	* Selection of model machine and implementation of JH step-1,2 & 3 - Abnormality identification and removal, simplification of hard to clean / lubricate / inspect & tightening, Preparation of CLIT standard * Plan for horizontal deployment of JH step 1, 2 & 3
5	Kobetsu Kaizen (KK)	15%	* Training on 16 losses & OEE to all concern employees * Establishing system for capturing the losses (15)	* Compilation & prioritization of losses * Setting up benchmark for OEE & captured losses * Preparation of Kaizen plan for reduction of prioritized losses (30)
6	Planned Maintenance (PM)	10%	* Training on planned maintenance activities * Establishment of system for machine wise breakdown recording in terms of breakdown hours & occurrences (10)	* Classification of breakdowns as mechanical, electrical, electronics * Why why analysis for major break down * Support to JH team for red tag removal & training to operators (20)
7	Education and Training (E & T)	10%	* Mapping of operators skill level for operating the critical machine/ processes (10)	* Identification of expected skill level for operating critical machine/process * Identification of training needs for critical machine and processes * Identification of defects & breakdown due to poor skill and knowledge (20)
8	Safety, Health and Environment (SHE)	5%	* The minor and major accidents are defined * Accidents record is available (5)	* Accidents are being analyzed and actions are planned to prevent repetitive accidents * Training for machine operators has been conducted to improve the safety awareness (10)
9	Initial Control	5%	* Separate department/ person available for component development (5)	* For each component development plan is prepared * The Lead time for each activity of the development is known and defined (10)
10	Office TPM	5%	* Office area mapped under zone mapping for 1S and 2S * Office employees trained for 1S-2S (5)	* Office employees made aware regarding activities to be done under office TPM * Mechanism established to capture losses related to office area (10)

Continued...

Performance Levels Continued.....		
Level 3	Level 4	Level 5
<ul style="list-style-type: none"> <li>* Zonewise plan has been made.</li> <li>* Criteria for Wanted &amp; Unwanted Matl.defined.</li> <li>* Phtos of Before condition taken.</li> <li>* For all required material place has been decided .(15)</li> </ul>	<ul style="list-style-type: none"> <li>* Maximum &amp; minium Qty. decided for all required items.</li> <li>* Photos &amp; Benefits of after condition captured from same angle. (20)</li> </ul>	<ul style="list-style-type: none"> <li>* Sustenance of 1 S and 2S</li> <li>* Benefits of 1 S and 2S summurized and diplayed.</li> <li>* Visual Control &amp; house keeping improved (25)</li> </ul>
<ul style="list-style-type: none"> <li>* Counter measures identified for improvement &amp; time bound plan has been made.</li> <li>* @ 40 % components startrd supplying in visually countable containers (15)</li> </ul>	<ul style="list-style-type: none"> <li>* Material handling improved for all supplied parts in line with requirement of Qty. &amp; packing standards.</li> <li>* 80 % components are supplied in visually countable containers (20)</li> </ul>	<ul style="list-style-type: none"> <li>* Zero customer complaints for visual defects due to transit or handling damedges.</li> <li>* Perfect bin management (25)</li> </ul>
<ul style="list-style-type: none"> <li>* Component wise and fitment, function, aesthetic wise list of all happened &amp; probable defects is made by CFT</li> <li>* For each listed defect existing inspection system has been studied &amp; countermeasures planned against lacunas in system.</li> <li>* 40 % of planned counter measures impl. (30)</li> </ul>	<ul style="list-style-type: none"> <li>* 80 % of planned improvements in inspection system are implemented &amp; significant effect noticed in customer complaint. (40)</li> </ul>	<ul style="list-style-type: none"> <li>* 100% planned counter measures are implemented ,Zero customer complaint.</li> <li>* Perfect inspection system for all parts, No defect can pass to customer. (50)</li> </ul>
<ul style="list-style-type: none"> <li>* Kaizen plan has been made.</li> <li>* 50 % kaizen has been implemented. (15)</li> </ul>	<ul style="list-style-type: none"> <li>* 80 % planned kaizens are implemented.</li> <li>* Effect of kaizen being reflected in customer complaint &amp; In-house rejection trend.(20)</li> </ul>	<ul style="list-style-type: none"> <li>* 100 % kaizen /pokayoke implemented. Zero customer complaint. (25)</li> </ul>
<ul style="list-style-type: none"> <li>* In-house rejection being analyzed &amp; categorized ABC way.</li> <li>* Operator know A, B &amp; C type of defect (30)</li> </ul>	<ul style="list-style-type: none"> <li>* Action plan made to prevent A &amp; C type of defects.</li> <li>* Reduction by 50% in A &amp; C type of defects. (40)</li> </ul>	<ul style="list-style-type: none"> <li>* All A &amp; C type of defects are zero.</li> <li>* for B type defects PM analysis is used.</li> <li>* In-house rejection reduced by 60 % (50)</li> </ul>
<ul style="list-style-type: none"> <li>* Implementation of JH step 1&amp; 2 on critical machines</li> <li>* Hard to Clean, Lubricate, Inspect and Re-tightening made easy</li> <li>* Plan for reduction of defects due to poor machine condition. (45)</li> </ul>	<ul style="list-style-type: none"> <li>* Implementation of JH Step -3 on critical machines.</li> <li>* Preparation of CLIT standards for critical machines.</li> <li>* Plan and action for CLIT time reduction (60)</li> </ul>	<ul style="list-style-type: none"> <li>* More than 50% critical machines are in step-3</li> <li>* 50% reduction in CLIT time.</li> <li>* One point lessons are made &amp; being followed.</li> <li>* Visual management being practiced (75)</li> </ul>
<ul style="list-style-type: none"> <li>* Analysis of OEE.</li> <li>* Implementation of minimum 50% of planed kaizen for prioritized losses. (45)</li> </ul>	<ul style="list-style-type: none"> <li>* Using the techniques like SMED, ECRS.VTR for loss reduction.</li> <li>* Implementation of 75% of planned kaizens and plan for horizontal deployment.</li> <li>* Improvement in OEE by 5%. (60)</li> </ul>	<ul style="list-style-type: none"> <li>* OEE &gt; 75%.</li> <li>* Reduction of top two prioritized losses by 40%</li> <li>* Increase in output/hour. (75)</li> </ul>
<ul style="list-style-type: none"> <li>* Action plan for prevention of repetitive breakdowns</li> <li>* Implementation of prioritized actions.(30)</li> </ul>	<ul style="list-style-type: none"> <li>* Reduction in Breakdown occurrences &amp; time by 20%.</li> <li>* Support to JH for establishment of CLIT standards for critical machines.</li> <li>* Kaizen plan for MTBF &amp; MTTR (40)</li> </ul>	<ul style="list-style-type: none"> <li>* Reduction in breakdown occurrences &amp; Time by 50%.</li> <li>* Implementation of kaizens for MTBF &amp; MTTR. (50)</li> </ul>
<ul style="list-style-type: none"> <li>* Preparation of training calendar.</li> <li>* Imparting trainings, &gt;50% adherence to training calendar.</li> <li>* Start of employee involvement in root cause analysis and initiation of actions. (30)</li> </ul>	<ul style="list-style-type: none"> <li>* Improved level of skill and knowledge reflecting in rejection trend, customer complaints, breakdowns , accidents ,etc.</li> <li>* 75 % of identified employees trained as per identified training need. (40)</li> </ul>	<ul style="list-style-type: none"> <li>* 100% adherence to training calendar.</li> <li>* &gt; 50% reduction in defect, breakdowns &amp; accidents due to knowledge &amp; skill. (50)</li> </ul>
<ul style="list-style-type: none"> <li>* Safety audits planned and conducted for identification of unsafe places &amp; unsafe acts.</li> <li>* Actions planned to prevent the potential accidents.</li> <li>* &gt; 30% actions are completed. (15)</li> </ul>	<ul style="list-style-type: none"> <li>* &gt;50% actions are completed and accidents reduced by more than 50%.</li> <li>* Training session conducted on health and environment. (20)</li> </ul>	<ul style="list-style-type: none"> <li>* Reduction in accidents by 80%.</li> <li>* No major accidents.</li> <li>* Awareness regarding health hygiene and environment. (25)</li> </ul>
<ul style="list-style-type: none"> <li>* Focus on reduction of time required for long lead activities.</li> <li>* The activity wise actual development time vs. plan is monitored. (15)</li> </ul>	<ul style="list-style-type: none"> <li>* Actions are planned and initiated for reduction of development time. (20)</li> </ul>	<ul style="list-style-type: none"> <li>* Reduction in development lead time. (25)</li> </ul>
<ul style="list-style-type: none"> <li>* Actions are planned and initiated for reduction of losses.</li> <li>* Analysis for customer and internal line stoppages available. (15)</li> </ul>	<ul style="list-style-type: none"> <li>* Reduction in customer and internal line stoppages.</li> <li>* Improvement areas for cost reduction has been identified.</li> <li>* Visiting vendors as and when required. (20)</li> </ul>	<ul style="list-style-type: none"> <li>* No line stoppages.</li> <li>* Kaizens implemented for cost reduction.</li> <li>* Visiting to sub vendor as per defined frequency and plan. (25)</li> </ul>

## 8.3 Implementation Role and Responsibilities

Who	What	When
<b>Vendor (Self Responsibility)</b>	Implementation of Phase-I activities	Within 5 months from date of kick off
<b>Vendor and ETL TPM CFT</b>	Implementation & execution of phase - II activities	On regular basis
	Tracking the progress for Phase-I and Phase-II activities	Monthly
<b>Task force (Senior committee)</b>	Progress Audits / Reviews	Bi- Monthly
	Guiding corrective actions	On regular basis
<p>Note :- Please refer TPM Progress execution plan for Phase-I and Phase - II activity details and time line for execution.</p>		

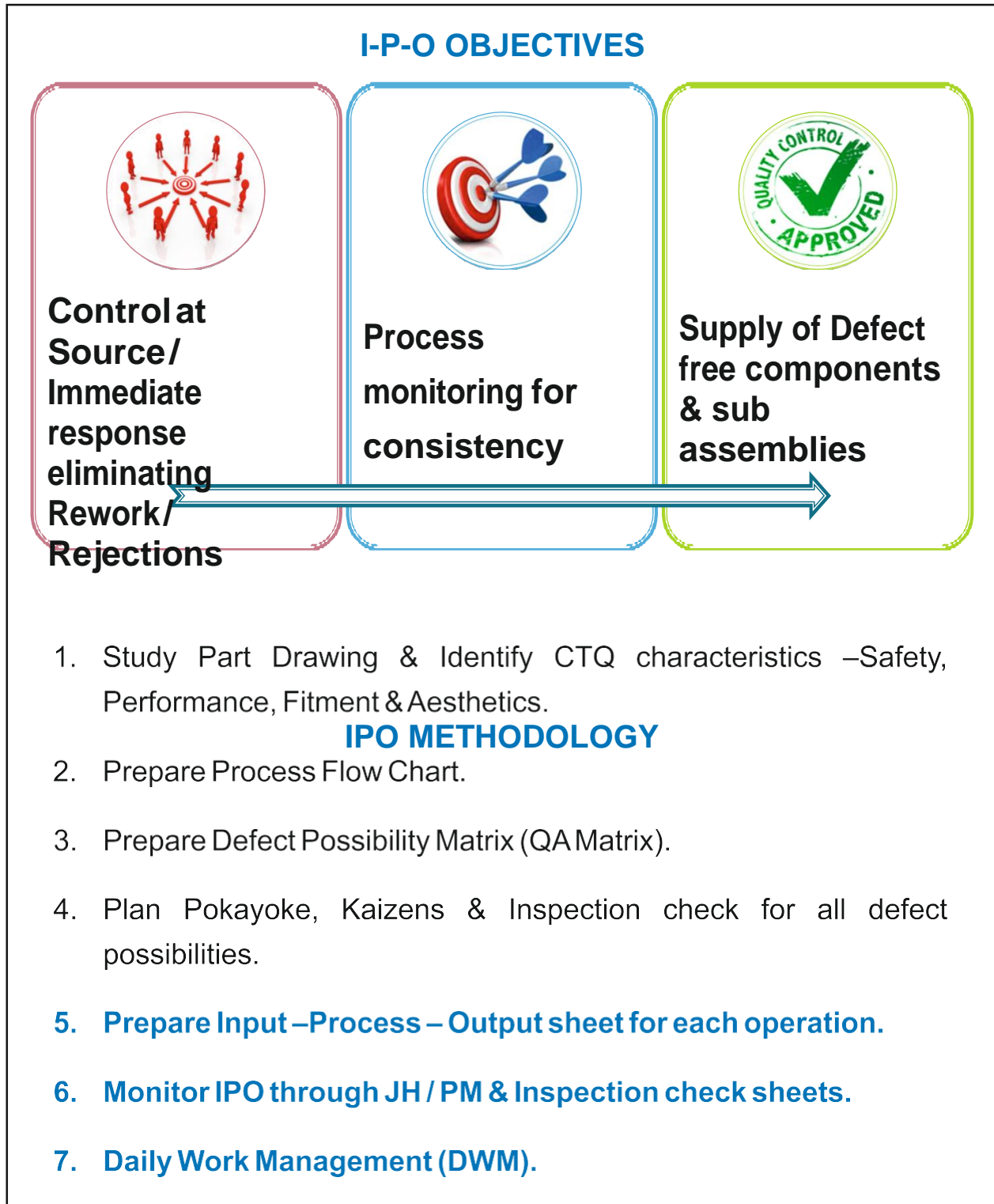
## 8.4 Assessment Schedule

Steps to challenge TPM Award			
Step	What	When	Who
1	Submission of TPM Activity Report	45 Days before audit	Supplier
2	Finalizing the Audit dates & Informing the vendors	15 Days before audit	Endurance
3	On Site audit by Endurance Senior committee	Day of audit	Endurance
	a) Target Achievement status inline with Award targets b) Pillar wise activity progress and results		Supplier
4	Announcement of Audit result	During vendor meet	Endurance

Note :- Self assessment score as per Guidelines mentioned should be > 70%.

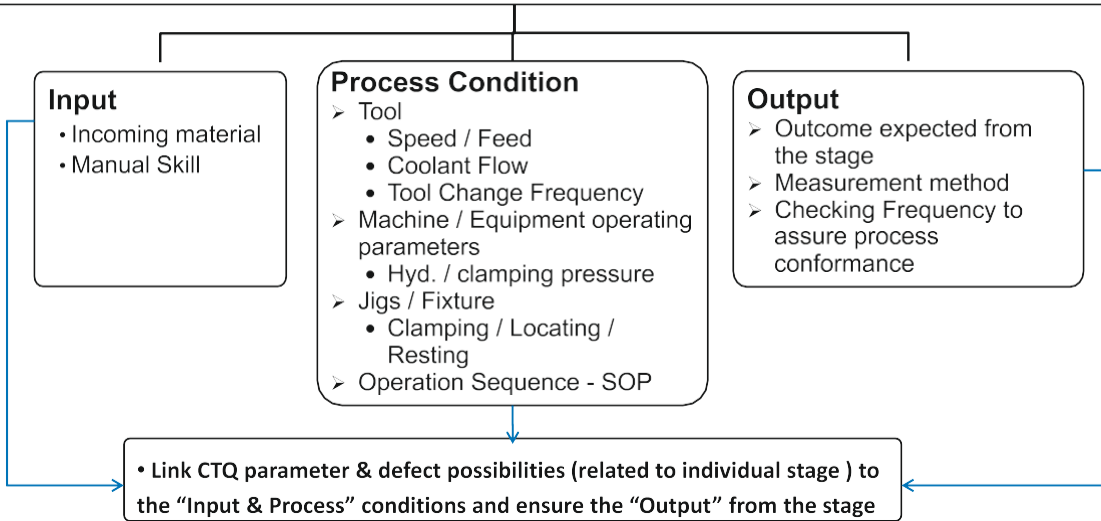
## 8.5 Input (I) Process (P) Output (O) and Daily Work Management (DWM):-

After Successful Implementation of TPM and achieving TPM Sustenance Award by Endurance, Suppliers shall need to Implement and establish IPO & DWM.

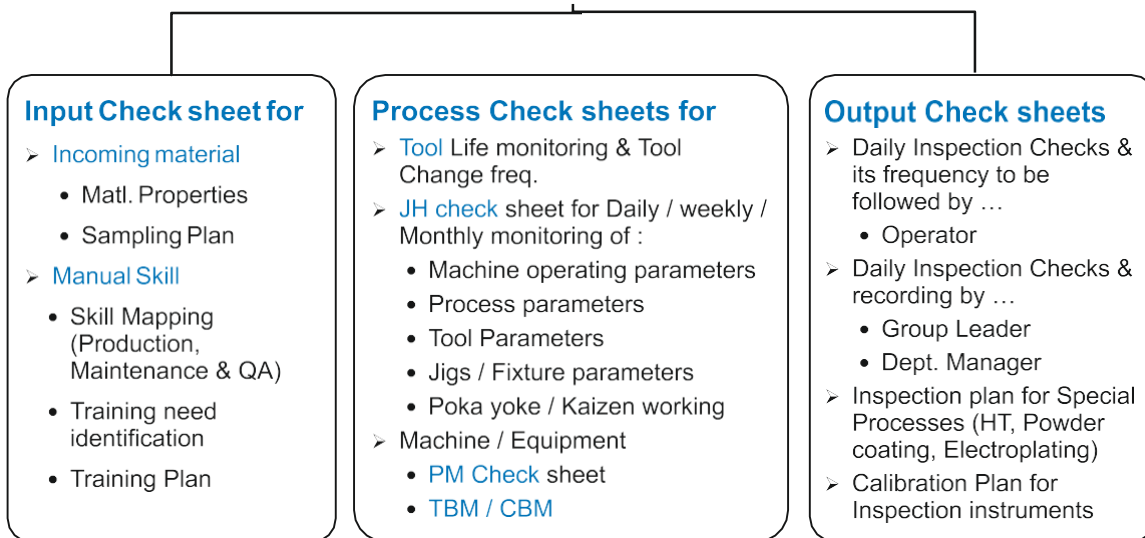


## Prepare Input –Process – Output sheet for each operation

Identify & include all 4M & 1T conditions, their specifications & Inspection Method



## Monitor IPO through JH / PM & Inspection check sheets



## DAILY WORK MANAGEMENT

### Involvement of Top Management to emphasize on IPO

—Completion —Timely Revision —Adherence to check sheets

### Daily Audit of at least one cell to ensure ...

- Review recent Customer feedback on Quality.
- Ensure all the defects received from customer & cell rejection are noted in QA matrix. (Add, if not)
- Review countermeasures planned & completed.
- Review compliance of monitoring control parameters through JH, PM, Tool monitoring.
- Review Inspection being carried out as planned.

# Supplier Quality Assurance Manual

To Motivate and Appreciate suppliers for their excellent performance in implementation of TPM practices, Endurance has institutionalized Awards as,

1. TPM Award (Level 1 Award)
2. TPM Sustenance Award

Criteria for respective awards are as mentioned below.

## 8.6 TPM Award

SN	Parameter	Target
1	<b>1S-2S</b>	Self assessment score 100%
2	<b>Material Handling</b> as per agreed norms and in visual countable container	All Parts
3	<b>Quality Maintenance (QM)</b> <b>Customer Complaint:</b> a) At Endurance Receipt and Line stage b) Warranty c) Early Failure <b>In-house Rejection</b>	Equal to or less than Category PPM or Min.50 % down w.r.to benchmark PPM ( whichever is lower) < 100 ppm < 100 ppm 60% Down with respect to bench mark
4	<b>Jishu Hozen (JH)</b>	1. > 50% machines are in step 3 (Start with Critical Machines) 2. 20% reduction in CLIRT time 3. Understanding, monitoring & controlling defects due to poor JH 4. Excellent visual management on floor
5	<b>Kobestu Kaizen (KK)</b>	1. OEE>75% 2. Set up & adjustment loss down by 40% 3. Tool change time & frequency reduced by 40% 4. Output/Hour >20% Up
6	<b>Planned Maintenance (PM)</b>	1. Reduction in Break down occurrences & time by 50%
7	<b>Education and Training (E &amp; T)</b>	1. Reduction in Break down, Accidents and Defects due to poor knowledge & skill 2. Training programs for knowledge improvement and skill improvement
8	<b>Safety, Health and Environment (SHE)</b>	1. No major accidents
9	<b>Initial Control</b>	1. > 75% components first time right 2. Reduction in development lead time by 20%
10	<b>Office TPM</b>	1. Zero customer & Internal Line stoppages 2. Management of sub vendors 3. Reduction in management loss by > 40%
11	<b>Cost of Manufacturing</b>	20% Down
12	<b>No. of Kaizens</b>	One/ Employee/ Month

## 8.7 TPM Sustenance Award

TPM Sustenance Award is next level Award to TPM Award. Vendors those have won Endurance TPM Award earlier are eligible for Endurance TPM Sustenance Award.		
SN	Parameter	Target
1	<b>Quality Maintenance (QM)</b> 1. Identification and control of Q components (Parameters which are contributing to defect to occur) 2. Kaizen on quality defect phenomenon 3. Kaizens for improvement in product performance 4. Implementation of poka yokes to achieve No inspection condition 5. Clear understanding of A/B/C type defects and actions for A and C type defects	1. Equal to or less than Category PPM or Min.70 % down w.r.to benchmark PPM (whichever is lower) 2. Warranty and early failures < 100 PPM 3. In-house rejection - 80% down w.r.t Benchmark.
2	<b>Jishu Hozen (JH)</b> 1. Sustenance of JH Activities 2. Excellent visual management 3. Actions for reduction in cost of consumables 4. Initiation of JH Step-4	1. > 70 % machines are in Step -3 2. > 40 % reduction in CLIRT Time 3. > 70 % reduction in Defects/ Breakdown/Accidents due to poor JH
3	<b>Kobetsu Kaizen (KK)</b> 1. Strengthening of loss capturing and analysis 2. Implementation of focused kaizens 3. Use of technique like VTR, SMED, & ECRS 4. Analysis and reduction of cycle time for bottleneck operations 5. Actions for operating motion loss, speed loss, minor stoppage and management loss as applicable	1. OEE > 85% 2. Reduction in prioritized losses by > 80 % 3. Output / Hour > 30 % Up
4	<b>Planned Maintenance (PM)</b> 1. Implementation of time based maintenance (TBM) and Condition based maintenance (CBM) 2. Systems for machine spare management 3. Maintenance of tool and equipment 4. Use of MP Information and vertical start-up. 5. Action for reduction of maintenance spare cost	1. Reduction in breakdown occurrences and time by > 75 % 2. Reduction in maintenance spare cost > 20 % 3. Number of MP sheets
5	<b>Education and Training (E &amp; T )</b> 1. Creation of infrastructure for trainings 2. Training calendar and its adherence 3. Training effectiveness and feedback 4. Hand in hand working of HR and E & T 5. Improved skill matrix for all key operations	1. Significant effect of E&T on PQCDSM 2. Number of persons developed as faculty /trainer
6	<b>Safety, Health and Environment (SHE)</b> 1. Focus on general health awareness of the employees and their families 2. Safety audits at regular frequency and actions 3. Identification and correction of hazards and environmental aspects 4. Initiation of EOHS certification activities	1. Zero accidents and its sustenance
7	<b>Initial Control Pillar</b> 1. Data base for Things Gone Wrong (TGW) Things Gone Right (TGR) and its utilization 2. Analysis and actions for reduction in development lead time 3. Up gradation of design and validation facilities 4. Data base for MP design and its utilization	1. >90% components are first time right 2. >50% reduction in development lead time 3. Number of MP sheets implemented
8	<b>Office TPM (OTPM)</b> 1. Systematic audit and quality control actions for management of sub vendors 2. Focus and actions for Cost Reduction 3. Analysis and actions for Non Value Added (NVA) activities in office areas	1. Zero customer and internal line stoppages 2. > 80% reduction in management loss 3. Reduction in FG inventory/ RM / WIP by > 20%
9	<b>Cost of Manufacturing</b> 1. Actions for reduction in cost of energy, consumables, labours etc	30% Down
10	<b>No of Kaizens</b> 1. Classification of Kaizens as Operator/Manager/Management Kaizens 2. Kaizen monitoring and sustenance Plan 3. Kaizen Book	One/Employee/Month

## 9. Policies

### 9.1 POLICY : NEW COMPONENT DEVELOPMENT

**Scope :** Development of BOM items for proprietary division.

**Applicability:** This will be applicable to all Endurance Supplier (termed as supplier) and Endurance Technologies Ltd (termed as ETL)

1. **Confidentiality** – The supplier has to maintain the confidentiality as per the Purchase Agreement and ensure non disclosure of any information to any other third party verbally or in writing. The violation of this may lead to the decision of withdrawal of entire group business and recovery of all consequential losses.

2. **Feasibility Confirmation** – The supplier must confirm the feasibility as per the Feasibility Format. Any request at the time of sample submission, will be treated as delay in development due to supplier responsibility.

#### 3. **Quality System Conformance**

3.1 The supplier must ensure necessary Quality and System documents are completed. The PPAP (Production Part Approval Process) must be submitted with the pilot lot and necessary PSW document to be maintained. In case of any defect observed, the TPM methodology will be followed and action plan must be submitted in 6W 2H format.

The other documents like Inspection Report and Material Test Report along with identified samples need to be submitted.

3.2 The suppliers must maintain all other quality documentation as per TS16949 requirements. The manufacturing processes applicable for part manufacturing must comply with EMS and OHSAS (ISO 14000 & 18000) requirements.

3.3 The supplier must transparently share the process capability study data and ensure full cooperation during audit by our team.

#### 4. **Packaging Requirement**

Supplier must ensure the specific packaging or usage of bins for regular supply. The suppliers also ensure that packaging provided is easy to handle and protect the component from all environmental requirements.

#### 5. **Process Change**

In case supplier need to change the approved process, the change management approval process must be followed and inform specifically for approval prior to change.

#### 6. **Tools Retention**

Supplier must ensure tools retention and any disposal of the tool must be mutually agreed upon and confirm in written from the Head of Sourcing / Development.

Continued.....



## 7. Suppliers Right

- 7.1 The supplier developing first will enjoy the maximum share of business subject to compliance of requirement related to QCD.
- 7.2 In case of obsolescence of developed part, the mutually agreed cost of special tools will be reimbursed to the supplier. However, the method of reimbursement will be jointly discussed.
8. Any failure due to supplier responsibility like usage of unspecified material, unapproved process, the all consequential costs will be recovered by Endurance Technology.
9. The supplier will ensure the timely development as per the agreed plan and in case of unforeseen problem, will work jointly with Endurance Team to meet the development requirements.
10. The supplier will confirm and ensure the capacities as per the mutual agreed SOVP (Start of Volume Production). The price of component must be in line with the existing similar category part for the base of material cost and for the process cost. Any specific requirement will be mutually agreed prior to the supply of part.
11. The supply of sample strictly against the Purchase Order and mentioning the necessary reference of part code and Purchase Order.
12. All other terms and conditions will remain in-force as per our Purchase Agreement and as printed backside of the Purchase Order. Endurance deserves the right to review this development policy from time to time and any such changes will be intimated to all concerned.

This policy is effective from 1<sup>st</sup> Oct 2011.

## **9.2 POLICY : AFTER MARKET COMPONENT SUPPLY**

**Scope :** Supply of components for After market requirements in proprietary division.

**Confidentiality –** The supplier has to maintain the confidentiality as per the Purchase Agreement and ensure non disclosure of any information to any other third party verbally or in writing.

Supplier will restrict their supplies to Endurance only and will not sale in open market or to any other individual.

### **Timely supply of components:-**

Endurance will provide a three months separate rolling schedule (One month firm and two months tentative) for exclusive components for after market. Supplies against firm schedules will be In warded by respective plant of Endurance.

Suppliers shall acknowledge the schedule and confirm back the acceptance of the same. Suppliers will provide due priority for supply of components for after market requirement and will communicate their dispatch plan in line with Endurance production plan.

### **Retention of Dies and Tools:-**

Supplier shall retain and maintain the dies and tools in working condition all the time and decision to discard must be taken only after written confirmation by Endurance, in absence of written confirmation it is sole responsibility of supplier to ensure the supplies.

In the event of any unforeseen circumstances at supplier end the supplier will ensure all the help and support towards establishing the supplies.

All other guidelines will remain in force as per purchase agreement and the terms and condition as per the Purchase order and development policy.

ETL reserves right to revise the policy time to time as and when required.

This policy is effective from 1<sup>st</sup> Nov 2011.

## **9.3 POLICY : REJECTION HANDLING OF VENDOR PARTS**

**Scope :** Applicable to vendors supplying to all plants of Endurance.

1. The rejection handling charges will not be made applicable for GRN (receipt stage) rejection.
2. 15% of Invoice Value (excluding taxes) will be charged in addition to the invoice value for all physically returned line rejection and warranty of BOM items.
3. Exclusion are imported BOM items, All Non BOM items, items under development and outsourced items being supplied with our dies, Aluminum alloy and bulk oil and fuel supplies.
4. For identified items the 15% charges will applicable only for rejection more than 2% or allowed limit which ever is lower, the reference for 2% will be considered for total supplies during the month.
5. 15% charges will not be applicable to line rejection booked in the system but scrapped at our end and not returned back due to any other reason.
6. The 15 % charges will be auto debited, how ever for identified items the 15% charges will be debited only for rejection more than to 2% or allowed limit (SAP system will be mapped accordingly and a customized report will be generated in SAP).
7. The authority for reversal will be first concerned Plant Head and then GM (Purchase) for Proprietary plants and Plant head and concerned Purchase head for casting division.
8. The above line rejection and warranty rejection must be mutually accepted and not one sided.

This policy is effective from 1<sup>st</sup> Mar 2012.

## 9.4 POLICY : VA / VE BENEFIT SHARING

Proposal Initiated By	VE Sharing with Vendors		
	1st Year	2nd Year	3rd Year
A) Vendor	60 %	30 %	Nil
B) Joint Projects	50 %	25 %	Nil
C) Endurance	Nil	Nil	Nil

Guidelines For VA / VE Suggestions.

- Yield Improvement
- Alternate Material
- Alternate / Change in process
- Change in Design for quality improvement
- Change in design for cost reduction

### **9.5 POLICY : SHORT RECEIPTS OF VENDOR PARTS**

1. This policy is applicable for Short receipt of bought out parts.
2. This policy shall not be applicable for imported parts, subcontracted parts, Production Consumables, indented purchases, machine spares; Parts supplied free of cost and bulk supplies like oils and aluminum
3. The received material shall be checked in presence of Endurance Technologies Limited (ETL) security person and lorry driver. The shortages, if any will be mentioned on delivery Challan / Invoice and the signature of lorry driver shall be taken.
4. All the statutory requirements shall be followed as per the Government rules and regulations in force from time to time.
5. This policy shall replace clause no. 13 – “Short Supply against Invoice Quantity” mentioned in Annexure part “B” of present Purchase agreement.
6. To calculate the shortage the Goods Receipt Note shall be taken as a reference which shows the Invoice Quantity by supplier and actual received quantity at ETL.
7. The shortage penalty for a particular month shall be charged in the 1<sup>st</sup> week of next quarter by way of system generated Debit Note. The reversal of the penalty, in case so decided, shall be done in the same financial year in which it is charged, failing which no reversal shall be done in the subsequent financial years.
8. The penalty shall be applicable for short receipt (discrepancy) of material as below :

Sr. No.	Criteria for Quarterly Penalty	Penalty (Rs.)
	<b>No. of shortage cases in the Quarter</b>	
1	More than 10	20,000
2	More than 7 to 9	10,000
3	More than 5 to 7	4,000
4	More than 2 and value more than Rs. 500.00	4,000
5	More than 2 and value less than Rs. 500.00	1,000
6	1 or 2 and shortage value more than Rs. 2000.00	4,000
7	1 or 2 and shortage value less than Rs. 2000.00	0

However, the Goods receipt note and subsequent payment shall be processed for the actual received and accepted quantity only.

- 8.1 The supply schedule for the short receipt quantity will be treated as cancelled; the revision of the schedule shall be at the sole discretion of ETL.
- 8.2 In case the payment has been made in advance prior to delivery, ETL shall have right to recover the payment separately.
9. ETL reserves the right to revise this policy as and when deemed necessary.

This policy is effective from 1<sup>st</sup> Jan 2015.

## **9.6 POLICY : LIFE TIME SOURCE**

In order to realize our goal "Endurance to become first choice supplier to all its OEM's "it is not only imperative for us to build our current business practices but also work on the Strategic supply chain management. As part of our sourcing strategy we are continuously working on having a strong and reliable supplier base with a view of making them our Long Term Suppliers. Towards this we have made this policy for development of Long Term suppliers.

- a) This policy shall be applicable for the suppliers of Proprietary plants of ETL.
- b) Under this policy supplier shall be evaluated and termed as a "Life Time Supplier" on meeting following criterion
  - i) Quality Performance - Continuous improvement on the Quality Systems and PPM within the category Benchmark.
  - ii) TOD and cost effectiveness – Continuously demonstrating cost reduction initiatives and working on volume based pricing year on year.
  - iii) VAVE reductions- Actions by providing value engineering proposals and give applicable cost reductions.
  - iv) Attitude& Cooperation – Adaptability to change on given requirements and offering first priority to ETL as a customer in any situation.
  - v) Financial capability and infrastructure – Ability and willingness to invest and grow with ETL. Effectively manage the working capital by paying suppliers in time, ensuring legal and statutory compliances.
  - vi) Ethics and Values – Demonstrating high level of ethics, transparency and code of conduct across the organisation at all the time.
- c) LTS status shall be reviewed every 2 years by re-evaluation of the supplier against the above 5 Criterion.
- d) Life time suppliers will have a mutually rewarding relationship with ETL as follows
  - i) Handholding by ETL in the supplier up-gradation program.
  - ii) Maximisation of the Share of Business to enable the supplier improve economies of scale.
  - iii) Preferred supplier for New Product Development and outsourcing opportunities.
  - iv) Supplier shall be qualified for being MC member of the Endurance Vendor Association (EVA).

This policy shall come in to effect from 1st April 2016.

## 9.7 POLICY : PROCESS CHANGE MANAGEMENT

1. This policy shall be applicable for all bought out parts inclusive of oil used as part of Bill of material and aluminum alloy where in Endurance Technologies Ltd (ETL) has released drawing/specification/standard or where the raw material, process and product specifications, Inspection & testing and packing standards are agreed between Vendor and ETL. Policy shall be also applicable to surface treatment processes as requirement of Bought out parts and being done as sub contract activity by ETL.
  2. This policy shall not be applicable for Production Consumables, indented purchases and machine spares where ETL has not released drawing/specification/standard nor production process is defined/agreed by Endurance
  3. The vendor shall,
    - Use the specified raw material and it's grade and shall purchase from Endurance approved/directed sources only (E.g. Spring steel Grade-III from Tata Steel)
    - Adhere to the production processes as per PPAP or mutually agreed process parameters and controls defined in PQCS/QAV/IPO (Process Quality control sheet/Quality assurance visit Report /Input-Process-Output sheet)
    - Adhere the defined sequence of the operation and No operation shall be omitted or skipped
    - Carry out the inspection and testing of raw material and product/component at defined stages and at agreed frequency with defined checking instruments which are calibrated as per requirement and plan.
    - Use the agreed packing standard.
    - Adhere to the approved process layout and defined location of factory.
  4. Any changes in process/activities as mentioned in point No.3 without ETL approval shall be liable for appropriate disciplinary actions by ETL. E.g. Change of machining process from traub in place of CNC OR use of 250 ton PDC machine in place of 400 ton machine as defined.
  5. Vendor shall also ensure and restore the machines and equipment to maintain required quality level and production norms.
  6. In case of any change required for betterment shall be informed in ETL as below,
    - a. Change required in New part to be referred to VCD head with cc to SQA, Plant QA and St. Sourcing
    - b. Change required in existing parts to be referred to St. Sourcing with Cc to SQA & Plant QA
- Proposed change shall be evaluated by Endurance for suitability to product design, Impact on Quality, cost, capacity and necessity for customer approval.
7. On approval of change; if required vendor shall align all other processes to suit the change and all related documentation (Control plan, work instruction, Process flow diagram- PPAP documents) shall be changed by the vendor and approved by ETL.

Continued.....

## Supplier Quality Assurance Manual

8. Vendor shall not outsource any of the component/operation fully or partially to sub vendor unless it is defined at the start of regular supplies. Any change in the approved sub vendors can be done only after information and approval by ETL.
9. Vendor shall do the surface treatment at Endurance approved source as decided at the start of series supplies and any change in source (even it is other approved source of Endurance) will not be allowed and accepted without ETL approval.
10. Vendor shall be responsible for establishment and sustenance of required quality system, statutory requirement, compliance of environmental norms at their Endurance approved sub Vendors. In case of any deviation ETL direct vendor being the principal supplier shall be responsible and liable to disciplinary action by ETL.
11. Vendor shall not deviate on any of the mentioned points from Sr. no 3 to 10 without information to and the joint written approval from ETL SQA function and plant Quality function.
12. In case nonconformance is observed as per the policy vendors are liable for penalties and strict punitive actions by ETL. It will include incidence specific penalty, downward revision in SOB, restriction to new part development or discontinuation of supplies depending on the severity of the Nonconformance, the details of penalties would be as below,

SN	Punitive Action	Penalty details
1	Incidence Specific Penalty	Amount of Penalty to ETL by end customer if any and/or 5% of values of supplies after implementation of unapproved change plus actual expenses incurred to segregate, rework, visit to customer etc. by ETL team
2	Downward revision of SOB	SOB shall be restricted to maximum 30 %
3	Restriction to NPD- New part development	With Immediate effect (To restart need action plan to establish system for process change management)
4	Discontinuation of Supplies	Decision based on severity of unapproved change plus Action No.1

Action point No. 2 & 3 shall be reviewed after one year of action taken.

13. Any penalty or punitive action on ETL from our customer due to vendor supplied parts and attributable to defect in raw material or process at vendor or sub vendor, shall be passed on to the concerned vendor inclusive of the consequential losses.

### **Nonconformance VS Punitive Action**

The purpose of this requirement is to prevent quality & delivery issues resulting from unapproved, untested changes or modifications after PPAP approval. This applies, but is not limited to the only following scenario and ETL reserves the right to add/review the process change scenario and related punitiveactions.

Continued.....



# Supplier Quality Assurance Manual

SN	Non Conformance scenario	Punitive Action
1	Usage of raw material 1.1 Of different grade than specified 1.2 from un approved source 1.3 Of different specification (Dia., length, billet size etc)	1. Incidence specific penalty with discontinuation of concern part till restoration and 2. If severity of problem is high then Discontinuation of Supplier
2	Non adherence to (wrt PPAP/CSC), 2.1 Agreed Process flow/sequence, machines, equipment, Tooling, Dies, Mold, Mfg. Fixtures etc. 2.2 Process parameters and controls defined in Control plan/PQCS/QAV/IPO or any other document defining the same 2.3 Transferring of the production line- partly or totally to a new or existing location, plant or building, change in layout 2.4 Omission or skipping of agreed operations / addition of process 2.5 Agreed Inspection method and frequency leading to Quality defect at ETL/ETL Customer 2.6 Cycle time as mentioned in CSC by means of cost saving efforts leading to Quality defect	1. If non adherence lead to quality issue at actual or potential quality problem at ETL/customer end then incidence specific penalty with discontinuation of supplies of concern part/part family till restoration of observed non conformity. 2. In case of repeated non adherence, supplies of part shall be discontinued with restriction for new part development 3. Revision of CSC if No impact on quality
3	Change in an approved sub supplier for, 3.1 Any component, operation 3.2 Supplier for surface treatment 3.3 bought out parts	1. Incidence specific penalty with discontinuation of supplies of concern part/part family till transfer of operation / parts from approved supplier 2. Revision of CSC if applicable
4	Outsourcing any of the component/operation fully or partially to sub vendor	1. Incidence specific penalty with discontinuation of supplies of concern part/part family till In-sourcing of concern component / operation 2. Restriction to NPD
5	Change in, 5.1 Transporter 5.2 Local ware house location, 5.3 Agreed Packaging, 5.4 Infrastructure and facility at ware house for inspection, bin management etc.	Penalty in case of quality issues at ETL discretion

Decision for specific punitive action and to specify the severity of unapproved change is solely at ETL discretion.

14. This policy shall be effective from 1st of Jan-2017
15. Endurance reserves right to do any change in policy with prior intimation to vendors.
16. Appropriate vendor authorities shall sign this policy as token of acceptance.

## 9.8 POLICY : PENALTY GUIDELINES

SN	Defects/Major NCs noticed at	Customer/ ETL	Occasions			Remark
			1 <sup>st</sup> Audit	2 <sup>nd</sup> Audit	3 <sup>rd</sup> Audit	
A1	Vendor Process Audit * (Refer page No.3 and 4 of supplier audit guidelines for NC/Defect details)	Audit by ETL	Rs. 0.20 Lakh	Rs. 1 Lakh + No New Product Development (NPD)	**Rs. 2 Lakhs + No New Product Development (NPD) + SOB revision	Any severe un approved change observed during audit will be liable to applicable penalty as per clause No. 5.4 of change management policy, or whichever is higher
		Audit by Customer	If Endurance Customer audits ETL supplier and imposes penalty to ETL an account of Defect/Major NC observed at supplier then same shall be debited back to back to supplier			
A2	Field Safety/ Function Related	ETL	Back to back cost as debited by Customer + 15 % Admin. Charges OR at discretion of ETL (case to case basis )			
A3	Plant Product verification – dismantling + Rework	ETL	1. Issue at Customer – Back to back Cost as debited by Customer + 15 % Admin. Charges 2.1 Issue at ETL where in Assembly/Sub assembly need to scrap at ETL- *Cost of Material + Labor +15% Admin. Charges 2.2 Issue at Endurance where in supplier parts are rejected at line – Debit as per current policy 9.3 Policy for Rejection handling of vendor parts mentioned in SQA manual page No.45. Refer Annex.2			* Cost of material-cost of assembly/ sub assly rejected /consequential damages due to supplier part which can not be reworked

For Repeated Quality issues – a) Apart from penalties as mentioned above, Plant and Corporate Purchase will raise additional penalties based on severity and impact b) Even after multiple penalties if there is No improvement observed next action of SOB reduction, Part category deletion and No new development will initiated by corporate Purchase based on Q performance

### Head SQA shall be approval authority for exercising the penalty for audit (A1)

\*\* No New Product Development (NPD) and SOB revision cases shall be reviewed after one year of action based on Supplier Performance.

This policy is effective from Q2 FY 19-20

## 9.9 POLICY : REVISION OF SOB- (Share of Business)

**Purpose:** - To establish relevance of Share of business and vendor performance in terms of vendor rating.

**Objective:** - To have Justified and transparent policy for allocation of SOB linked with vendor rating performance of the supplier.

**Scope:** - Applicable to all BOM suppliers for Proprietary, casting outsourcing and BOM suppliers for castings.

**Input data:** - Supplier's quarterly vendor rating.

**Triggers for revision:** -

- Supplier not meeting min. threshold of 70 marks for vendor rating in any 2 quarters out of last 4 quarters.

Q1	Q2	Q3	Q4	Q1 (Next FY)
48	58	Initiate SOB revision		
75	78	62	59	Initiate SOB revision
82	49	78	59	Initiate SOB revision

- Major NC observed during ETL audit at supplier end. Refer chapter 5 of SQA manual clause No.5.4 and 5.5.
- Severe quality problem at ETL or ETL's customer/Field complaint
- Any attitude and/or cooperation issues in supplies, quality improvement or cost. SOB reduction due to this trigger will be at the discretion of VP/GM Sourcing

**Revision Frequency:** - Review and change in SOB will be done every quarter based on last 4 quarter performance

**Policy :-**

- Trigger 1** (Vendor rating performance):-
  - If vendor rating for any 2 quarter out of last 4 consecutive quarter is less than 60 then SOB will be up to 30% max. If supplier is already at SOB level of  $\leq$  30 then it will reduced further.
  - If vendor rating for any 2 quarters out of last 4 consecutive quarter is between 60 and 70 then SOB will be up to 50 % max. If supplier is already at SOB level of  $\leq$  50 then it will reduced further
  - If vendor rating for any 2 quarter out of last 4 consecutive quarter is 71 and above then SOB will be up 70 % max.
  - SOB shall be applicable for entire supplies from particular supplier to all proprietary plants of ETL.

- e. If the dependence of ETL on a vendor is such that the SOB cannot be reduced then quality improvement action shall be started at such vendors by SQA on topmost priority to improve the vendor rating
2. **Trigger 2 & 3** (Major NC during audit or quality problem):- In case of Major NC or quality problem at ETL or at ETL's customer /field complaint, downward revision of SOB shall be at discretion of Head SQA in consultation with GM/VP Sourcing.
3. Supplier wise allocation will be signed off by VP-group Sourcing and GM- Group SQA and same shall be fed in to system by Sourcing. Signed off copy shall be shared with operation for their information and procurement planning accordingly.
4. Allocated SOB's shall be applicable for six months and shall be reviewed for change based on performance.
5. Any change in SOB in between for business need shall be proposed by VP- Group Sourcing in consultation with GM- SQA and shall be approved by President and CSO. Same will be reviewed and revised as per above policy once business emergencies are mitigated.
6. Any significant change in SOB due to any trigger above shall be always informed to CBU heads with the reasoning and logic for such change to ensure no communication gap and dispute and to get their input for new or under rationalization suppliers for revising SOB, time line and alternate revision to other suppliers.
7. This policy shall be effective from Q3 that is 1st October 2019

### **9.10 POLICY : WHISTLE BLOWER POLICY**

Whistle Blower Policy is an integral part of the Code of Conduct of Endurance Technologies Limited ("Endurance" / "Company"), which aims to promote conduct of its business affairs in a fair and transparent manner.

Endurance considers you as a partner in its progress and in promoting ethical conduct of business affairs. Employees of the Company are governed by the Code of Conduct and are expected to adopt highest standards of professionalism, honesty, integrity and ethical behavior in the course of dealing with customers, vendors, sub-contractors, service providers, amongst others. During the course of transactions with the Company, should there be a need to highlight any deviation from normal acceptable standard, we encourage you to report and bring this to our attention.

For this, your complaint / grievance can be sent on the email ID viz. **(etl\_governance@endurance.co.in)** created specifically to look into such matters.

This redressal mechanism is recommended for serious and sensitive issues and for which necessary details should be provided along with your complaint/grievance, to enable investigation.

**Consistent with the Company's philosophy, anonymous mails SHALL NOT be entertained.**

We are committed to conduct investigation in a fair & unbiased manner and any matter reported shall be kept in **Strict Confidence**.

## 10. SQA Interface with other functions

Sr. No.	Activity	SQA	Plant QA	* VCD/Strategic sourcing
1.	Supplier Selection and Approval	A	S	R
2.	PPAP	S/I	A	R
3.	Rejection Handling	S	A	R/I
4.	Deviation	I	A	R
5.	LPS	A	S	R
6.	Change Management	I/A	A	R
7.	Quality Agreement	S/I	A	R

**R: - Responsible; A: - Approval; S: - Support; I: - Information**

**\*VCD for development parts, Strategic sourcing for regular parts**

## 11. Code of Conduct For Suppliers, Service Providers and Contractors

Endurance Technologies Limited (“Endurance” / “the Company”) is committed to conduct its business with high moral and ethical business practices. Endurance constantly promotes adherence to its values i.e.

**CITTI (C - Customer Centricity, I – Integrity, T – Transparency, T – Team Work and I – Innovation)** in all business dealings with its customers, suppliers, service providers and contractors.

Suppliers, Service Providers and Contractors (“Vendor”) of Endurance have an important role to play in the business dealings with Endurance and discharging their responsibilities towards their stakeholders and the environment. Endurance expects its Vendor to demonstrate high standards and ethics in its business dealings.

Endurance has a zero tolerance towards corrupt and unethical practices. Any party or person involved in such practices shall be dealt with seriously including severance of relationship with Vendor.

This Code of Conduct sets out the basic requirements that Endurance seeks from its Vendor on various aspects which are of utmost importance which the Vendor is required to comply with.

### A. WORKFORCE

1. Vendor of Endurance shall be committed to respect the rights of labour/ workers/ employees (“Workforce”).
2. Vendor shall:
  - Treat its Workforce equally, fairly and with respect,
  - Offer safe, secure, healthy and conducive working environment to its Workforce,
  - Not discriminate in recruitment, salary/ wages or otherwise of Workforce based on gender, colour, religion, cast or otherwise.
  - Continuously develop the skills and competencies of its Workforce, and while doing so comply with all applicable laws and regulations.
3. Vendor shall not employ child labour or forced labour and ensure that all Workforce shall be paid minimum wages as per prevailing law.
4. Vendor shall at all times comply with all applicable laws, rules, regulations, orders, permissions and notifications of the local, state and central government.

### B. ENVIRONMENT, HEALTH AND SAFETY

1. Vendor is expected to contribute to an ecologically sustainable development to reduce the impact of its business operations on the environment.

2. Vendor shall supply products/provide services to Endurance which comply with the applicable rules and regulations for protection of the environment, including, but not limited to Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, Plastic Waste Management Rules, 2016, as amended from time to time and rules and regulations of the Central and the State Pollution Control Boards.
3. Vendor shall develop, implement, and maintain such processes, policies and business practices to eliminate or minimise environmental impact.
4. Vendor shall use natural resources in a diligent manner by implementing processes and policies to conserve, reduce, recycle and reuse the same.
5. Vendor shall follow all Environmental, Health and Safety and other policies of Endurance while executing any work or contract or providing services at Endurance offices and/or at its manufacturing plants.
6. Vendor shall follow all laws of the land including laws on environment sustainability and protection while executing any work for or providing services to Endurance.

## **C. CONDUCT IN BUSINESS TRANSACTIONS**

### **1. Business Ethics**

Vendor shall conduct its business operations with transparency and openness provided that business secrets and confidential information of Endurance are not divulged, resulting in any adverse impact on business of either Party.

Vendor should not give any kind of gifts, articles or favours to Endurance employees. Vendor shall also adopt zero-tolerance policy for practices like corruption, extortion, embezzlement, or bribery, to obtain an unfair or improper advantage for business with Endurance and shall have adequate monitoring procedures to ensure compliance of this condition.

### **2. Preventing conflicts of interest**

Factors that might influence Vendor's decisions due to private, business or other conflicts of interest must be prevented at the outset. The Vendor shall disclose to the Company, if any of his relatives, associates are connected with the Company, directly or indirectly, in any capacity which would influence its relationship or any financial transactions with the Company. Vendor should not develop & supply or provide same or similar product/s or service/s to competitors of the Company using Company's Confidential Information, Intellectual Property or any tools, dies, mould(s), jigs and any other material provided by the Company. Vendor shall not be involved in and shall desist from any unfair or anti-competitive trade practices.

### **3. Protection Confidential Information and Intellectual Property**

Vendor shall respect the confidential information and the intellectual property rights of the Company and shall take appropriate steps to safeguard the same and not divulge/disclose any confidential information and/or infringe intellectual property rights and misuse technology of the Company,

which comes to its knowledge during the course of its business relationship/ dealings with the Company. In the event of Vendor visiting any of the offices or manufacturing plants of Endurance, Vendor undertakes that any confidential information including not limited to material(s), designs, processes, procedures, which may come to its knowledge as a result of such visit, shall be kept strictly confidential and shall not be divulged to or made available to any third party. In case of sub-contracting, sharing of confidential information and intellectual property of the Company should be made with the prior written consent of the Company, wherein the Vendor shall be responsible and liable for any breach by such sub-contractor.

#### **4. Third Party Representation**

Vendor is not authorised to represent the Company or enter into any business transactions, on behalf of the Company, without the prior written permission of the Company. Vendor is prohibited from use of the Company's logo, trademark or brand name in any communication or marketing material, without the prior written consent of the Company.

#### **5. Prohibition of Insider Trading**

Vendor is aware, and shall advise its respective employees, officers, contractors and agents, of the restrictions imposed by the securities laws of India, on the purchase or sale or trade in securities by any person that has received material, non-public information of Endurance or its business or engage in any other action to take advantage of that information, including passing that information on to others.

In addition, if the Vendor becomes aware of material, non-public information about any other company, including customers, suppliers, vendors or other business partners of Endurance, which is obtained by virtue of Vendor's interaction with Endurance, then the Vendor shall not buy / sell / trade and ensure that it has a mechanism that prohibits its employees, agents, consultants or contractors from dealing in that company's securities in any manner or engage in any other action to take advantage of that information, including passing that information on to others.

#### **6. Compliance Commitment**

1. Vendor is expected to go through, read and abide by the conditions of this Code of Conduct and sign the same as token of acceptance.
2. Vendor is required to go through and abide by the terms and conditions specified in Purchase Agreement, Non-Disclosure Agreement, terms and conditions of Purchase Order(s), Supplier Quality Manual or any other document(s) related to business transactions between Endurance and the Vendor, executed by it and released to it by Endurance from time to time.
3. Vendor's compliance with the principles and requirements laid down in this Code of Conduct shall be reviewed periodically by the Company. Further, the Company reserves the right to conduct inspection or appoint a qualified third party to verify compliance with this Code of Conduct, by the Vendor.
4. Any violation of the principles and requirements set out in this Code of Conduct by the Vendor, shall be regarded as a serious violation. In any event of suspected violation of any principles, as per the Code of Conduct, by the Vendor, the Company reserves the right to stop any business with such Vendor and shall not be liable to the Vendor for any damages or losses as a



consequence thereof.

5. Vendor shall implement and maintain appropriate internal procedures and controls to facilitate and improve compliance with this Code of Conduct.

Endurance reserves the right to change/amend/alter this Code of Conduct in line with any changes to its compliance program. In such an event, Endurance shall consider any revised version of the Code of Conduct, as accepted by the Vendor without requiring new signatures from the Vendor.

## DECLARATION

I/We, \_\_\_\_\_ through its authorised signatory  
Mr./Ms. \_\_\_\_\_, having Vendor Code \_\_\_\_\_, hereby confirm that:

1. I/We have received and read the Endurance Code of Conduct for Vendor;
2. By signing this Code of Conduct, I/we undertake to comply with all the provisions and principles laid out herein.

For : \_\_\_\_\_

Signature : \_\_\_\_\_

Name : \_\_\_\_\_

Designation : \_\_\_\_\_

Date : \_\_\_\_\_

Place : \_\_\_\_\_

## 12. List of Formats

Below mentioned formats are referred in various sections of this manual shall be available for the suppliers as mentioned in table below.

S. N	Description	Format No	Source to get the formats
1	Request for Information (RFI)	FT-PUR-SQA-01	Sourcing/VCD Buyers
2	Non-Disclosure Agreement	FT-PUR-SQA-02	Sourcing/VCD Buyers
3	Purchase Agreement	FT-PUR-SQA-03	Sourcing/VCD Buyers
4	Supplier System Evaluation	FT-PUR-SQA-04	ETL CFT Shall Carry for Audit
5	Feasibility Study	FT-PUR-SQA-05	Download from Vendor Portal/ VCD Buyer shall share
6	Process Change information Form	FT-PUR-SQA-08	Submit request via Vendor Portal
7	Corrective and Preventive action submission form-8D	FT-PUR-SQA-09	Download from Vendor Portal
8	Corrective and Preventive action submissionform-6W2H	FT-PUR-SQA-10	Download from Vendor Portal
9	Corrective and Preventive action submission form-QFR	FT-PUR-SQA-11	Download from Vendor Portal
10	Supplier Audit Plan	FT-PUR-SQA-12	Shall be used internally by SQA/QA
11	Wet Process Supplier Audit Check sheets	FT-PUR-SQA-14	ETL CFT Shall Carry for Audit
12	Process Audit Check sheets	FT-PUR-SQA-15	ETL CFT Shall Carry for Audit
13	New Product & Mass Production Process Approval	FT-PUR-SQA-16	ETL CFT Shall Carry for Audit
14	Approval of Packing Standard	FT-PUR-SQA-20	Download from Vendor Portal





To,

Endurance Technologies Ltd.  
Corporate Office,  
E-94, MIDC Waluj,  
Aurangabad (M.S.)

**Declaration for Compliance of “Supplier Quality Assurance Manual”**

Dear Sir,

This refers to Supplier Quality Assurance Manual - “SQAM” received during Annual Vendor Meet / through Endurance Vendor Portal.

We hereby declare that we have studied each and every details of SQAM and confirm that all contents are well understood and we shall,

1. Meet to all expectations related Performance and management system requirements
2. Adhere to all Procedure and policies laid out in manual

**Supplier Name and Address:-**

	MD/CEO/COO	Customer Account Manager	Plant Head
Name			
Designation			
Signature and date			
Company Seal			



## **Acknowledgement**

I herewith acknowledge receipt of hard copy of Endurance Supplier Quality Assurance manual. We shall go through the details and meet the mentioned expectations and shall follow mentioned policies, procedures and guidelines.

Date :- \_\_\_\_\_

Name :- \_\_\_\_\_

Designation :- \_\_\_\_\_

Name of the organization :- \_\_\_\_\_

Signature :







**Endurance Technologies Ltd.**  
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