10- IMPROVEMENT

10.1 General

The organisation has determined and selects opportunities for improvement and implements any necessary actions to meet customer requirements and enhance customer satisfaction.
These include:

a) Improving products and services to meet requirements as well as to address future needs and expectations;
b) Correcting, preventing or reducing undesired effects;
c) Improving the performance and effectiveness of quality management system

This term has been defined in ISO 9001 as the **recurring activity to increase the ability to fulfil requirements.** It is therefore the policy of the Organization to not to wait for a problem, but to continually improve the effectiveness and efficiency of the processes. The organization therefore aims at improving the effectiveness of the QMS through the use of Quality Policy, Objectives, Audit Results, Analysis of Data, Corrective and Preventive Actions, Management Review etc. (Form No. Continual improvement/ kaizen – QMS/F/05)

10.2 Non-Conformity and corrective action

The corrective action has been defined (Operating Procedure No. OP/QMS/07) as a process, which eliminates the cause of non- conformities so as to **prevent recurrence**. It is used as a tool for improvement. As such adequate planning is done to include evaluation of the significance of problem and its impact on such aspects as operating costs, costs of non–conformities, product performance, dependability, and satisfaction of customers and other interested parties. It is ensured that the people from appropriate disciplines are involved and participate in the corrective action process (Form No. QA/F/09 & QA/F/09A. These are also discussed in the Management Review meetings. For taking the appropriate corrective action, attention is focused on eliminating causes of non–conformities so as to avoid recurrence. The sources of information for corrective actions are some or all of the followings -

- Customer Complaints
- Non -conformity reports
- Internal audit reports
- Outputs from management review
- Outputs from data analysis
- Relevant quality management system records
- The Employees
- Process measurements and
- Results of self-assessment

A detailed operating procedure defining the following is described in (Operating Procedure No. OP/QMS/05)**.** The appropriate records are maintained by QMSR.

a) Reviewing nonconformities (including customer complaints)
b) Determining the causes of nonconformities
c) Evaluating the need for action to ensure that non-conformities do not recur
d) Determining and implementing actions needed
e) Records of the results of action taken, and
f) Reviewing corrective action taken.

Ref: Procedure for Corrective Actions (OP/QMS/07**)**

10.2.3 Problem Solving

PDCA problem solving method is used when any product / process / system non conformity occur. Customers prescribed formats are used if available.
The **Kaizen Engineers** use 7 QC tools, why – Why Analysis for problem solving and to identify and elimination of root cause.

Disciplined problem solving methods are used for taking corrective action. If required by the customer, customer complaints are handled in a format prescribed by the customer.

Ref: Procedure for Problem Solving (OP/QA/04)

10.2.4 Error-Proofing

The organizations have a documented process to determine the use of appropriate error-proofing methodologies. Details of the method used have been documented in the process risk analysis (such as PFMEA) and test frequencies have been documented in the control plan.
The process includes the testing of error-proofing devices for failure or simulated failure. Records are maintained. Challenge parts, when used, shall be identified, controlled, verified, and calibrated where feasible. Error-proofing device failures have a reaction plan.
The **Kaizen Engineers** use Poka-Yoke concepts in corrective action process.

Ref: Procedure for Problem Solving (OP/QA/05)

10.2.5 Warranty Management Systems

As such no warranty we are providing or requirement of our customer but when we required providing warranty for our product(s), we will implement a warranty management process. We include in the process a method for warranty part analysis, including NTF (no trouble found). When specified by the customer, we will implement the required warranty management process.

10.2.6 Customer Complaints and Field Failure Test Analysis

We are performing analysis on customer complaints (field failures is not applicable to us), and initiate problem solving and corrective action to prevent recurrence.
We communicate the results of testing/analysis to the customer and also within the organization.
The **Kaizen Engineers** analyses and initiate corrective action of parts rejected by the customers. The **Kaizen Engineers** minimize the cycle time of this process. Record of the analysis is maintained and made available upon request.

10.3 Continual Improvement

The organization continuously improves effectiveness of its quality management system by utilizing tools like-
Quality policy, quality objectives, audits results, analysis of data, corrective actions, preventive actions, management review, up-gradation of plant and machinery and human resource development. Every **6 Months**, a review of all above is taken by the management in the Top Management. Top Management and other departmental heads analyse the data generated since last MRM

This term has been defined in ISO 9000 as the **recurring activity to increase the ability to fulfil requirements.** It is therefore the policy of the Organization to not to wait for a problem, but to

continually improve the effectiveness and efficiency of the processes. The organization therefore aims at improving the effectiveness of the QMS through the use of Quality Policy, Objectives, Audit Results, Analysis of Data, Corrective and Preventive Actions, Management Review etc. (Form No. Continual improvement – QMS/F/05)

The organization therefore determines the actions to eliminate the causes of potential non-conformities so as to prevent their occurrence. A detailed procedure covering the following is defined in (Operating Procedure No. OP/QMS/08). The appropriate records are maintained by QMSR.

a) Determining potential non-conformities and their causes
b) Evaluating the need for action to prevent occurrence of nonconformities
c) Determining and implementing action needed
d) Records of results of action taken
e) Reviewing preventive action taken

10.3.1 Continual Improvement- Supplemental

We have a documented process for continual improvement. We have included in this process the following:
a) Identification of the methodology used, objectives, measurement, effectiveness, and documented information;
b) A manufacturing process improvement action plan with emphasis on the reduction of process variation and waste;
c) Risk analysis & PFMEA.

Records:

Sl.No	Record Title	Format No	Retention period	Retention Resp.	Indexing method	Disposition
01	Minutes of Meeting	QMS/F/10	03 Years	QMSR	File / Computer	Shred / Deleting
02	Process Module	QMS/F/02	Till product exist + 1 Year	QA Head	File / Computer	Shred / Deleting
03	Customer satisfaction survey	MKT/F/03 & MKT/F/07	03 Years	Mkt. Head	File	Shred
04	Customer satisfaction index	MKT/F/04	03 Years	Mkt. Head	File	Shred
05	Customer perception survey form	MKT/F/07	03 Years	Mkt. Head	File / Computer	Shred / Delete
06	Continual Improvement/ KAIZEN	QMS/F/05	03 Years	QMSR	File / Computer	Shred / Delete
07	Key Performance Indicator (KPI)	QMS/F/17	Till Rev.	QMSR	File / Computer	Shred / Delete
08	Internal Audit Plan	QMS/F/11	03 Years	QMSR	File / Computer	Shred / Delete
09	Internal Audit Schedule	QMS/F/13	03 Years	QMSR	File / Computer	Shred / Delete

10	List of Internal Auditor	QMS/F/12	Till Rev.	QMSR	File / Computer	Shred / Delete
12	Internal Audit Observation Sheet	QMS/F/14	03 Years	QMSR	File / Computer	Shred / Delete
13	Internal Audit CA Report	QMS/F/15	03 Years	QMSR	File / Computer	Shred / Delete
14	Product / Process Audit Plan	QA/F/30	Till Rev.	QA Head	File / Computer	Shred / Delete
15	Product Audit Report	QA/F/14	01 Year	QA Head	File / Computer	Shred / Delete
16	Process Audit Report	QA/F/13	01 Year	Production Head	File / Computer	Shred / Delete
17	Risk Assessment	QMS/F/21	Till product exist + 1 Year	MKT. Head	File / Computer	Shred / Deleting