Kerala Agro Machinery Corporation Ltd.

(A Government of Kerala Undertaking)

QUALITY SYSTEM PROCEDURE

(International Standard ISO 9001:2015)

BOOK 9

FACTORIES AT ATHANI, KALAMASSERY, PALAKKAD AND MALA

01.08.2020

DISTRIBUTION OF CONTROLLED COPIES OF QUALITY SYSTEM PROCEDURE MANUAL

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ISSUED TO	
ISSUED BY	Management Representative
DATE	01.08.2020

MASTER LIST OF QUALITY SYSTEM PROCEDURES

SL.NO.	DOC NO.	NAME OF DOCUMENT
1.	QSP/MRO/01	Procedure for Quality System Management
2.	QSP/MRO/02	Procedure for Control of Quality Records
3.	QSP/MRO/03	Procedure for Document and data control
4.	QSP/MRO/04	Procedure for Internal Quality Audits
5.	QSP/MKT/05	Procedure for Customer Related Processes
6.	QSP/PUR/06	Procedure for Purchasing
7.	QSP/PRD/07	Procedure for Process Control – Assembly
8.	QSP/PRD/08	Procedure for Process Control – Pre treatment& Painting
9.	QSP/PRD/09	Procedure for Maintenance
10.	QSP/PRD/10	Procedure for Process Control – Machine Shop
11.	QSP/QAD/11	Procedure for Identification & Traceability
12.	QSP/QAD/12	Procedure for Control of Non-conforming Products
13.	QSP/QAD/13	Procedure for Corrective Action, Preventive Action and Continual Improvement
14.	QSP/QAD/14	Procedure for Inspection and Testing
15.	QSP/QAD/15	Procedure for Maintenance and Calibration of Measuring Instruments and Equipment
16.	QSP/QAD/16	Procedure for Data Analysis
17.	QSP/RND/17	Procedure for Research and Development
18.	QSP/STR/18	Procedure for Preservation of Product
19.	QSP/HRD/19	Procedure for Human Resourcest
20.	QSP/HRD/20	Procedure for Personnel and Administration
21.	QSP/FIN/21	Procedure for Financial and Commercial Accounting
22.	QSP/SYS/22	Procedure for I.T. Functions
23.	QSP/SYS/23	Procedure for I.T- Information Security Management
24.	QSP/RAO/24	Procedure for Identification of RISK and Opportunities

Prepared by	MR	Effective Date	01.08.2020
Approved by	MR	Control Status	
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AMENDMENTS

Sl. No	Page No.	Issue No.	Rev. No.	Date	Revision Details	Authorized By
1	All	0	0	01.08.2020	Book 9- First issue	HOD

PROCEDURE FOR QUALITY SYSTEM MANAGEMENT (QSP/MRO/01)

1.0 PURPOSE

This is to endure that;

- Adequate resources are identified and made available to various departments for equipping themselves to meet the optimum requirements for quality.
- System is reviewed regularly and updated to meet changing needs.
- System is monitored for effectiveness.
  Date from system monitoring, is analyzed to provide opportunity for preventive action and continual improvement.
- Applicable statutory/regulatory requirements are identified and complied with.

2.0 SCOPE

The system covers resources requirements of all divisions and departments in KAMCO.

3.0 RESPONSIBILITY

Divisional and Departmental Heads are responsible to ensure that the procedures are followed.

4.0 PROCEDURE

4.1 A Production Plan, Sales Plan and Recruitment Plan emerges from the Annual Business Plan/Budget. New requirements of machinery, equipment, tools, gauges, jigs and fixtures also emerge from the business plan/budget.

4.2 Concerned departments make resource plans comprising of new equipment and up-gradation ofexisting infrastructure and submit proposals to management.

4.3 Resource Plan can also be need based; based on the market situation and customer feedback.For approval of the proposals, management takes into account, selection of equipment, the improvement in quality/productivity aspects and the justifications put forth by departments concerned.

4.4 The Management approval with corrections if any, are forwarded to concerned departments for implementation of the program.

4.5 All Heads of Departments monitor the effectiveness of implementation of the quality managementsystem within their respective departments. Performance is reviewed during monthly departmental meetings. Further action, recommendations etc. are taken up during themanagement review.

4.6 The respective Heads of Departments analyze numerical and language target as a result of suchmonitoring. Analysis is reviewed and discussed in Management Review Meetings as well asreported through MIS to the senior management.

Reference: Procedure for data analysis QSP/QAD/16

4.7 The following statutory/regulatory requirements have been identified as applicable to KAMCO'sOperations in the current context.

A. Product Requirements

No.	Requirement	Reference	Current Control Measure	Records
1.	Minimum Performance Standards	MPS issued by Ministry of Agriculture, Govt. of India	C.O.P. Tests Engine Smoke Test for conformance/assurance	Test Reports

B. Environmental Protection Requirements

No.	Requirement	Reference	Current Control Measure	Records
1.	Effluent treatment	Consent to operate, from KPCB	ETP norms	ETP Records

C. General Requirements

Sl.No.	Requirement	Reference (current edition, amendments)
1	Work environment	Factories Act, 1948
2	Electrical equipment	IER
3	D.G. Sets	IER, Air Act 1981
4	Pressure Vessels	Factories Act 1948
5	Employee Welfare	Factories Act 1948
6	Others	Other generally applicable statutes

5.0 MANAGEMENT REVIEW

General

The Managing Director in Conjunction with M.R. and appropriate senior staff undertake management reviewtwice in a financial year,utilizing data derived from the analysis of management system audits, operational problems,qualityperformance records and other pertinent information to ensure the suitability and effectiveness of the Quality Management System.

Reviews are also undertaken by management of the areas involved to determine that the procedures and methods currently employed are achieving the desired results; to examine ways in the light of current knowledge and technology that require improvement.

Review input

The management review shall be planned and carried out taking into consideration:

a. The status of actions from previous management reviews
b. Changes in external and internal issues that are relevant to the quality management systems.
c. Information on the performance and effectiveness of the quality management system, including trends in:
    1. Customer satisfaction and feedback from relevant interested parties
    2. The extent to which quality objectives have been met
    3. Process performance and conformity of products and services
    4. Non conformities and corrective actions
    5. Monitoring and measurement results
    6. Audit results
    7. The performance of external providers
d. The adequacy of resources
e. The effectiveness of actions taken to address risks and opportunities
f. Opportunities for improvement

Review Output

Records of minutes of these review meetings are maintained by the M. R. The records of meetings include decisions and plans for improvement of effectiveness of quality management system and the processes, product improvement with respect to customer or statutory / regulatory requirements, resource needs to sustain and continually improve the quality management system.

PROCEDURE FOR CONTROL OF QUALITY RECORDS (QSP/MRO/02)

1.0 PURPOSE

i) To ensure that Quality Records are legible, identified, collected, indexed, filed, stored and maintained, by respective departments during retention period.

ii) The records are accessible only to those required to maintain them.

2.0 SCOPE

All Quality Records related to Quality Management Systems are covered.

3.0 RESPONSIBILITY

Head of originating Division/Department is responsible for control of documents.

4.0 PROCEDURE

4.1 Required Quality Records are identified in the respective Department Quality Manuals.

4.2 These records are collected, indexed and filed/stored as given below.

4.2.1 The forms which become quality records after the required information are filled in the relevant columns are filed in appropriate files and indexed indicating the department code, (as per procedure for Document and Data Control (QSP/MRO/03).

4.2.2 A master list of all files and registers available in the department is maintained in the concerned Department Quality Manual indicating the retention period and method of filing. Unless otherwise stated the retention period will be one year.

4.2.3 For Finance Department, the format, work instruction, Registers and Ledgers originated and maintained are as per Accounts Manual approved by the Company. Revised/updated formats or documents shall be identified with status-0 for original, 1,2,3 – for subsequent revisions. The pre-revised copy Master Accounts Manual is maintained by Divl. Head and shall be identified as obsolete and revised set shall be attached. All copies in work locations are also replaced with new ones. Whenever many revisions are incorporated, Divl. Head arranges reissue of Manual. Under this procedure, the Accounts Manual is termed as work instruction and is a level III document.

4.3 These records will be stored in such a way that they are easily retrievable and securely kept to prevent damage/deterioration or loss. In case the records are kept in electronic media, duplicate/back up records are available to prevent loss of data.

4.3.1 Financial records are preserved for the period prescribed as per Companies Act and Income Tax Act. Certain files are kept for a period even beyond the limits prescribed by the above Acts, if any Judicial Proceedings are pending. The detailed maintenance and preservation procedures are prescribed in the Preservation Manual approved by the Company.

4.4 Whenever it is contractually agreed, these records are made available to the customer and the retention period for them will be based on the contract.

4.5 Care will be taken by personnel, who fill in the data in Quality Records to ensure that they are legible and easily readable.

4.6 A Master List of all Quality Records are available in Dept. Quality Manual indicating the Retention period. Method of filing. On expiry of the Retention period, the records are suitably disposed with the approval of HOD and such disposals, are recorded in the Quality Record Disposal Register.

PROCEDURE FOR DOCUMENT AND DATA CONTROL (QSP/MRO/03)

1.0 PURPOSE

(i) To ensure that documents and data relating to the requirements of this Quality Management System are reviewed and duly authorized prior to issue.

(ii) This document details the procedure to ensure that only valid documents are in force.

(iii) To ensure that obsolete documents are removed promptly from point of use.

2.0 SCOPE

All documents related to Quality Management System.

3.0 RESPONSIBILITY

3.1) Head of originating Division/Department is responsible for ensuring the adequacy of document before approval/issue.

3.2) Head of originating Division/Department and MR are responsible for control of documents including their identification of revision if any, legibility and to prevent the unintended use of obsolete documents.

3.3) The user Departments are responsible for maintaining, updating and re approving the documents and to make available to concerned persons for implementation.

3.4) Master list of all documents originated in each department is maintained by the concerned Department Head.

3.5) In case obsolete documents are retained for any purpose, they are suitably identified with the approval of Department Head concerned.

3.6) Documents of external origin are identified and controlled and these are approved by the Department Head concerned.

4.0 DEFINITIONS:

4.1 Master Copy: is the original print of the Quality System Manual/Procedure/Work Instructions/Formats. This is identified as "Master Copy" in red colour at the rear side on each printed page.

4.2 Controlled Copies are photocopies of master copy. These are identified as "Controlled" in blue colour on the printed side of each page. "Controlled" copies have a unique two digit copy number for identification. These copies are automatically updated whenever changes are incorporated. Controlled copies are circulated as per the distribution list.

4.3 Uncontrolled Copies: are also photocopies of the master copy. These are also identified as "Uncontrolled Copy" in blue colour on the first page of each section. Any copy which does not carry blue rubber stamp "Controlled"/ "Master Copy" and any Xeroxed copy of these Controlled copies are also treated as "Uncontrolled Copy" and will not come under the purview of procedure for Document and Data Control (QSP/MRO/02).

5.0 PROCEDURE

5.1 Document Preparation and Approval:

Documents relating to requirement of Quality System are prepared, reviewed for adequacy, approved and issued as detailed below.

DOCUMENT	PREPARED BY	APPROVED BY	ISSUED BY
QSM	MR	MD	MR
QSP	MR OFFICE	MR	MR
DQM	Dept. Officers	Dept./Divl./Unit Heads	MR

5.1.1 All documents revised and reissued in full will have Book nos. starting from 1

5.1.2 Quality System Manual is the Level I document and the master copy is maintained by MR. Controlled copies are distributed as per the distribution list.

5.1.3 Quality System Procedures are the Level II documents and the master copy is maintained by MR. Controlled copies are issued as per the distribution list.

5.1.4 Department Quality Manual – (level III document) pertaining to respective dept. is prepared by an Officer-in-charge of the shop/section and is approved by the Department/Divisional/Unit Head. Master copy is maintained by MR and a controlled copy is issued to the concerned dept.

5.1.5 Original issue of Quality System Manual is approved by MD and issued by MR. Subsequent changes are also approved by MD and issued by MR.

5.1.6 Master list of drawings – Master List of Components and Bill of Materials are prepared, maintained and controlled by Engineering Department. Parts catalogue is also maintained, controlled and issued by Engineering Department to various inhouse departments.

5.1.7 Quality plans are prepared, maintained and controlled by Quality Assurance Department.

5.1.8 Price list based on Board decision is prepared, approved and issued to approved dealers by Marketing Dept.

5.1.9 Product Leaflet, Service cum Log Book and Operator's Manual are issued to approved dealers/customers by Marketing Dept.

5.1.10 Process Sheet of Machine Shop and Assembly is prepared, controlled and maintained by Engineering Department.

6.0 Standards are used by Engineering and QA Departments. Updated Standards are maintained in Engineering Department for reference.

6.1 In case of any revision, relevant revised Standard is procured & maintained by Engineering Dept.

7.0 Codification in KAMCO include the following

7.1 All measuring instruments, gauges and equipment

7.2 Machines, Jigs and fixtures

7.3 Engines, Tiller and Reaper (Chassis) by a unique numbering system

7.4 Drawings/component/product code

8.0 Document Changes

8.1 In the case of QSM and QSP, change requests in Document Correction Request are received by M.R. Requests are reviewed with concerned department/divisional /unit heads. Agreed revisions are incorporated and the change is recorded in the amendment sheet. Modified pages are issued as per distribution list.

8.2 For Quality plans, Work instructions and Formats, revisions are initiated by the concerned HODs. Based on requests received, if found acceptable, changes are initiated, revised and issued by MR Office. Amendment details are noted in "Master Record Index for Department Quality Manual amendments".

8.3 Product leaflets, Service cum Log Book, Operator's manual and Parts Catalogue are printed in large numbers. Hence amendment circular is sent to the copy holders (dealers) asking them to incorporate details. Reprinting is initiated when sufficient changes take place or available copies are over. These documents will carry concerned document numbers and issue date.

8.4 Master copies of documents with latest issue/revision status are maintained by MR.

8.5 The change status of level I, level II and level III documents of the system is identified by Revision No. and by issue No. After a number of revisions (say maximum 10) the documents are re-issued with an updated issue level. The revision level is indicated by a continuing number for each issue level.

9.0 Control of obsolete documents.

9.1 In the case of level I and level II documents, modified copies are issued by MR only after getting back obsolete copies from each department.

9.2 In the case of level III documents and drawings, user department removes obsolete copies and return to issuing department for destruction.

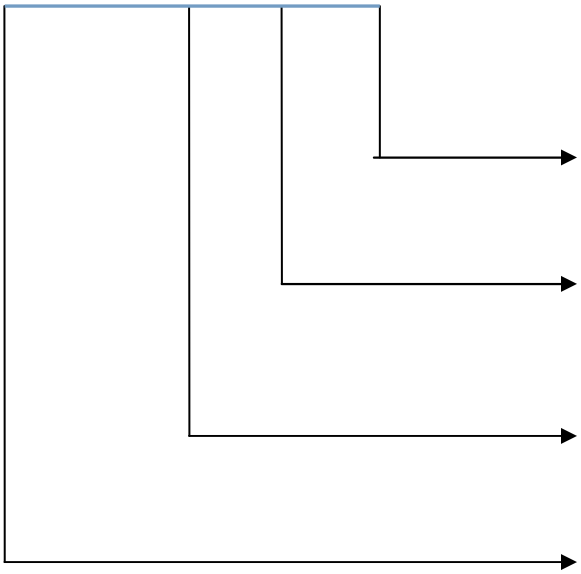
Obsolete documents if maintained for reference, are stamped "Superseded" on each page.

Obsolete documents of level I, level II and level III are maintained by MR

10. Level I document, Quality System Manual is identified as AQSM:01. Amendment status is identified as given in para 8.5.

11. DOCUMENT NUMBERING FOR QUALITY SYSTEM PROCEDURES

1 2 3 4 5 6 7 8 9
Q S PX XXXXX



Issue status in small alphabet. (Zero indicates First issue)

Two digit running numbering

Department identification Code (3 alphabets Refer Note)

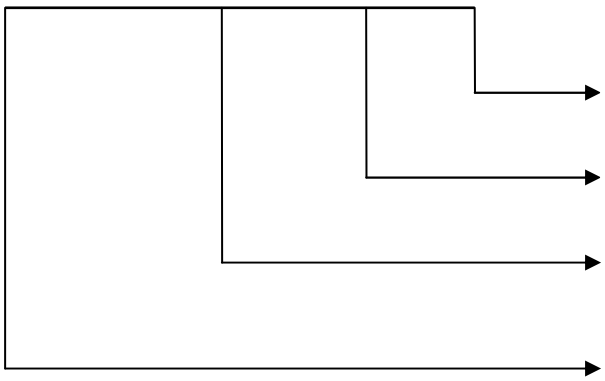
QS – for Quality System, P - Procedure

Note:

MRO : Management Representative's Office
MKT : Marketing
MTL : Materials
PUR : Purchase
PRD : Production
QAD : Quality Assurance
RND : Research and Development
STR : Store
HRD : Human Resources Development
HRM : Human Resources Management
FIN : Finance
SYS : Systems
RAO : Risk and Opportunities

12.0 DOCUMENT NUMBERING FOR DEPARTMENT QUALITY MANUALS

D Q M X XXXXXX
1 2 3 4 5 6 7 8 9 10



Issue status in small alphabet (Zero indicates first issue

Two Digit running numbering

Department identification Code
(3 alphabets – Refer Note)

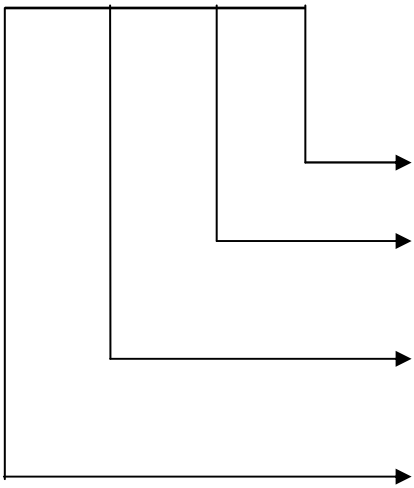
X for Unit (A/P/K/M)
(DQM) Indicates Department quality Manual

Note:-

MRO - Management Representative's Office
MKT - Marketing
PUR - Purchase
MTL - Materials
ASY - Assembly
MNC - Maintenance
MSP - Machine Shop
QAD - Quality Assurance
RND - Research and Development
STR - Store
FIN - Finance
HRD - Human Resources
SYS - Systems

13.0 DOCUMENT NUMBERING FOR WORK INSTRUCTIONS FORMATS AND LISTS

X XXX X–C X



Issue status in small alphabet (Zero indicates first issue)

Two digit numbering – C Indicates computer format.

Identifies type of document.
W – Work Instruction
F – Format
L – Lists

Identifies department (2 alphabets – refer note)

Note:- Identification of department by two alphabets.

MR	-	Management Representative
MK	-	Marketing
PR	-	Purchase
AY	-	Assembly
MN	-	Maintenance
MS	-	Machine Shop
QA	-	Quality Assurance
RD	-	Research and Development
ST	-	Store
FI	-	Finance
SY	-	Systems
MT	-	Materials
HR	-	Human Resources

13.1 For identification of Units, the work instructions, Formats and list will indicate Unit name.

PROCEDURE FOR INTERNAL QUALITY AUDITS (QSP/MRO/04)

1.0 PURPOSE AND SCOPE

To ensure that Quality Systems are effectively operating in accordance with the requirements of Quality System Manual QS Procedures and ISO schedules. Audit is carried out in all operations both for adequacy and compliance.

2.0 RESPONSIBILITY

Management Representative (MR) is to ensure that the procedures are followed by all concerned departments.

2.1 It is the responsibility of Auditors and Auditees to facilitate conduct of audits as per schedule.

2.2 Department Heads are responsible for overseeing timely and effective implementation of corrective actions as per the audit findings.

3.0PROCEDURES

3.1 Non Conformance

3.1.1 Non conformity, which leads to Corrective Action Request (CAR), is the non-fulfillment of specified requirements.

3.1.2 The basic purposes of audits are to assess conformance of the system implementation and to detect non-conformities in the systems if any, so that appropriate Corrective and preventive actions are taken to put back the Quality system in order.

3.2 Categories of Corrective Action Request (CAR)

3.2.1 Non conformities leading to Corrective Action Request are generally classified into three categories: Major, Minor and observations.

3.2.2 MAJOR CAR – Relates to the total absence of an element of the standard or a system procedure.

3.2.3 MINOR CAR – Relates to a single observed lapse in a procedure.

3.2.4 OBSERVATIONS – A minor lapse or a minor isolated problem which if not attended in time may lead to a minor CAR in future.

3.3 Internal Quality Audits are carried out as per Audit Plan approved by Management Representative. However, depending on the status and importance of activity to be audited, plan will be altered to suit the requirements.

3.4 Internal Quality Audits are carried out by Qualified Internal Auditors. List of Qualified Internal Auditors is maintained by MR.

3.5 Audit Findings brought out by Auditors as Corrective Action Requests (CAR) and observations are handed over to MR. In case of CAR the root cause and correction is identified by the auditee and immediate corrective action plan is finalized with the auditor and implemented for closing the non-conformance. The corrective action plan is verified by the auditor through a follow up audit within the time frame of one month or less. The effectiveness of the corrective and preventive action is verified during the next Internal audit within three months.

3.6 Management Representative consolidates all original CARs and observations and forwards them to concerned Divisional/Departmental Heads for taking appropriate corrective actions.

3.7 Divisional/Departmental Head on implementation of corrective actions records the same and returns to MR for verification and closure.

3.8 On receipt of CARs/Observations from Divisional/Departmental Heads, MR or any authorised Auditor verifies the effectiveness of corrective action taken. If implementation is done satisfactorily, the CAR/Observation is closed by MR. All the closed CARs/Observations are maintained by MR.

3.9 Wherever required, effective implementation of corrective actions against CARs/Observations of previous audits are checked and recorded during subsequent audits.

I. DOCUMENTS

Sl. No.	Document Description	Doc. No.
1	List of qualified “Quality System Internal Auditors”	MRL: 01
2	Master List of Dept. Quality Manuals – A. U.	MRL : 02
3	Master List of Dept. Quality Manuals – P.U.	MRL : 03
4	Master List of Dept. Quality Manual – K.U.	MRL : 04
5	Master List of Dept. Quality Manual – M.U.	MRL : 05
6	List of Process	MRL : 06
7	Action Plan for Objectives	MRL : 07
8	RISK Assessment	MRL : 08
9	Internal & external issues relevant to QMS	MRL: 09

II. FORMATS

SL.NO.	FORMAT DESCRIPTION	FORMATNO
1.	Audit Plan	MRF : 01
2.	Audit Schedule	MRF : 02
3.	Corrective Action Request	MRF : 03
4.	Follow up actions on CAR	MRF : 05
5.	Document Correction Request	MRF : 06
6.	Master Record Index for Department Quality Manual Amendments	MRF : 07
7.	Report to M.R.M	MRF : 08

PROCEDURE FOR CUSTOMER RELATED PROCESSES (QSP/MKT/05)

1.0 PURPOSE:

This document details the procedure

(i) To ensure customer requirements are thoroughly understood and differences areresolved before acceptance of the order.

(ii) Products/Implements/Accessories /Spare parts are delivered to the customers as per the requirement to gain the satisfaction of the customers

.

(iii) Establish and develop Dealership network to facilitate proper sales and service for the products marketed by the company.

(iv) Establish adequate communication with the customers to effectively gauge their feedback and Incorporate it to enhance customer satisfaction

2.0SCOPE

2.1 Company has to meet all the contract obligations to the customers, subject to statutoryregulations, from the enquiry stage to the delivery of the goods at customers site including receipt of payments, invoicing and transit insurance.

2.2 This procedure covers the marketing and sales of Power Tiller, Diesel Engine, Implements and Accessories and Spare Parts.

3.0RESPONSIBILITY:

3.1 HOD of Marketing is responsible to ensure that the proceduresare followed by all the individuals in the Marketing Dept.

4.0PROCEDURE:

4.1 HOD on receipt of enquiry / order passes it to concerned officers for scrutiny and detailed verification.

4.2 All matured orders including credit sales, etc. received from dealers/customers are entered in the Computer as order booking. Matured orders are those with payment received or assured through Bank/ LC / Advance and other features like delivery schedule acceptable to us, insurance terms, specific information regarding transit sale, direct sale where we have dealers, sales which require government guarantee/ approval etc.

4.3 Details such as Purchase Order No., Date, Model, Quantity Ordered, Delivery Schedule, Accessories required, Payment terms and mode of despatch are verified. Clarifications if any on the above are obtained and Performa invoices forwarded on demand wherever necessary.

4.4 Receipts of order and payment are acknowledged.

4.5 In case delivery schedule cannot be met as per the requirement of order, it is brought to the notice ofHOD.HOD in turn consult with Production and Materials Dept. to check whether the delivery schedule requirements of the Order can be met.

4.6 Schedule amendments if any are informed to the dealer/customer on review of orders.

4.7 Month-wise order position review is carried out by divisional head and appropriate actions initiated .

4.8 Tiller allotment Register is updated and maintained in case number of pending orders exceed available stock / producible number. Divisional head oversees the situation when orders are more than supply.

4.9 Record of Tiller transfer notes maintained by storesare available in the Computer and Despatch advise is generated by dept.

5.0RECEIPT OF PAYMENT

5.1 Entries are made in the Computer for all payments received.

5.2 Payments received are forwarded to Accounts Department along with Payment forwarding slip.

5.3 Receipt of payments is sent to concerned Dealer / Customer by Accounts Department.

6.0DESPATCH ADVICE (TILLER, ENGINE, REAPER, IMPLEMENTS & ACCESSORIES)

6.1 Allotment of Tillers/Engines/Reapers against orders is made in consultation with Divisional Head/HOD of Marketing, subject to 4.8 above.

6.2 Despatch Advice for Products is prepared as per allotment of products and passed on to Stores for Despatch

6.3 In the case of Despatches to CFA/regional offices, which are considered as a stock transfer, Inter unit Stock Transfer Note is prepared by making entries in the Computer and copies are sent to Stores for arranging Despatch.

6.4 In the case of Dispatches from Palakkad/Kalamassery/Mala Unit, required Despatch advices are issued from Marketing Dept. at Athani/generated from computer system at resp. units.

7.0 DESPATCH ADVICES (SPARE PARTS)

7.1 Registration of orders for Spare Parts

All orders are entered in the Computer after verification and acknowledged to the Customer.

7.2 Preparation of Despatch Advice

Despatch advice for Spare parts is prepared based on orders, through computer.

7.3 Packing of items for despatch

The Despatchadvice is sent to Parts Warehouse for despatching items. Based on thedespatch advise, the department forwards goods to customers as per the agreed delivery schedule.

8.0 INVOICING

8.1 As per despatch advice PWH arranges packing and makes arrangements for despatch. Marketing Dept. raises Invoices indicating the date of despatch, mode of despatch, number of packing cases, quantity and items packed, freight details, carriers name, etc.

8.2 Invoices for Products, Accessories, Spare Parts, (excisable/ non-excisable) are generated in the Computer by marketing department/Stores Dept. in respective units

8.3 Suitable records are created in the Computer on Partywise basis on preparation of Invoice.

8.4 Copies of invoice along with despatch advise and other documents if any, are sent to Stores Dept., for sending alongwith the Carriers.

8.5 After arranging despatch, Stores Dept, sends the despatch advise along with connected L.R./R. R. to Marketing Dept. along with related papers.

8.6 In case of stock transfer to CFA/Regional offices, Stores Dept. transfer the Tillers, Reapers and Accessories as per the I S T N and returns copy of ISTN along with concerned L.R. to the Marketing Dept. On receipt of ISTN, suitableintimations are passed on to the concerned CFA/Regional Office. Invoices are prepared by CFA/ Regional offices. On receipt of the copy of invoice necessary entries are made in the computer.

8.7 In the case ofdespatches from Palakkad/Kalamassery/Mala Unit , invoices are prepared from the respective units after making necessary entries in the computer. Through online system these details are made available in the Marketing Dept.

8.8 Monthly analysis is carried out by Marketing dept. on the DAS execution and informed to Top Management for taking corrective and preventive action wherever necessary.

9.0 DELIVERY

9.1 Stores department despatches products, Implements & Accessories through Approved Carriers as per the despatch advice. Spare parts are despatched by PWH through approved carriers separately or along with products.

10.0DESPATCH OF DOCUMENTS

Concerned Despatch documents are sent to customers immediately along with carriers and/ or by Speed Post/Registered Post/Courier with covering letter.

The documents consist of :

1. Original Invoice with copy
2. Consignee copy of L R /RR
3. Service cum Log Book
4. Certificate for Registration of Tiller/Trailer.

Insurance declaration certificate is separately sent on receipt from insurance company.

Copy of invoice is sent to Accounts Department. In the case of payments through Bank, Invoice in triplicate/quadruplicate, consignee copy of LR alongwith one copy of Transit Insurance declaration are forwarded to Accounts Department for negotiation.

11.0 CLEARANCE OF DOCUMENTS

On clearance of the documents, entries are made in the Computer by Finance Dept. In case of any delay follow up is done with the Dealer,

12.0EXPORTS

Export orders received from Agents/Clients are scrutinized and finalised in consultation with Managing Director. The order is executed against letter of credit opened by the client or any other mutually agreed terms. All other procedures are the same as that applicable to domestic sales.

13.0RECORDS

Documents, formats and records related to marketing are maintained in Department Quality Manual DQM/MKT/01.

14.0RETAIL SALES THROUGH KAMCO SALES COUNTER

KAMCO is operating retail sales counter for spare parts in Athani and Palakkad Units. The parts required for this sales counter are transferred from PWH/Main Stores through a store issue note. The daily sales proceeds is remitted in Accounts Dept. on the next working day along with statement. Accounts department issues cash receipt for such amounts remitted.

15.0SELECTION OF DEALERS

Below mentioned procedure is followed in the selection of Authorised dealers.

15.1 Advertise in local editions of Newspapers .
15.2 Scrutinize the credentials submitted by respondents and send the dealership application form to the selected respondents.
15.3 Check the filled up applications received from the applicants

15.4 Short list the applicants with due consideration to their experience, infrastructure, financial position etc. as per the requirement.

15.5 An officer from the marketing dept. visits the establishment for verification to find out suitability andgive his report of findings and recommendations to the higher ups for suitable decisions.

15.6Based on the reports and subsequent discussion between top management & selected party, Dealership agreement is finalized.

15.7 The selected dealer's name is added to the list of Authorized dealers and Dealership certificate is issued to the dealer.

15.8 If no suitable application is received, reputedparties are directly contacted. For such Parties, procedure 15.2 to 15.7 is applicable.

15.9 In the caseof Co-operatives/ Govt. Agencies, dealership can be granted without following the above procedure.

16.0 CUSTOMER SATISFACTION

KAMCO has established effective channels of communication with its dealers / customers / farmers and other agencies to gauge customer needs and respond to them. Feedback is evaluated for feasible modifications to the products or processes.

16.1 Marketing personnel make periodic visits to customers, and Dealers to gather information on product performance, preferences, trends of sales etc.

16.2 Market survey is carried out among Dealers and Customers, once within two years , by using questionnaire or personal interview methods.

16.3 Dealers have to meet all pre-sales and after-sales obligations to customers especially within the warranty period as per the dealers agreement and service manual.

16.4 Investigation of root causes for customer complaints and implementation of appropriate corrective/preventive actions are carried out.

16.5Data on Customer complaints and resulting corrective and preventive actions are furnished to Top Management & M.R. for review.

16. 6 KAMCO provides training to Mechanics deputed by Dealers. This training includes operation, maintenance and repairs of products and accessories.

16.7 The farmers are also trained at KAMCO in operation and maintenance of products and accessories as when required.

16.8 Dealer gives training to Customer in Operation and Maintenance of the Products as per Instruction Manual before giving delivery of Power Tiller / Reaper /Diesel Engine.

16.9 Overall customer satisfaction is measured by Marketing HOD and reported to the senior . management and discussed in the Management Review Meeting.

17.0 WARRANTY CLAIMS

17.1 Company extends warranty for its products, provided the operation, maintenance and servicing of the Tiller/Reaper/Diesel Engine is done strictly as per Operator's Manual and service cum log book. The terms and conditions ofwarranty are given in the Warranty Card available in service cum log book.

17.2 If any complaint on product is received by the Dealer, it is attended to immediately by their service staff.

17.3 The warranty claim form is forwarded by the dealer to KAMCO in quadruplicate along with damaged items on freight paid basis.

17.4 On receipt of a warranty claim in Marketing Division, procedure as described below is followed:

17.5 Warranty Claim Clearance:

17.5.1 Registration of warranty claim.

17.5.2 Verification of claim with product Service Register

17.5.3 Checking of all defective items received.

17.5.4 Claim value is calculated. Servicing department checks and investigates the causes of failure based on the dealers report and failed components received.

17.5.5 W.C which fulfills the warranty conditions are submitted along with items to QA along with warranty claim form for investigation of failure.

17.5.6 QA, based on investigation results and identification of root causes initiates corrective and preventive actions as required and informs the concerned departments. For furtherdetailsrefer procedure for corrective Action, preventiveactions and continual improvement QSP /QAD/13.

17.5.7 Get back Warranty Claim formwith QA's remarks / recommendations.

17.5.8 If the claim is admitted by Q.A., sanction is obtained from approving authority for replacement of defective parts. If the claim is rejected, the same is informed to dealer and defective parts returned on freight paid basis.

17.5.9 Makes entries in Warranty ClaimRegister and Tiller Service Register.

17.5.10 Preparation of warranty claim DAS (MKF : 02) in Quadruplicate for accepted items, and Despatch Advise Note DASR (MKF : 06) in duplicate for rejected items.

17.5.11 Forward Warranty claim DAS/DASR to Stores for despatch of replaced / rejected items to the dealer on freight paid basis.

17.5.12 After Despatch, gets back DAS/DASR copy with despatch details and sends a copy of warranty claim form to the dealer along with covering letter and way bill by RegisteredPost / speed post.

17.5.13 Two copies of settled warranty claim forms are forwarded to QA. For claims admitted under material defect, the cost is to be deducted from vendor(as decided by QA) the copy of such claim is forwarded to Finance dept. to recover the cost of defective item.

17.5.14 If the Service details are not received in time/or the conditions are not satisfied, warranty claims are not generally considered. Dealers are then intimated accordingly.

17.5.15 In case of Warranty Claim admitted on products manufactured by other units, a copy ofthe settled Warranty Claim (MKF:02) is forwarded to them for necessary Corrective Actions.

17.5.16 For better transparency, Marketing Department advises other units, monthly warrantyclaim admitted, for information..

17.6 Warranty Clearance at Regional Offices

17.6.1 Regional Marketing Officers are vested with authority to settle minor warranty claims presented by the dealers in the approved format for claims arising due to manufacturing or material defects, subject to the Warranty conditions

17.6.2 Warranty claims admitted by Regional Officers are sent to Servicing Dept. at Athani, for processing and to effect replacement to the dealer.

17.6.3 Regional Marketing Officers send a monthly report giving details of claims settled, with full particulars.

17.6.4 Claims of major nature are processed at H.O. Servicing Dept. as per procedure 17.5.1 to 17.5.16.

18.0 PRODUCT SALES AND SERVICE REGISTER

18.1 On despatch of products to dealer, entries are available in the Computer.

18.2 On receipt of Index Card from Dealer, the date of sale and address of customer are entered in the concerned column in the Service Register in computer.

18.3 On receipt of service coupon, the date of service and hours worked are entered in the Service Register in computer.

18.4 KAMCO supplies one Operator's Manual and a Service Cum Log Book to each customer who purchases Power Tiller / Reaper or Diesel Engine . Warranty Services are provided as per details furnished in the Service cum Log Book.

18.5 Immediately after delivery of a Product to Customer, Dealer forwards the Index Card/ Pre- delivery inspection card to KAMCO after making entries such as Date of Delivery and Address of the Customer for updating the service register.

I. MASTER LIST OF DOCUMENTS

SL. NO.	DOCUMENT DESCRIPTION	DOCUMENT NO.
1.	Price List	MKW : 01
2.	Product Leaflet (Tiller)	MKW : 02
3.	Service cum Log Book (Tiller)	MKW : 03
4.	Price List – Spare Parts (Tiller)	MKW : 04
5.	KAMCO Dealers Approved List	MKW : 05
6.	Parts Catalogue (Tiller)	MKW : 14-04
7.	Product Leaflet (D I Tiller)	MKW : 06
8.	Parts Catalogue (D I Tiller)	MKW : 07
9.	Product Leaflet (Reaper)	MKW : 08
10.	Service cum Log Book (Reaper)	MKW : 09
11.	Parts Catalogue (Reaper)	MKW : 10
12.	Price list – Spare Parts (Reaper)	MKW : 11
13.	List of Process	MKL: 01
14.	Action Plan for Objectives	MKL: 02
15.	RISK Assessment	MKL: 03

II. MASTER LIST OF FORMATS

SL. NO	FORMAT DESCRIPTION	FORMAT NO.
1.	Despatch Advice	MKF : 01
2.	Warranty Claim Form	MKF : 02
3.	Despatch Advice (DAS) for Warranty Claim	MKF : 03
4.	Master Record Index for Department Quality Manual Amendments	MKF : 04
5.	Payment Forwarding Slip	MKF : 05
6.	Despatch Advice Note (Warranty Rej.)	MKF : 06
7.	Customer complaint Redressal	MKF : 10
8.	Report To MRM	MKF : 11
9.	Invoice	MKF : 12
10.	Production/ Order/ Despatch Statement	MKF : 13

PROCEDURE FOR PURCHASING (QSP/PUR/06)

1.0 PURPOSE

1.1 To ensure that all raw materials, semi-finished, fully finished components for production implements and accessories consumables and subcontracted components, are procured from approved/established vendors.

1.2 To ensure that the procurement action is taken in time by processing repeat orders/tender enquiries wherever applicable.

1.3 To assess Vendor capability to effect supplies in accordance with Purchase Order meeting acceptable quality and deliveries so that they can be listed as approved vendor.

1.4 To ensure goods received are of consistent quality conforming to the standards/specifications of the Purchase Order.

1.5 To provide feedback to the vendors for improving quality of supplied and materials.

1.6 To ensure that Vendor's performance is recorded, monitored and suitably graded.

2.0 SCOPE

2.1 This procedure is applicable for procurement of raw materials, fully finished bought out components, production consumables and sub-contracted components. This procedure does not apply for procurement of general stores, consumables, building materials, office furniture and equipment.

2.1.1 All fresh and replacement of Capital Equipment

2.2 All purchased/sub-contracted items which are required as inputs for the manufacture of the product.

2.3 This procedure covers all Vendors, who are supplying sub-assemblies, fully finished components, semi-finished components, raw materials and production consumables of critical nature and which affect the quality of end product.

3.0 RESPONSIBILITY

3.1 Head of Purchase/Materials Department is responsible to ensure that the procedure is followed by all individuals in the Department.

3.2 Authority to approve final performance rating of each vendor rests with Divisional Head or Department Head of Purchase/Materials in consultation with Department Head of Quality Assurance.

3.2 Adequate information including drawing references, component code etc. shall be reviewed and latest revisions are included in the purchase order, by the department personnel and communicated to the vendor.

4.0PROCEDURE

4.1.0 Approved vendor list is prepared based on one of the following criteria.

A. Previous demonstrated performance of the vendors by their ability to supply the required materials for the past one year. Additional items on these established & approved Vendors are subjected to approval of the Vendor Development Committee.
B. Reputation in the market for the quality of proprietary products.
C. Assessment and certification of the Vendor's Quality System by an independent body to National/International Standards.
D. Assessment by company personnel on site.
E. Evaluation and approval of Product samples.
F. Published experience of other users.

4.1.1 For suppliers approaching for registration, following procedure will be applicable.

4.1.2 The registration form is issued to the supplier for filling up the details.

4.1.3 These details are processed and approved to proceed further by Vendor Dev. Committee

4.1.4 Premises of the supplier are assessed by technical personnel designated by HOD/Divl. Head.

4.1.5 The vendor evaluation report (PRF:07/PRF:07-C) is filled up by the personnel who visits the premises.

4.1.6 After taking decision on the capability of the Vendors based on Vendor Evaluation Report, they are requested to supply samples for approval.

4.1.7 The samples are submitted by New Vendors to the Quality Assurance Department at HO and based on their recommendations regarding the sample, decision is taken on ordering on them. They are registered as a Vendor by the Purchase/Materials Dept. at HO. The first Purchase Order is released on a trial basis for a smaller quantity. After satisfactory supply of the trial order, they are included in the Approved Vendor List and regular Purchase Orders are released depending on requirement of the materials.

4.1.8 Vendor list is approved by the Head of the Purchase/Materials Dept. and released to ManagementRepresentative and all Units. The relevant pages are issued to Q.A/Store/M/c shop departments for their records.

4.1.8 This list is updated once in a year based on vendor performance.

4.1.9 Components for the products manufactured by the Company are procured based on the quantity requirement assessed by the department taking into consideration the stock available and pipeline supplies expected.

4.1.10 Annual spare parts sales forecast projected by marketing is also taken into consideration to arrive at the quantity.

4.1.11 In the case of purchases made for new items, an enquiry is floated and the quotations received are evaluated /recommendations of user Dept. obtained if required and order finalised by Head of Department of Purchase/ Materials

4.1.12 In the case of established Vendors for a particular component, repeat orders are released.

4.1.13 Vendor Development Cell is constituted under Manager(VDC) for New Products / Accessories. Vendor development committee comprising of Senior. Manager (Mtls) (Convenor), Dy. Manager (Mtls), Manager (R & D), Asst Manager (R & D), as members, oversees the VDC activities and approves the development of Vendors identified by VDC/Purchase/Materials Dept.

4.2.0 <u>Purchase Order Approvals:</u>

4.2.1 Considering the requirements of all Units of KAMCO a combined Purchase Plan is prepared, group wise, and this plan is used as Master Purchase Plan for entire one year.

4.2.2 Purchase Proposals are prepared in Standard Format based on the Master Purchase Plan for all units of KAMCO put together.

4.2.3 The proposals are then audited by Internal Auditor from Finance Department and upon clearance, they are put up for approval by appropriate authorities.

4.2.4 Purchase Orders are released, separately, for each Unit of KAMCO after obtaining approvals from concerned authorities, in respective formats and copy of the order is forwarded to the concerned Unit.

4.2.5 Delegation of financial powers to approve Purchase Proposals is given in the Department Quality Manual.

4.2.6 The ordered items may undergo verification at Vendor's premises depending on the situation decided by the Management. In view of this, the Purchase Order does not have site verification clause. Site inspected items received will have evidence of inspection by QA staff, supported by an inspection report and the final acceptance is subject to approval by QA Section Head.

4.3.0 Follow up with Vendors

4.3.1 Order follow up is done by the concerned staff to whom the work is entrusted. Periodic follow up. with the vendor is made to ensure timely deliveries.

4.3.2 Regular close contact is maintained with the Vendors so that regular and uninterrupted supplies are maintained as per Purchase Order.

4.3.3 If any deviation in the technical specification is sought for by the vendors, clearance for suchsupplies will be obtained from Quality Assurance Department in writing and such deviations will be applicable for the particular supply/batch only.

4.3.4 Requirement of deviations in technical specifications required to overcome procurement/production/process problems and customer complaints, clearance of Engineering department is sought as per procedure for Engineering Department (QSP/ENG/16).

4.3.5 Requests for Purchase necessitated due ton changes in Quality, Delivery, Terms and conditions etc based on requirement are considered and put up to appropriate authority.

4.4.0 Order Amendment

Purchase Order amendments in respect of Terms and Conditions, Quantity, delivery, price and specifications as applicable are issued by the Materials Department when required. In case of the Amendment to be issued on account of price revision, quantity increase, etc., detailed proposals is put up by concerned officer as in the case of purchase proposal and approval of M.D./Appropriate Authority is obtained before release of such amendments. The Purchase Order Amendment is signed by Head of Materials Department. P.O. Amendments for changes in delivery schedule are issued by Purchase depts. Of respective units and such amendments are signed by HOD Purchase / Unit Head.

4.5.0Regularization of Orders

4.5.1 In case, supplies are received (components of products only) in excess of order quantity, the same is regularised based on the requirement /as put by purchase dept. and as per clause 4.2.5 above

4.5.2 To meet immediate production requirements verbal orders are issued and these are regularised by a formal Purchase Order immediately after receipt of materials by Purchase/Mtls Dept.

4.5.3 All necessary documents to clear consignment against Purchase Order are processed/obtained in liaison with Finance Dept. and forwarded to Stores Dept.by the staff of Purchase

4.5.4 Rework of components segregated by QA is arranged as per procedure for control of Non-Conforming Products (QSP/QAD/12). Accounting of such rework is done based on the new invoice submitted by the party and corresponding IGRR is prepared by Stores Dept.

4.6.0 Performance Rating

4.6.1 Performance rating of a mix of Quality rating and Delivery rating and is carried out annually. Weightage points have been indicated for each factor as below and subdivided as shown.

FACTOR	Sub parameter	Ratio of Weightage	TOTAL WEIGHTAGE
QUALITY	IGRR Acceptance	50 %	50 %
	Assy. Rejections	50 %	
DELIVERY	Timely supply as per schedule	50 %	50 %
	Cost of item	50 %	

4.6.2 Quality Rating will be calculated as follows.

				Fornon self certified vendors	ForSelfcertified Vendors
Quality	IGRR	50%	0 Rejection	Full mark – 100%	Fullmark– 100%
			For Rejections	Mark based on rejection ratio	Full mark 100%
	ARN	50%	0 Rejection	Full mark 100%	100%
			1% or less (against the qty. supplied upto the month)	60%	30%
			More than 1%	20%	10%

4.6.3 Delivery Rating will be calculated as follows.

$$\text{Supply} = \frac{\text{Total Quantity supplied during the month}}{\text{Scheduled qty. for the month}}$$

Delivery rating = Supply Ratio x Weightage (70%) + Cost Ratio x Weightage (30%)

4.6.4
Performance Rating = Quality Rating + Delivery Rating

Note: 1. Excess Quantity supplied will not be considered for calculation of delivery.
2. Date of receipt of materials in the Stores is taken as the date of supply.
3. In case of supplies from Vendors, who have through bank facility, their despatch date shall be taken as the date of supply.

4.6.5 Deletion of Vendors

In case the performance rating of the vendor is found unsatisfactory (less than 50%), Purchase Dept. advises the vendor to take necessary Corrective Action and is allowed three months time for improvement. Their performance is again reviewed after three months and if found unsatisfactory, a report is submitted to the next Management Review Meeting. MRM will decide on deletion/continuance of the Vendor, considering his performance in Athani, Kalamassery and Palakkad Units for Tiller and Engine components and for Reaper components in Mala Unit.

In case one or more items supplied by a vendor is continuously for 3 quarters coming under 50% either in quality rating or delivery rating, the above procedure is applied for deletion of the items from such vendors. However if Vendor's Performance Rating (Delivery/quality) is continuously between 50-70%, Depts. will try to improve the Vendors and if no improvement is seen this may also be referred to MRM.

4.6.6 Whenever amendments are issued to the procurement drawings, the revised copies of the drawings are forwarded to the concerned vendors with a request to return/destroy the obsolete issue of drawings. The revision levels of drawings issued to vendors are entered in the "Drawing Issue Register" and the revision status is shown in the purchase order amendment.

4.7.0 All items required for production are classified based on ABC analysis.

A – Category components constituting about 70% of total cost of components.

B – Category components constituting about 20% of total cost of components

C – Category components constituting about 10% of total cost of components

4.7.1 Maximum permitted inventory is controlled according to the guidelines given below. (Based on ABC analysis).

A Category components : Stock for one month production

B Category components : Stock for two months production

C Category components : Stock for three to six months production depending on value of material

4.7.2 If the inventory goes up beyond the permitted value, Purchase Department take appropriate actions to bring down the inventory.

4.7.3 In case it is warranted to hold higher inventory due to commercial/manufacturing reasons, approval from Divisional Head/Managing Director is taken while clearing purchase proposal.

4.7.4 Minimum stock level of all critical components, which affects production is fixed as per list approved by Divl. Head and maintained by HOD. Purchase Department takes appropriate actions in order to maintain this minimum stock level.

5.0 Capital Item Procurement

5.1 The requirements are first discussed in the Corporate Level Budget meetings.

5.2 Once the budget is approved, the procurement proposal is placed before the Committee for capital machinery purchase and replacement.

5.3 Administrative sanction is obtained from Managing Director based on the recommendation of the Committee.

5.4 Mtls Department arrange the procurement observing the procedure laid in the "Stores Purchase Manual" of Govt. of Kerala and Standing Orders of Govt. of Kerala on capital machinery purchases.

6.0 General Items Procurement

6.1 User Department to generate indent.

6.2 Emergency items up to Rs. 1000/- can be procured immediately on approval ofManager(Purchase) by cash purchase.

6.3 Emergency case more than Rs 1000/- can be procured on approval of MD

6.4 Other General items can be procured through Materials Dept. after observing Procedures ofStore Purchase Manual.

7.0Procedure For Procurment Of Components Through Tender

7.1FIRST STAGE –EOI

Expression of interest to be called for by advertisement in print media and through web site. Documents required for " expression of interest" for empanelment of vendors for supplying components shall be prepared and finalized through legal vetting. Advertisement in print media with sufficient coverage shall be released. Extension of last date for submission of EOI can be extended if required to improve participation. The new vendors are to be assessed by competent KAMCO personal and based on the recommendations, the vendors are to be enlisted. The enlisted vendors are to be classified for supplying components falling under various categories, based on their EOI submitted and assessment.

7.2 SECOND STAGE -Floating of Limited E-Tender

Limited E-Tenders are to be floated with the enlisted vendors. The enlisted vendors are to be informed for taking user Login id in the tender portalhttp://etenders.kerala.gov.in , by sending all of them a step by step instruction list in their registered email id. The registering process to be completed by contacting the vendors (over phone / E-mail etc.) for guiding them in taking the user login id from the Tender Portal, for starting the Limited E-tender process.

7.3 THIRD STAGE – Terms and conditions

The quantity to be considered for tendering to be fixed as three year requirement. The EMD is set as 1% of the annual approximate cost (Considering requirement for one year) calculated with prevailing rates. The cost of tender form to be given as 1% of the EMD fixed. The encrypted drawings of the components are to be sent to the selected and enlisted vendors from the EOI in their registered email id from materials@kamcoindia.com . Time given for submitting the tender can be extended in case of requirement /request from renderers. Time extension can be affected for a maximum of three times in each case. In addition to this corrigendum can be issued to rectify errors/omissions/modifications.

7.4 FOURTH STAGE – Opening and Evaluation

The Tender opening is to be evaluated by the Technical committee for evaluation of E-tender consisting of Sr. Manager (Materials), GM (operations), DGM (finance) and Manager (purchase). In case less participation from renderers (Participation from single tenderer only or no participation) re –tender or fresh tender after cancellation of original tender may be resorted. While processing re-tender or fresh tender, open tender through manual mode shall be resorted to improve participation and competition. Relaxation of terms and condition during the re-tender /fresh tender can be incorporated for improving participation.

7.5 FIFTH STAGE- Negotiation

Negotiation to be conducted with the L1 tenderer if his rate is on the higher side then the prevailing rates. If the rates are less than or equal to the prevailing rates, no negotiation will be needed. Negotiation shall also be conducted if there is suspected cartel formation. Technical committee for evaluation of E-Tender may evaluate the chances of cartel.

8.0 Suggestion For Finalisation Of Po (Through E – Tender) After Negotiation/Without Negotiation

During negotiation with the parties after the opening of e-tenders floated, the following scenario is observed.

1. Even after negotiation, the rate of the L1 Tenders is more than the existing price.
2. Rate of the L1 Tenderer is equal or less than the existing price.

8.1Proposed Action

8.1.1Scenario 1 as above, when the rate of L1 tenderer is higher than existing rate.

If the L1 tenderer is an existing vendor, then they may be requested to supply as per existing PO up to March 31st 2018 or completion of supply, whichever is earlier. If the vendor is not agreeing to it, the existing alternate vendor may be asked to supply (if the rates are less than the L1 supplier). If the existing rate of alternate vendor is equal or more than the L1 rate, then PO may be released to the L1 tenderer.

If the L1 tenderer is a new vendor, the existing vendors may allowed to supply till the L1 tenderer develops and completes the trial PO.

8.1.2Scenario 2 where rates of L1 is equal to or less than the existing rates.

If the L1 tenderer is an existing vendor supplying the same item, then the release new PO after completing the formalities. Existing PO for the alternate vendors may be short closed on start of supply by the vendor/vendors who got order through tender.

If the L1 tenderer is a new vendor (either a new vendor or existing vendor for whom that item is not ordered so far), we have to wait till sample gets accepted and trial order is completed. Till the vendor develops the item we shall continue with supply from the present vendors.

I. DOCUMENTS

Sl.No.	Document Description	Doc. No.
	PURCHASE	
1	List of ABC Category Items	PRL: 02
2	List of Process	PRL: 03
3	Action Plan for Objectives	PRL: 04
4	Risk Assessment	PRL: 05
	MATERIALS	
5	List of Process	MTL: 01
6	Action Plan for Objectives	MTL: 02
7	Risk Assessment	MTL: 03
8	Action Plan for achieving opportunities	MTL:04
9	List of Approved Vendors	MTL: 05
10	Delegation of Financial Power to Approve Purchase Proposal	MTW : 01

II. FORMATS

Sl.No.	Formats Description	Format No.
	PURCHASE	
1	Purchase Requisition	PRF:01
2	Master Record Index for Dept. Quality Manual amendments	PRF:09
3	Vendor Performance rating	PRF:10-C
4	Report to MRM	PRF-12
5	Request for PO Amendment	PRF: 13
	MATERIALS	
6	Enquiry Form	PRF:02
7	Purchase Plan	PRF:03
8	Purchase Plan	PRF:03-C
9	Purchase Proposal	PRF:04
10	Purchase Proposal	PRF:04-C
11	Purchase Order	PRF:05
12	Purchase Order Amendment	PRF:06
13	Purchase Order Amendment	PRF:06-C
14	Vendor Evaluation Report	PRF:07
15	Vendor Evaluation Report	PRF:07-C
16	Vendor Registration Form	PRF:08
17	Vendor Registration Form	PRF:08-C
18	Master Record Index for Dept. Quality Manual amendments	PRF:09
19	Report to MRM	MTF-12

PROCEDURE FOR PROCESS CONTROL ASSEMBLY (QSP/PRD/07)

1.0 PURPOSE

To identify the activities to be followed in assembly so that the assembled Power Tiller/Power Reaper/Engine meets the specifications.

2.0 SCOPE

Assembly of Power Tillers/Power Reaper/Engines with In-plant and bought out components.

3.0 RESPONSIBILITY

Head of Production Department is responsible to ensure that the procedure is followed by all individuals in the Department.

4.0 PROCEDURE – POWER TILLER AND ENGINE

4.1 The annual production is decided based on the budget. This production figure is broken down to monthly targets. Assembly of Power Tiller/Engine is done in separate assembly lines viz., Engine Line, Transmission Line and Tiller Line. The process plans (ENW:31 to ENW:42) of assembly are available with chief mechanics of each work centre. These work centres are designated as line assemblies and for certain line assemblies there are sub-assemblies too.

4.2 Parts required for assemblies, are drawn through Stock Issue Note (STF:03-C). Parts required for assembly at each work centre is located in bins at appropriate work stations with identification. Standard parts required by different work centres are kept in centralised places. Painted parts are obtained from painting section/outsourced.

4.3 There are 3 Assembly Lines as indicated below.

(i) Engine Line (4 Work Centres)
(ii) Transmission Line (3 Work Centres)
(iii) Tiller Line (5 Work Centres)

Details are shown in the Process Chart for Engine, Transmission & Tiller Assembly Lines (AYW:19)

4.4 Assembly work planning and scheduling is carried out by the concerned Line Chief Mechanic for which, format Assembly Job Report (AYF:07) is used. Work carried out in each work centre is recorded in Assembly Line Record for each Assembly Line, wherein Chassis/Engine No. of each Assy. is noted.

4.5 Assembly is carried out progressively as per process chart. In the first work centre at Engine and Transmission Line Assembly Route Card AYF:02 and AYF:03 is provided showing relevant Engine No./Chassis No.

4.6 After completion of each line assembly the concerned Mechanic verifies the assembly and signs the assembly tag with date.

4.7 At the end of each assembly line, Chief Mechanic of that line clears the assembly for next assembly line/processing.

4.8 Assembly rejections/damages are removed from respective Work Centres after verification by concerned line Supervisors and disposed off as per Procedure – QSP/QAD/12.

4.9 Assembled engines are tested as per ENW:33 (Work instruction for Engine Testing) and Engine Test Record (AYF:01)/AYF:01(DI) is completed.

4.10 Engines and Tillers are offered for inspection to QA Department along with Tiller/Engine completion report (AYF:12/AYF:13)

4.11 Tillers after inspection are handed back with Finished Tiller Inspection Report (QAF:02)

4.12 Engines after inspection are handed back with Finished Engine Inspection Report (QAF:13)

4.13 Any rework/rectification/resetting as detailed in the above (QAF:02 and QAF:13) are attended to. After rework the same is presented for re-inspection. This process is repeated till the product is fully accepted.

4.14 Accepted Tillers/Engines are transferred to Store along with transfer notes.

4.15 Daily Production is entered in the computer showing details of production in all work centres. The daily production report can be obtained from computer by the concerned departments.

5.0 Work Centre wise activities are as follows.

Sl.No.	Work Centre	Process Plan Ref.	Activity	Line Inspection Doc. Ref.	Remarks
1	E1	ENW:31*	Sub Assy. and Line Assy.	AYW:13*	a. Punch Engine No on Cylinder Frame
2	E2	ENW:32*	Sub Assy. and Line Assy.	AYW:14*	
3	ET	ENW:33*	Engine Assy.	AYW:15*	Accepted Engine go for painting
4	EF	ENW:34*	Line Assy.		On receipt of Painted engines
5	T1	ENW:35	Sub Assy. and Line Assy.	AYW:16	Punch Tiller No On MGC.
6	T2	ENW:36	Line Assy.	AYW:16	
7	T3	ENW:37	Sub Assy. and Line Assy.	AYW:16	a. Fill lubricating Oil SAE 90 Grade .0 b. Run Assy.using motorand belt
8	K1	ENW:38	Line Assy.	AYW:17	a. Punch Tiller No. on SupportingArm b. Sent for painting
9	K2	ENW:39	Assemble Parts	AYW:17	On receipt from Painting
10	K3	ENW:40	Assemble Parts	AYW:17	

11	K4	ENW:41	Assemble Parts	AYW:17	a. Run K4 assembly using motor and belt b. Set control Levers
12	Tiller Finishing	ENW:42	Mount Engine in K4 and fix peripheral parts	AYW:18	On satisfactory completionof assembly tiller started, movedand offered to QA for acceptance.

Note: In case of any abnormalities/deviation noticed in any stage, re-works/adjustments/corrections are attended by concerned line Mechanic/Chief Mechanic.

6.0 Compliance to minimum performance standards (MPS), issued by the Ministry of Agriculture:

6.1 With reference to the Annexure – II of the MPS for Power Tillers, the smoke tests are carried out and the records maintained by Assembly section.

6.2 Other tests specified by Government of India is conducted at Central Farm Machinery Testing Centre as per GOI requirements.

NOTE

* Process Plan and Line Inspection Doc: will be having suffix 'DI' for DI 120 Engine.

8.0 PROCEDURE – POWER REAPER

8.1 The annual production is decided based on the budget. This production figure is broken down to monthly targets. Assembly of Power Reaper is done in separate work centres viz., Engine I, Reaper I, Reaper II and Reaper III. The process is controlled as per the Process Flow Chart. The Process Flow Chart is displayed at each work centre. These work centres are designated as Reaper Line Assembly and for certain work centres there are sub assemblies.

8.2 Parts required for assemblies, are drawn through Stock Issue Note (STF:03-C). Parts required for assembly at each work centre is located in bins at appropriate work stations with identification. Painted parts are obtained from painting section.

8.3 There is only one Assembly Line called Reaper Line comprising of four work centres, as indicated below.

(i) Engine I
(ii) Reaper I
(iii) Reaper II
(iv) Reaper III

Details are shown in the Process Flow Chart for Power Reaper Assembly.

8.4 Assembly work planning and scheduling is carried out by the concerned Chief Mechanic/TA for which, format Assembly Job Report is used. Work carried out in each work centre is recorded in Assembly Line Record for each Assembly Line, wherein Chassis/Engine No. of each Assy. is noted.

8.5 Assembly is carried out progressively as per process flow chart. In the first work centre at Engine/ Reaper, Card is provided showing relevant Engine No.

8.6 After completion of reaper line assembly the concerned Mechanic verifies the assembly as per flow chart and signs the assembly tag with date.

8.7 Assembly rejections/damages are removed from respective Work Centres after verification by concerned mechanics and disposed off as per Procedure – QSP/QAD/12.

8.8 Reapers are offered for inspection to QA Department with request for inspection through computer.

8.9 Reapers after inspection are handed back with Finished Reaper Inspection Report (QAF:28)

8.10 Any rework/rectification/resetting as detailed in the above (QAF:28) are attended to. After rework the same is presented for re-inspection. This process is repeated till the product is fully accepted.

8.11 Accepted Reapers are transferred to Store along with transfer notes.

8.12 Daily Production is entered in the computer showing details of production in all work centres. The daily production report can be obtained from computer by the concerned departments.

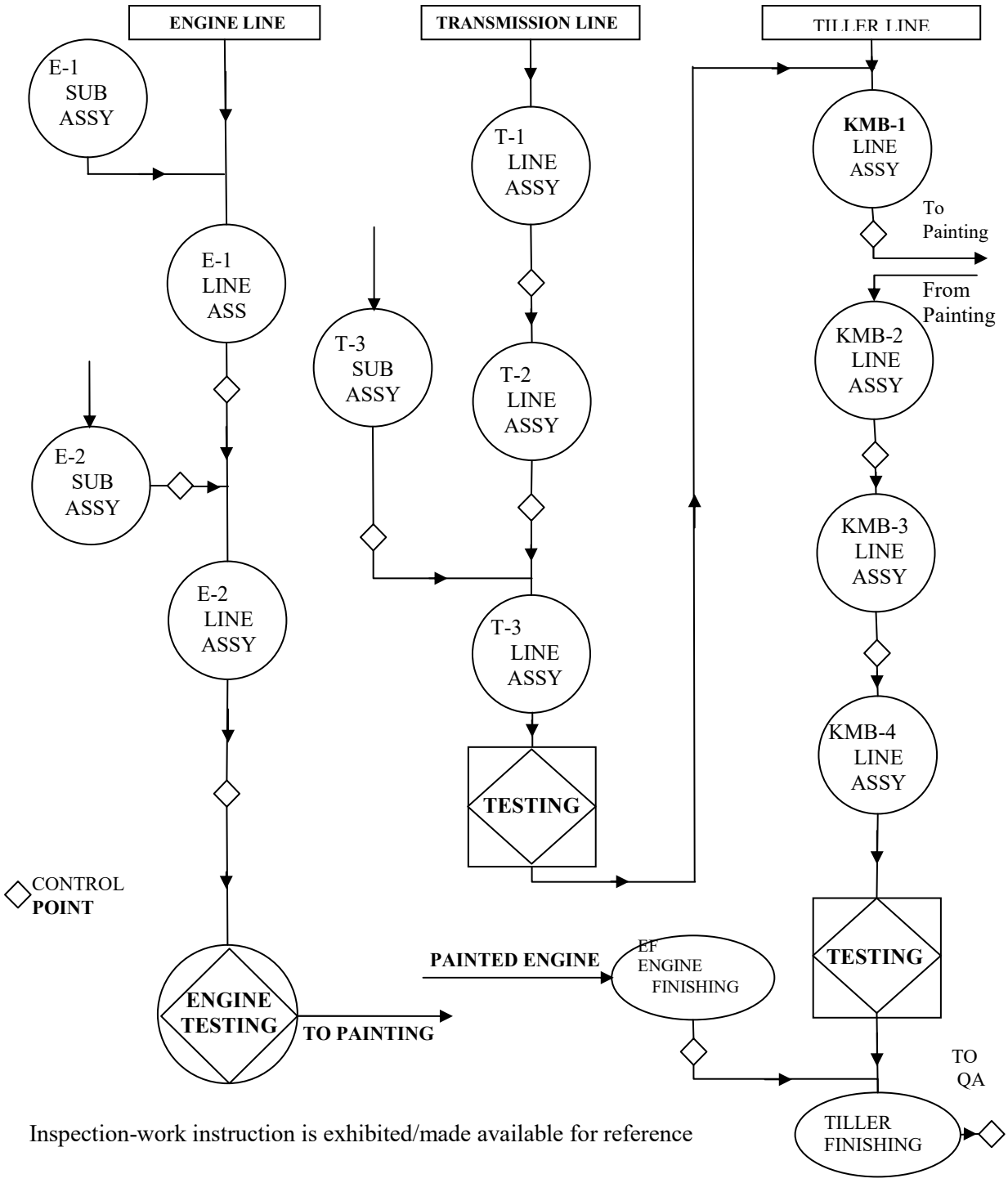
I. DOCUMENTS

Sl. No.	Document Description	Doc. No.
1	Check list for Line Inspection in Assembly EI Work Centre	AYW:13,AYW:13DI
2	Check list for line Inspection in Assy. E2 Work Centre	AYW:14,AYW:14DI
3	Check list for Line Inspection in Assy. Engine Testing	AYW:15,AYW:15DI
4	Check list for Line Inspection in Assy. T1, T2, T3 Work Centres	AYW:16
5	Check list for Line Inspection in Assy. K1, K2, K3 & K4 Work Centres	AYW:17
6	Check list for Line Inspection in Assy. Tiller Finishing Work Centre	AYW:18
7	Process Chart for Engine Transmission and Tiller	AYW:19
8	Pre treatment process plan	AYW:20
9	Painting System	AYW:21
10	Work Instruction for Painting System in Malayalam	AYW:22
11	Work Instruction for Chemical testing in Malayalam in Phosphating plant	AYW:23
12	Operation process chart of Dynamo Assembly(K.U)	AYW:24
13	Effluent treatment system	AYW:25
14	Effluent treatment plant – Work instructions	AYW:26
15	Process Flow Chart for Power Reaper	AYW:27
16	List Of Process	AYL: 01
17	Action Plan for Objectives	AYL: 02
18	RISK Assessment	AYL: 03
19	Action Plan for achieving opportunities	AYL: 04

II. FORMATS

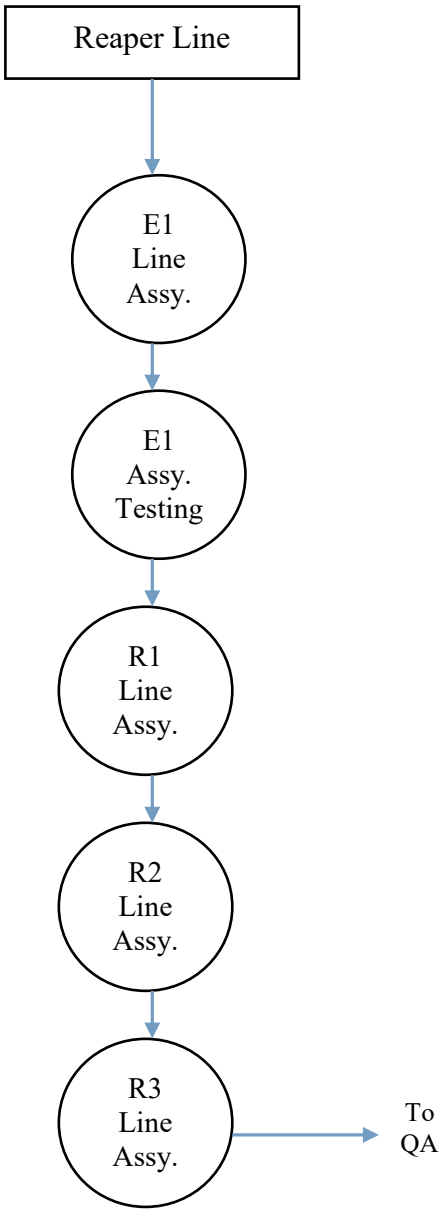
Sl.No.	Format Description	Format No.
1	Engine Test Record	AYF:01
2	Engine Assembly Route Card	AYF:02
3	KMB Assembly Route Card	AYF:03
4	Material Rejection Note	AYF:04-C
5	Daily Production Report	AYF:06-C
6	Assembly Job Report	AYF:07
7	Engine Transfer Note (ETN)	AYF:08-C
8	Tiller Transfer Note (TTN)	AYF:09-C
9	Painting Job Report	AYF:10
10	Items for painting	AYF:11
11	Tiller Completion Report	AYF:12
12	Engine Completion Report	AYF:13
13	Master Record Index for Department Quality Manual Amendments	AYF:14
14	Report to MRM	AYF:15
15	Reaper Card	AYF:16
16	Reaper Transfer Note	AYF:
17	Reaper Assembly Job Report	AYF:

PROCESS CHART FOR ENGINE TRANSMISSION AND TILLER LINES



Inspection-work instruction is exhibited/made available for reference

PROCESS CHART FOR REAPER



PROCEDURE FOR PROCESS CONTROL: PRE-TREATMENT AND PAINTING (QSP/PRD/08)

1.0 PURPOSE

This document details the procedure to paint Power Tiller, Power Reaper, Diesel Engines, components and assemblies after pre-treatment as per specified process.

2.0 SCOPE

Scope covers Power Tiller/Engine/Reaper, components and sub-assemblies required by Assembly Shop and components required by Marketing Department for sale as spares.

3.0 RESPONSIBILITY

Department Head of Assembly is responsible to ensure that the procedures are followed by all in the Dept.

4.0 PROCEDURE

4.1 Pre-treatment:

Components which require pre-treatment before painting are drawn from Stores by Assembly through Store Issue-cum-Delivery Note and are stacked at specified areas in the pre-treatment Shop/Assembly.

4.1.1 Based on requirement of Assembly Shop, components are taken and pre-treatment carried out.

4.1.2 Concentration of pre-treatment chemicals is checked once in a week/whenever required and losses if any is compensated.

4.1.3 Pre-treatment Process Plan is available in the Department Quality Manual

4.2 Painting

Pre-treated components and cleaned Power Tiller Engine/KMB Assemblies are applied with Polyurethene paint with approved colour in Painting Booths. Painting process adopted is PU painting system.

4.2.1 Spray painting is done under controlled pressure as specified as in DQM.

4.2.2 The settings shall be strictly adhered to, to minimize wastage of paint, consumption of power, etc.

4.2.3 Workmanship is controlled by application viscosity of paint, monitoring the dry film thickness.

4.2.4 Painting Process Plan is available in the Department Quality Manual of Assembly Shop.

4.3 Effluent Treatment Plant (ETP) Operations:

4.3.1 ETP is operated to treat the effluent as per the norms of Kerala State Pollution Control Board (KPCB) whoever available in units.

REAPER PARTS FOR PHOSPHATING AND PAINTING

Sl.No.	ITEM	COLOUR	Sl.No	ITEM	COLOUR
1	Hook for Speed Change	Silver Ash	23	Guide Divider RH	Silver Ash
2	Arm for CD	Silver Ash	24	Lever Sp. Ch.	Silver Ash
3	Carrying Frame	Silver Ash	25	Plate Revolving (4)	Silver Ash
4	Rear Frame	Silver Ash	26	Guide Plate U	Red
5	Rail for Carrying Chain U	Silver Ash	27	Guide Plate L	Red
6	Rail for Carrying Chain L	Silver Ash	28	Rod Guide U (3)	Silver Ash
7	Rear Rail U	Silver Ash	29	Rod Guide L (3)	Silver Ash
8	Rear Rail L	Silver Ash	30	Rod Guide RH	Silver Ash
9	Lower Plate	Red	31	Wheel Disc A (2)	Silver Ash
10	Upper Plate	Red	32	Wheel Disc B (2)	Silver Ash
11	Handle 1 (2)	Silver Ash	33	Wheel Hub (2)	Silver Ash
12	Handle 2 LH	Silver Ash	34	Cover for frame	Red
13	Handle 2 RH	Silver Ash	35	Seat for TS	Silver Ash
14	Handle Stay	Silver Ash	36	Peep Hole Cover	Silver Ash
15	Upper Deck	Red	37	Bearing Case U	Silver Ash
16	Lower Deck	Red	38	Bearing Case L (2)	Silver Ash
17	Middle Deck	Red	39	Chain case	Silver Ash
18	Marker	Red	40	Wheel Support	Silver Ash
19	Guide Divider LH	Silver Ash	41	Extension Axle	Silver Ash
20	Support for Deck	Red			
21	Bonnet (4)	Red			
22	Bonnet LH	Red			

LIST OF PHOSPHATING ITEMS TILLER & ENGINE

1. Side Plate-L
2. Side Plate-R
3. Rear Cover for T.P.
4. Front Cover for T.P.
5. Mudguard Plate
6. Rear Wheel Bracket
7. Front Frame
8. Wheel Cover-L
9. Wheel Cover-R
10. Fitting Plate Rear Apron
11. BLS Plate-L
12. BLS Plate-R
13. Main Handle
14. Upper Cover T.P.
15. Aux. Side Plate-L
16. Aux. Side Plate-R
17. Guide Plate A.S.C.
18. Guide Plate M.S.C.
19. Handle Stay
20. Fan Pulley Cover
21. Washer 'B' Setting
22. Fitting Bar A for W.C.L.
23. Fitting Bar for W.C.R.
24. Fitting Bar B for W.C.
25. Cover Head Light
26. Mask Light Unit
27. Radiator Cover
28. Main Handle Cover
29. Wheel Rim
30. Crank Case Upper Cover
31. Fuel Tank
32. Engine Pulley
33. Front Bracket for Belt Cover
34. Rear Bracket for Belt Cover

LIST OF ITEMS (TILLER & ENGINE) WITH COLOUR

I. SILVER ASH COLOUR

1. Engine
2. Main Handle
3. Main Handle Cover
4. Wheel Rim
5. Upper Cover
6. Aux. Side Plate 'L'
7. Aux. Side Plate 'R'
8. Engine Pulley
9. Mask Light Unit
10. Guide Plate MSC
11. Guide Plate ASC Rod
12. Washer 'B'
13. Handle Stay
14. Fan tension Pulley
15. Flywheel Cover

II. BLUE COLOUR (ER 90) / STEEL GREY COLOUR (D I)

1. KMB
2. Front Frame
3. Side Plate 'L'
4. Side Plate 'R'
5. Rear Wheel Bracket
6. Rear Cover T.P.
7. Front Cover T.P.
8. Mudguard Plate
9. Engine Stand
10. Wheel Cover 'L'
11. Wheel Cover 'R'
12. Tension Pulley TR
13. Bearing MCI-Assy.
14. Fitting Plate Rear Apron
15. Rear Wheel Handle
16. Rear Wheel Clamping Handle
17. Fitting Metal 'A'
18. Fitting Metal 'B'

III. RED COLOUR

1. Fuel Tank
2. Radiator Cover
3. Fan Pulley Cover
4. Head Light Cover
5. Clamp Head Light
6. Indicator Mark
7. Belt Cover

IV. ALUMINIUM COLOUR

1. Silencer Flange
2. Lock nut

ITEMS PAINT DIPPED

BLUE COLOUR (ER 90) / STEEL GREY COLOUR (D I)

1. Aux. Wheel Hub
2. Wheel Distance Piece
3. Front Protector
4. Front Stand
5. Fitting Bar A for W.C.L.
6. Fitting Bar A for W.C.R.
7. Fitting Bar B for W.C.
8. Supporter A
9. Supporter B
10. Front Bracket for Belt Cover
11. Rear Bracket for Belt Cover
12. Tail Wheel Inner Pipe

PROCEDURE FOR MAINTENANCE (QSP/PRD/09)

1.0 PURPOSE

1.1 This document details the procedure to be followed in attending break-down maintenance of machine tools and equipment and to plan and carry out preventive maintenance of machine tools and equipment to ensure continued process capability of machines/equipment.

2.0 SCOPE

All machine tools and equipment used in various departments.

3.0 RESPONSIBILITY

Head of the Department of Maintenance is responsible to ensure that the procedure is followed.

4.0 PROCEDURE

4.1 Preventive Maintenance: Schedule (Format No. MNF:01) is prepared by HOD and given to concerned Department and Electrical/Mechanical Maintenance Sections. The machines are taken up for preventive maintenance by the Electricians/Mechanics under the supervision of Charge-hands as per preventive maintenance instruction.

4.1.1 List of machinery and equipment that is available in the company and requiring maintenance is available with Head of Maintenance. (MNL:01-List of machinery & equipment).

4.1.2 All machines and equipment are attended at least once in every three months, and defects noticed if any are rectified. Final checks are carried out by the HOD/Section Head.

4.1.3 After carrying out the Preventive Maintenance work, the Preventive Maintenance Check list (Form No.MNF:02/MNF:03) are filled up by the Electrician/Mechanic respectively and countersigned by the Charge-hand/Chief Mechanic. These reports are handed over to the HOD/Section Head. These are reviewed by Department Head every month.

4.1.4 A monthly report is given to Divisional Head/Unit Head detailing the works carried out.

4.1.5 Maintenance schedules are reviewed every six months by Divisional Head/Unit Head

4.2 Break-down Maintenance:

Maintenance/Repair Order (Form No.MNF:04) is initiated by the concerned department indicating the location and nature of fault and signed by the reporting officer. Maintenance Order is received by the Section Head/HOD of Maintenance and handed over to the concerned Charge-hand (Electrical/Mechanical) for execution. The work is got done through Electrician/Mechanics. After completion of work the operation is demonstrated and machine handed over to the concerned department on acknowledgement. Repair completion report is given to the department concerned. Preventive maintenance got done through outside agency is recorded.

4.2.1 Maintenance order on completion of work is given to HOD (Maint.) after making necessary entries and obtaining the signature of the concerned department staff endorsing the completion of the work..

4.2.2 The critical reasons for breakdown are evaluated for their causes and necessary action initiated to correct and prevent such occurrences.

4.3 Sub-Station:

The Electrical Sub-station is maintained by Electrician along with Charge-hand in the Shift. They also attend to the operation of compressor and other maintenance works. The records for maintenance are registered in the concerned registers.

4.4 The Telephone System:

The (EPABX) is maintained through annual service contract.

4.5 Water Supply System:

One Plumber attached to this department attends to the day-to-day operation of water supply system and also attends to maintenance works.

4.6 Welding Operations:

Any welding work required for production or rectification is carried out through external contract workers

4.7 General Maintenance:

All maintenance works of yard lighting, general lighting system and air conditioners are attended by the Maintenance Dept.

4.8 Spare Parts Management:

Spares and consumables required are procured as and when required. Review of spare parts and consumables is carried out once in a year.

4.9 Shift arrangements are done by HOD Maintenance.

4.10 Inspection:

The inspection of all items purchased for Maintenance Dept. as well as Electrical items like Dynamos, Light Units, Switches, Cables purchased for Assembly of Tillers/Engines are inspected by the Charge-hand and endorsement made in the inspection reports/indents.

DOCUMENTS

Sl.No.	Document Description	Doc. No.
1	Master List of Machinery	MNL : 01
2	Work Instructions for Maintenance	MNW: 03
3	List of Process	MNL : 02
4	Action Plan for Objectives	MNL : 03
5	Risk Assessment	MNL : 04
6	Action Plan for achieving Opportunities	MNL : 05

Sl.No.	Format Description	Format No.
1	Preventive Maintenance Schedule	MNF:01
2	Preventive Maintenance Check List (Electrical)	MNF:02
3	Preventive Maintenance Check List (Mechanical)	MNF:03
4	Maintenance/Repair Order	MNF:04
5	Master Record Index for Dept. Quality Manual Amendments	MNF:05
6	History Cards of Machines/Equipment	MNF:06(C)
7	Report to MRM	MNF:07

PROCEDURE FOR PROCESS CONTROL: MACHINE SHOP (QSP/PRD/10)

1.0 PURPOSE

This document details are procedures/methods adopted to manufacture components as per Work Order/Process Sheet to ensure that the requirements of the drawing are completely met.

2.0 SCOPE

This procedure covers all components manufactured in Machine Shop. The activities covered include:

(i) Shop floor planning
(ii) Drawal of materials/components from Stores
(iii) Handling of materials/components in the shop floor
(iv) Accounting of raw materials, work in progress, and finished products/components.

3.0 RESPONSIBILITY

Department Head of Production responsible for all the activities in the department. Officers and charge hands assist him in fulfilling the responsibilities.

4.0 PROCEDURE

4.01 Monthly Production Schedule (MPS) is prepared from production plan in the Annual Budget for the year. MPS is the basic document in Machine Shop for production planning. Batch quantity and actual Monthly Production Figure are based on Raw Material availability and requirement from assembly line. For initiating process of a component, as per List of In-plant Processed components, material is issued against issue requisition raised on Stores Dept. by Technical Assistant/designated persons and approved by Section Head and above. Work Order number is allotted to production batch and reference of stock issue note is recorded in the Work Order register.

4.02 Based on Process Sheet for the component, Route Card and First Piece Inspection Card are raised by Technical Assistant/designated persons and approved by Section Head and above and the same are kept in Inspection area of In-plant Q.A. Dept.

4.03 To achieve the required production, planning is carried out based on Assy. requirement. Machine load chart is prepared at the end of each shift. Machines are loaded in the subsequent shift as per Machine load chart. Machine loading is altered if found necessary by the Shift-in-charge. Components are taken up for Process based on process sheet and Drawings issued from Engineering Dept. Process sheet indicates the details of operations as well as Machine, Tools, gauges, instruments, jigs and fixtures required.

4.04 Job is moved to the first work centre with a Process Status Tag prepared and attached to the platform/bin by Technical Assistant/designated persons specifying the Work Order details for identification. The required Tools, Gauges etc. are drawn from Tool Crib by the Machine Operator and the required Jigs and Fixtures are loaded for the operation specified in the Process sheet. Tool damages are recorded through Damage Slip. These damages are analysed monthly by HOD to initiate corrective action wherever necessary.

4.05 After the Set Up is completed, Operator/Charge Hand submits the First Piece to Q.A. along with First piece inspection card for approval of the Set Up. If the First Piece is OK, the authorised personnel in Q.A. makes necessary entries in the First Piece Inspection card allowing the operation to proceed. Otherwise necessary corrections are made in the Set Up until Set Up approval is obtained from Q.A. before the operation is allowed to proceed.

4.06 When operation is completed in one Work Centre, Process Status Tag is updated by Charge Hand and the job is moved to the next Work Centre by Technical Assistant designated persons further operations as per the Process Sheet. Charge Hand makes sure that operation are fully completed as per process sheet and submitted to QA so as to avoid repeated handling and rectification.

4.07 Wherever a Stage Inspection is specified in the Process Sheet, the job is presented to Q.A. after making relevant entry in the Route card by Technical Assistant/designated persons. After Inspection, accepted pieces are moved to the next Work Centre as per Process sheet. The Pieces requiring rework are moved to a Work Centre/Fettling/Welding area as required for arranging rework. After rework the component is moved to the Work Centre for further operation.

4.08 Outright rejections, are disposed off as per procedure QSP/QAD/12. Based on MRN'S raised by QA Dept., the process defect and Material Defect pieces are defaced and forwarded to Stores Dept. for removal to scrap yard or for onward dispatch to vendor as the case may be.

4.09 When all operations as per Process Sheet are completed, the job is submitted to Q.A. for final inspection. Accepted pieces are sent to Stores through Finished goods transfer note requisition prepared by concerned Technical Assistant and approved by shift officer and above. The rejections are disposed off in the same manner as for Stage Inspection.

4.10 During inspection certain items require rectification for acceptance for further operation or trial acceptance to use in Assembly. It is necessary to ascertain whether such rectification is carried out to the requirement so that product quality is assured. After carrying out the necessary rework, they are submitted for re-inspection along with the Rectification/Re-inspection Card. Accepted pieces are cleared for further operation/sent to Stores through Material Return Requisition.

4.11 In case of non-conformity observed during self verification by the operator while machining, such components are offered to Q.A. by the concerned Operator/Charge Hand in First Piece Inspection Card for decision.

4.12 For certain heat treatment operations for which facilities are not available in Machine Shop, the same are off-loaded to vendors as per List of Approved Vendors. Work Orders are released on such vendors as per Purchase Procedure QSP/PUR/06, through purchase/material dept

4.13 Materials, as required in Process sheet, are dispatched to Vendors against Work Order through store department The material returned by the vendors after processing are accounted through Inspection and Goods Received Reports (IGRR) raised by Store Dept. The materials received are verified for quantity discrepancies and the respective RCV along with material is submitted to QA for inspection & approval. After finalizing the RIR/IGRR by QA, accepted material is Drawn from Store and taken into stock in Machine Shop on authorization by / Shift Officer HOD and moved to the particular work centre as per the Process Sheet.

4.14 Accounting of Material. Under process in Machine Shop, is carried out in Process Control Register. The same is continuously updated based on Stock Issue Note, Material Return Note F T N request and Material Rejection Note. When a Work Order is completed, the same is closed by stamping "CLOSED" seal on Work Order Register, Process Control Register and Route Card.

4.15 Calibration of measuring instruments and gauge is carried out by Q.A. List of calibrated instruments and gauges used in Machine Shop is maintained in Machine Shop. Master Calibration Records are maintained by QA at AU/concerned Dept. in other Units and calibration cards are maintained in Machine Shop.

4.16 Weekly reports giving details of stock of raw materials and work-in-progress are forwarded to M.D., Divisional Head/Unit Head and HOD Purchase.

4.17 Monthly Production Report giving details of Finished Components Production for the month and Utilisation of Manpower are forwarded to M.D. and Divisional Head/Unit Head.

4.18 Machine wise details of production are recorded in Machine Log by the Shift-in-charge in each shift.

4.19 Based on MRN'S corrective/preventive actions are initiated as and when necessary.

4.20 Details of Quality Records and formats are maintained in the Department Quality Manual; available in the department.

I. DOCUMENTS

Sl.No.	Document Description	Doc. No.
1	List of inplant Processed Components	MSL:01
2	Approved list of Vendors for carrying out process for which In-house facilities are not available	MSL:02
3	List of Process	MSL : 03
4	Action Plan for Objectives	MSL : 04
5	RISK Assessment	MSL : 05

II. FORMATS

Sl.No.	Format Description	Format No.
1	First Piece Inspection Card	MSF:01
2	Route Card	MSF:02
3	Machine Log	MSF:03
4	Process Status Tag	MSF:04
5	Master Record Index for Department Quality Manual Amendments	MSF:05
6	Machine Load Chart	MSF:08
7	Damage Slip	MSF:10
8	Report to MRM	MSF:11
9	Rectification Re-Inspection Card	MSF:12

PROCEDURE FOR IDENTIFICATION AND TRACEABILITY (QSP/QAD/11)

1.0 PURPOSE

To ensure that Identification and Traceability of products are established at various stages of process.

2.0 SCOPE

All products, both bought out and processed inside the plant.

3.0 RESPONSIBILITY

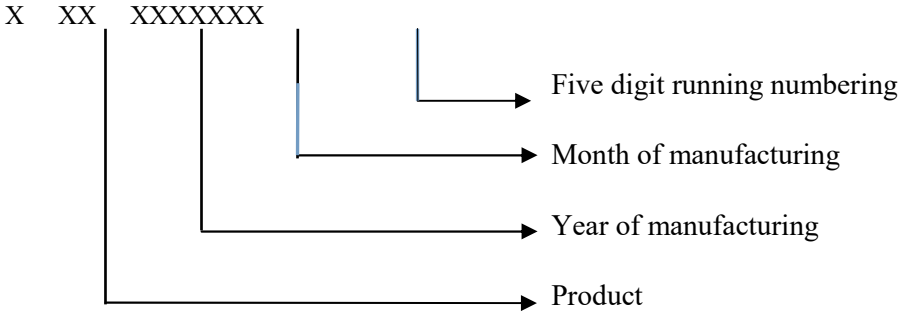
Heads of concerned Divisions/Departments are responsible to ensure that the system is followed by all staff in their division/departments.

4.0 PROCEDURE FOR IDENTIFICATION

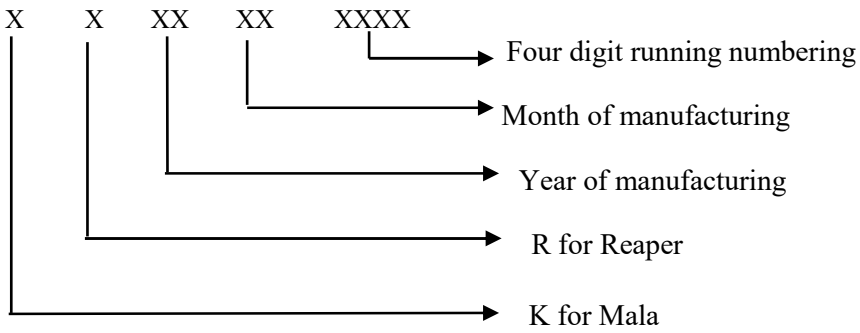
4.1 Attached matrix under Annexure A shows how Identification is established and maintained.

4.2 Final product is identified by engine number stamped on engine and chassis number stamped on main gear case/supporting arm for Power Tiller and rear frame for Power Reaper. Both these numbers are also stamped on the name plate fixed on Main Handle Cover for Tiller and Carrying Deck (U) for Reaper.

4.2.1 Numbering System for Diesel Engine and Power Tiller are as follows.



Numbering System for Reapers are as follows



4.3 In Machine Shop, Cylinder Frames, Main Gear Cases, Side Covers and Axle Gear Cases are identifiable based on the vendor identification mark.

4.4 In Stores, components are identifiable based on the lay-out and location list available in Department Quality Manual.

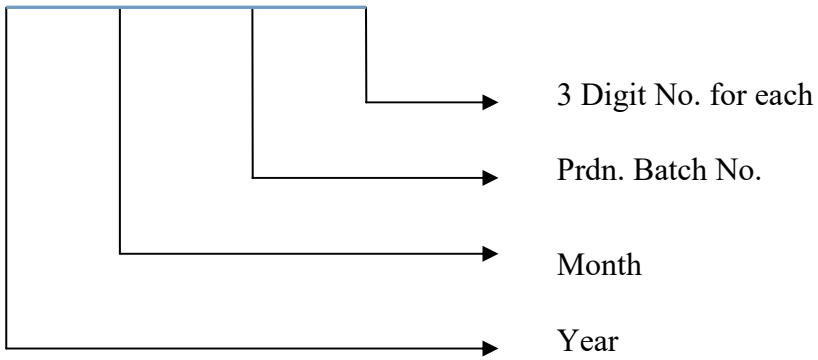
4.5 List of Components with their identification mark is given in Annexure B.

4.6 Traceability of components/finished product.
Major components are traceable from the manufacturing Batch No. of the concerned vendors. Moreover these are traceable from the Material Control Register available with the vendor.

4.6.1 As a guideline KAMCO advised all the vendors to provide the traceability mark as per the details given below.

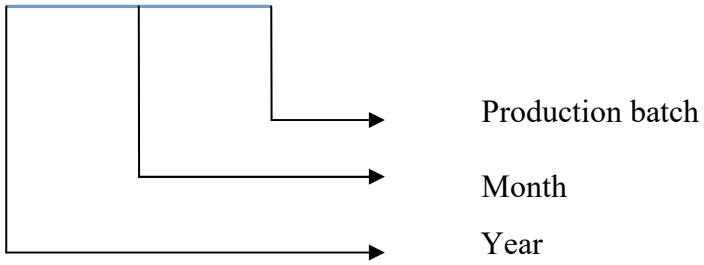
For processed items

x xx xxx



For Casting and Forging.

x xx



Vendors who are having their own system procedure follow their Traceability No. which provides required details for traceability.

4.5.2 As a reference we have given below certain traceability mark provided by vendors on supplies

SL. NO.	CODE NO.	NAME OF COMPONENTS	VENDORS NAME	TRACEABILITY MARK
1	15 11 001	MAIN GEAR CASE	M/S. ENKEY	17 K 3M
2	1502001	CYLINDER FRAME	M/S. AUTOKAST	17 L 04
3	11 12 001	AUXILLARY GEAR CASE	M/S R.K. ENTERPRISES	M2
4	16 01 010	ROCKER CASE	ASHWIN ENGG	3AM
5	1111052	AXLE GEAR CASE (L)	M/S AUTOWINGS	SF2
6	1004001	SIDE COVER	M/S. SPACE PRO	EMBLEM

IDENTIFICATION METHOD
ANNEXURE: A (DOC:QSP/QAD/11)

DEPARTMENT	ACCEPTED	RE-WORKABLE	REJECTIONS
STORE	GREEN TAG (QAF:07)	YELLOW TAG (QAF:09)	RED TAG (QAF:08)
QUALITY ASSURANCE	GREEN TAG (QAF:07)	YELLOW TAG (QAF:09)	RED TAG (QAF:08)
MACHINE SHOP	GREEN TAG (QAF:07)	Carry Rework markings sych as W/F/M/US in yellow paint**	Carry PD/MD markings in red paint***
ASSEMBLY	Components Name Plates	*Line Rejections/damages are collected and kept in separate bins	

Note: *1. These components are later segregated and disposed off as per Procedure for Control of Non-Conforming Products (QSP/QAD/12).

2. Components presented to Q.A. by inward stores are tagged with white coloured Material Presentation Tag (STF:09)

3. "Closed Air Cleaner Flange and Green Paint mark on water drain plug" are the identification mark of tested OK Engines.

** W – Weld F – Fettling M – Machining US – Under Size

*** PD – Process Defect MD – Material Defect

IDENTIFICATION MARK PROVIDED BY VENDORS ON COMPONENTS

ANNEXURE - B

SL. NO.	CODE NO.	NAME OF COMPONENTS	VENDORS NAME AND TRACEABILITY MARK
1.	**FORGINGS**		
1.1	10 03 001	Crank Shaft	BOMBAY FORGINGS(BF) / AAK8K
1.2	10 03 027	Connecting Rod	BOMBAY FORGINGS(BF) / AAK99K
1.3	10 04 010	Cam Shaft	KUMAR FORGE & VALVES/AM32
2.	**CASTINGS**		
2.1	10 02 001	Cylinder Frame	AUTOKAST LTD(AKL) / 17L04
2.2	10 11 001	Main Gear Case	ENKEY PRECISION (NK)
2.3	16 11 005	MGC Upper Cover	SPACE PRO (SP) / M2
2.4	16 01 010	Rocker Case Cover	ASHWIN ENGINEERING (AE) / AC5
2.5	11 17 035	Wheel Hub	AUTOLINES (AUL) / M1
2.6	11 19 020	Supporting Arm	ASHWIN ENGINEERING (AE) / AC2

3.	**GEAR MACHINNED**		***SUPER CRAFT***	***CVM PRECISION PRODUCTS***	
3.1	16 03 005	Crank Gear	S	c	
			FAIRFIELD ATLAS	***SREE GANESH GEARS***	
3.2	16 13 062	42 T Gear	FAL	SK	
3.3	16 13 069	53 T Gear	FAL	SK	
3.4	16 13 007	33 T Gear	FAL	SK	
4.	**SHAFTS MACHINED**		***JER RING***	***CVM P.P***	***ALMA AGRO***
4.1	11 13 010	First Shaft	J	c	AA
			JER RING	***CVM P.P***	***ALMA AGRO***
4.2	11 13 041	2ND Shaft ASC	J	c	AA
4.3	11 13 070	BSC Shaft	J	c	
			JER RING	***ALLMA AGRO***	
4.4	11 13 065	Axle Shaft	J	AA	
5	**REAPER ITEMS**				
5.1	2119007	Reaper Engine	HONDA SIEL POWER PRODUCTS **(HONDA GLX 150)** GCAED00250		
5.2	2101000	Reaper MGB	VISESH TRANSMISSIONS**(VTM)** 1757/01/18		
5.3	21 14 000	Cutter Assy.	DIAMOND AGRO ENGG PVT LTD **(DAEPL)** 141003		
5.4	2106013	Carrying Frame	ST JOSEPH INDUSTRIES **(SJI)**		

5.0 PROCEDURE FOR IDENTIFICATION OF INSPECTION/TEST STATUS:

5.1.0 Raw Materials

5.1.1 Raw materials like castings and forgings before inspection are stored in designated areas.

5.1.2 Raw materials for manufacture in the form of castings and forgings are stored in the designated area by Stores section after inspection and acceptance by QA.

5.1.3 Rejected materials are tagged/marked with red colour in visible area and will be stored in a designated area.

5.2.0 In-process Materials

5.2.1 First Piece Inspection Card (MSF:03)/Route Card (MSF:04)/Process status tag used for machining of a component will indicate the inspection and test status in Machine Shop.

5.2.2 Finished components accepted are identified with green tags. Reworkable components are marked with rectification symbols (W/F/M/US) in Yellow Paint. Rejected components are marked as PD (Process Defect) and MD (Material Defect) in red paint.

5.2.3 In-process materials are identified with Process status tag.

5.3.0 Bought Out Components

5.3.1 Components under inspection are identifiable as per the matrix given below.

Presented for inspection	Accepted	Re-workable	Rejection
White Tag (STF:09)	Green Tag (QAF:07)	Yellow Tag (QAF:09)	Red Tag (QAF:08)

5.3.2 Items to be reworked are identified with yellow tag (QAF:09). After rework, if the items are acceptable, yellow colour/tag are removed by inspector concerned. If the items are not acceptable even after rework, yellow marks are replaced by red mark/tag to indicate rejection.

5.4.0 Assembly

5.4.1 Correctness of assembly works done at each work centre is certified by concerned Mechanic on the assembly tag.

5.4.2 Status of Engine performance test is identified as follows. Okayed Engine by Green Paint mark on drain plug Rejection/Rework-recorded in Engine Assy. Tag. Status of Tiller/Engine in assembly/test floor is identifiable at all stages by route cards. Accepted Power Tiller/Engine is affixed with "QC passed/Inspected" sticker by Inspector/Chief Mechanic of Quality Assurance on the Radiator Cover.

5.4.3 Tillers/ Reapers to be reworked are identified with yellow tag with a copy of finished tiller/ reaper inspection report wherein the defects are noted. After rework, it is presented for re-inspection.

5.4.4 For Reaper Assembly

Status of Engine is Quality tested by Engine manufacturer and sticker affixed. Status of Reaper in Assembly/ Test Floor is identifiable at all stages by reaper card.

PROCEDURE FOR CONTROL OF NON-CONFORMING PRODUCTS (QSP/QAD/12)

1.0 PURPOSE

To ensure that,

1.1 Defects, deviations and reworks observed in components are identified, documented and corrective actions taken.

1.2 Non-conforming components are not inadvertently used in assembly of final product..

1.3 Such defects/deviations are evaluated and methods for avoiding recurrence of such defects are developed.

2.0 SCOPE

The system covers all in plant manufactured and bought out items/assemblies used in final product.

3.0 RESPONSIBILITY

The Department/Divisional Headsof all departments are responsible for maintenance of the system.

4.0 PROCEDURE

4.1 Inplant manufactured items

4.1.1 Non rectifiable defects observed during process are noted and Material Rejection Note (MRN) is prepared by Q.A.

4.1.2 Rejected in plant items either due to material defect or process defects are identified by red paint.

4.1.3 Rejections due to process defects are forwarded to Stores Dept. for disposal as scrap.

4.1.4 Particulars of material defects are intimated to the concerned vendor to take appropriate corrective actions.

4.1.5 Rejections due to material defects are returned to vendors periodically.

4.2.0 Bought out components

4.2.1 Reasons of rejection found in bought out components are recorded in IGRR (STF:01) on inspection.

4.2.2 Repeated instances and abnormal rejections are intimated to vendor by Q.A. for taking appropriate corrective actions.

4.2.3 Department Head of (Purchase) arranges rework of components/mating components as decided by Q.A/MRB. On completion of rework, Q.A re-inspects and takes a decision on acceptance.

4.2.4 To have uniform acceptance criteria and transparency, Material Review Board (MRB) is operated at Head Office, Athani for Power Tiller and Engine. All the deviations noted in components/implements/accessories, which require deviational acceptance in special situations are referred to MRB.

4.2.5 MRB is constituted with Dept. Head of (QA) as Conveners and, GM (Mktg), M (R&D) and M(Prdn) as members for Power Tiller/Engine/Power Reaper

4.2.6 Requests to MRB are prepared by Dept. Head (Pur) and forwarded through Divl. Head to the Convener of the Committee. In the case of Units, the requests are forwarded with Unit Heads' recommendation for consideration.

4.2.7 Decision of MRB will be minuted and communicated to the concerned Depts. and to the Units for further necessary action. Decisions of MRB irrespective of the units are communicated to all the Units for information. Convener of the MRB consolidates the decisions during the year and communicates to MD and discussed in the Management Review Meeting.

4.2.8 The above procedure 4.2.1 to 4.2.5 is applicable to the Implements/Accessories of Power Tiller.

4.2.9 MRB is constituted with Unit Head as Conveners and HOD (Q.A) & HOD (Assy.) as members for Power Reaper.

4.3.0 Components found non-conforming in assy.

4.3.1 Components having deviations observed during different stages of assembly are collected by Assembly and kept in the designated Assy. Rejection/Damaged Component bins available in the Assembly Shop floor.

4.3.2 Material Rejection Request is prepared and forwarded to QA for further inspection and segregation.

4.3.3 Such components are jointly inspected by Assembly and QA staff for segregating them as Assembly damages/rejections twice in a month for Power Tiller & Engine and once in a month for Power Reaper.

4.3.4 Material Rejection Note (MRN) is prepared by QA and distributed to concerned Departments. Q.A. intimates particulars of rejections to concerned vendors based on MRN.

4.3.5 Assembly rejections/damages are sent to Stores along with Material Rejection Note copied to Costing and Purchase. Assembly damages are treated as scrap and disposed off periodically by Stores. Cost recovery for assembly Rejection are effected by costing section from vendors.

4.3.6 Stores despatches assembly rejections to concerned vendors based on the request from vendors.

4.3.7 The reason for non-conforming materials passing through various stages of inspection and reaching final assembly is investigated by Dept. Head of Q.A. and appropriate preventive and corrective actions promptly devised.

4.4.0 Re-work on finished products

4.4.1 Non-conformity if any noted on finished Product is recorded by the Inspector/Mechanic concerned on the format Finished Tiller/Engine/Reaper Inspection Report in duplicate and one copy is given to Assembly to carry out rectification.

4.4.2 Assembly arranges rectification/re-work of such Tillers/Engines/Reapers. After rectification, it is re-inspected by Q.A. for acceptance.

PROCEDURE FOR CORRECTIVE ACTION, PREVENTIVE ACTION AND CONTINUAL IMPROVEMENT (QAP/QAD/13)

1.0 PURPOSE

1.1 To ensure that appropriate Corrective and Preventive Actions are taken at various stages of activities.

1.2 To ensure that the actions initiated identify opportunities for improvement, on a continual basis.

2.0 SCOPE

All products and critical machinery/equipment are covered.

3.0 RESPONSIBILITY

Head of concerned Division/Department is responsible for taking appropriate corrective and preventive actions and identifying opportunities for continual improvement.

4.0 PROCEDURE

4.1 Corrective/Preventive actions are initiated by Heads of Departments in the form of NCR (Non Compliance Report).

4.2 NCR raised on a Dept. is taken up for investigation for locating the cause relating to the product/process system under question.

4.3 Results of the investigations are recorded on NCR and returned to related/originating depts.

4.4 The Dept. concerned determines corrective actions needed to eliminate the non-conformity based on NCR.

4.5 Once corrective action is implemented the same is monitored by the same Dept. for its effectiveness.

4.6 The cycle gets completed once the controls required to ensure effectiveness of the corrective actions are implemented.

4.7 Relevant changes in Quality plans, work instructions or formats are made based on 4.5 & 4.6.

4.8 Preventive actions are taken up based on quality of products, concessions given, audit results, quality records, service reports, customer complaints and defect analysis of non-conformities by the related depts.

4.9 Adequate steps required to deal with problems relating to preventive actions and application of controls for effectiveness are carried out.

4.10 The corrective and preventive actions taken, are summarized by the HOD. The actions are reviewed with respect to the departmental objectives and targets. Opportunities for continual improvement are summarized by the HOD. Corrective/Preventive actions along with their effectiveness and the opportunities for continual improvement, are discussed in the subsequent Management Review Meeting. Corrective and Preventive Actions are also discussed in the Department Meetings for effective employee participation. Necessary action for achieving continual improvement is identified and initiated during the Management Review.

4.11 Below given are the details of corrective and preventive actions related to various departments.

5.0 Q.A. Department

5.1.0 In Process Components

5.1.1 Non-conformities identified during inspection of in-house machined components are raised through Material Rejection Note (MRN). They are classified as process defects or material defects.

5.1.2 Non-conformities due to process defects are analyzed by Machine Shop for necessary corrective and preventive actions.

5.1.3 Non-conformities due to material defects are advised to concerned vendors. The actions taken by the vendor to eliminate the defects is monitored periodically.

5.2.0 Assembly Rejections

5.2.1 During the joint inspection of assembly rejections by Assembly and QA, defects of components and concerned vendors are identified.

5.2.2 Based on above information relevant vendors are informed of the defects indicating the reasons for non-conformities to enable them to take corrective and preventive actions.

5.2.3 In case the defective components are re-workable the vendor is advised accordingly. Preventive actions taken by the vendor is monitored.

5.3.0 Bought out Component Inspection

5.3.1 Components supplied by vendors are inspected as per relevant drawing and the quality plan. Non-conformities observed during inspection are intimated to the vendors through Inspection Goods Received Report (IGRR). If the same non-conformities are seen in three consecutive supplies and the rejection is above 15% of supplies, the vendors are advised by separate letters to initiate appropriate corrective/preventive actions.

5.3.2 The above procedure 5.3.1 is also applicable to the Implements/Accessories.

5.4.0 Meetings of vendors are organized periodically to discuss the non-conformities noted in their supplies. These meetings give an excellent opportunity to the vendors to project their difficulties to maintain the specifications if any, interact with Quality Assurance and Purchase Departments.

5.4.1 The vendors are also encouraged to visit QA Department so as to understand the method of inspection and instruments/gauges used for each component verification.

5.5.0 Warranty Claims

5.5.1 Defective components received along with warranty claims from Marketing Dept. are analyzed to find out reason of failure. On the basis of this analysis concerned vendors are advised to initiate preventive actions to avoid similar failures in the case of high value items and defects of repetitive nature.

5.5.2 Failure analysis findings are indicated in the concerned warranty claim recommendations for settling the claim.

6.0 Assembly Shop

6.1.0 Finished Power Tiller/Engine/Power Reaper

6.1.1 Non-conformities intimated by Quality Assurance through finished Tiller/Engine/Reaper Inspection Reports are analyzed based on the repetition of same defects. Based on this analysis, adequate preventive actions are initiated to eliminate occurrence of similar complaint. All the concerned Chief Mechanics/Mechanics are also given proper instructions to take required care in future assemblies.

6.1.2 If the analysis reveals that defects are due to defective components, the same is reported to QA for necessary actions.

6.2.0 Assembly Damages

6.2.1 Assembly Damages are analyzed on a monthly basis. Based on the analysis report corrective actions are initiated with an aim to bring down damages.

6.2.2 Also line Mechanics are given proper instructions/training as needed, in the handling of components and tools.

6.3.0 Assembly Rejection

6.3.1 Components identified as Rejection due to deviation by Assembly Mechanics/Chief Mechanics are removed from respective work centres and kept in pre-determined areas/bins.

6.3.2 Material Rejection Request is prepared and forwarded to QA for further inspection and segregation.

6.3.3 These segregated items are jointly inspected by Assembly and QA Depts. to find out the reasons for non-conformities.

6.3.4 In the case of Assembly Rejections, further corrective/preventive actions are taken by QA, which includes analysis and intimating concerned vendors accordingly. HOD Assy. also analyses the Material Rejection Note to find out the correctness of Material Rejection Request & the regular rectifications carried out on an item, which is not disposed as MRN after rectification. The analysis report is presented to the Management, along with the root causes/sources of error, the actions initiated and their effectiveness. The same is discussed in Management Review Meeting for further follow up if any.

6.4.0 Assembly Line Inspection

6.4.1 During the course of line inspection at various stages of assembly, non-conformities if any are identified, necessary corrective actions are taken to rectify the non-conformities by the Chief Mechanics or by any other concerned higher officials.

7.0 Marketing Department

7.1.0 Warranty Claims

7.1.1 Warranty is extended to Power Tiller for a period of one year or 500 hours of operation whichever is earlier. In the case of engines/reapers, warranty is extended to a period of six months or 250 Hrs of operation whichever is earlier.

7.1.2 Warranty Claim from approved dealers during this period is received by Marketing Dept. Defective components received are then forwarded to QA for analysis and advice. Based on the advice of QA, defective components are replaced if the claim is accepted or defective components are returned to the concerned dealers in case of non-acceptance.

In case of warranty claim admitted on KU and PU, a copy of the settled warranty claim is forwarded to them for necessary corrective and preventive actions. In case of warranty claim admitted on MU the settled warranty claim is forwarded to them along with Despatch Advices.

7.1.3 Warranty claim settlement is analyzed by Marketing Dept. and a consolidated monthly settlement of admitted warranty claims is prepared. Copies of this statement are issued to MD, H.O.D of Production, Marketing, Finance, Purchase, Quality Assurance, Assembly and Unit Heads of PU, KU and MU.

Based on the customer complaint analysis & customer requirements, Mkt. Advises the Engg Dept. & Q.A. for modifications/improvements of the products. Marketing also advises Engg. & QA on the need for diversification and other methods for integration.

7.2.0 <u>Customer Complaints</u>

Customer complaints are mainly due to:

7.2.1 Transit damages of components

7.2.2 Short/excess receipt of components

7.2.3 Receipt of wrong components against orders.

7.3.1 Receipt of complaints from customers/dealers are registered. The customer complaint Redressal Format (MKF:10) is filled up by Marketing Dept. and is forwarded to the respective Departments through MR Office for investigation and for Corrective Actions. Customer complaint is closed by Head of the Department of Marketing at Athani for all Units. After closing the customer complaint, copy is forwarded to respective Depts./Palakkad/Kalamassery/Mala Unit. The entire complaint redressal is routed through M.R. Office. Quarterly report is submitted to MR Meeting for effective transparency.

7.3.2 Adequate preventive measures are also initiated in association with interface departments if any, to avoid occurrence of similar complaints in future.

7.3.3 Check lists wherever required are used for proper monitoring and to eliminate customer complaints.

8.0 Machine Shop

8.1 Non-conformities brought out through Material Rejection Note (MRN) by QA are analyzed by the HOD for their root causes/sources of error. The analysis report is presented to the Management, along with the root causes/sources of error, the actions initiated and their effectiveness. The same is discussed in Management Review Meeting for further follow up if any.

8.2 The results of corrective and preventive actions are monitored.

9.0 Procedure for call back in the Factory:

9.1 Defects on accepted components are noticed during

a.Assembly

b. Product Testing

c. Periodic Confirmation Inspection

d. Despatch of Spare parts

e. Despatch of Product.

9.2 When a major defect is noticed, the concerned Dept. contacts/inform immediately to QA Dept. QA Dept. analyse, investigate and identify the problem. Based on this report QAF:25 is prepared by HOD (QA) indicating the corrective action required. QA will identify the vendor, manufacturing lot from Traceability and verify the RIR observations and reasons for defect. HOD in consultation with Divl. /Unit Head, arranges the corrective actions.

9.3 Corrective Actions

a. On verification of corrective action plan. QA Dept. segregates the defective items from Assembly line and request Assy. to dispose under MRN. QA also advise Stores Dept. to suspend the issue of the item to Assy./Mktg. until Corrective action is completed.

b. QA Dept. segregates the defective items in Stores, QA and Mktg. and identify the Quantity with the Tag QAF:26 and issue the Call Back Intimation Slip QAF:25 to Stores and Assembly. On finalising MRN and PCB, QA forwards copies to Purchase and Costing. Stores issues out the quantity under QAF:25 and removes the item to rejection Stores for disposal. Costing Dept. advise Accounts to deduct the cost from Vendor.

c. In case any item is found defective in sales counter, which is cleared by QA Dept. with Tag QAF:26, Mktg. returns the item through Store Return Note. Stores dispose these items along with the lot rejected in Stores under QAF:25.

d. Based on QAF:25 Slip, QA issues a letter to vendor showing the quantity rejected and its reason for call back from stock with copy to other Units concerned.

9.4 Preventive Actions

QA arranges inspection of call back item in next supplies and specifically verify this deviation. In case of major defects QA Engineers are deputed for immediate corrective actions at vendor site.

10.0 CRITERIA FOR CORRECTIVE/PREVENTIVE ACTIONS

No.	Area	Criteria	Action by
10.1.1	Bought out inspection	Three times lot rejections of above 15% for the supply of a component in a financial year	Q.A. Dept.
10.1.2	In-house production	More than 10% of the rejection is due to a single cause over supply schedule of vendor – Material Defect	Q.A. Dept.
10.1.3	In-house production	More than 2% of rejection over a monthly production – Process Defect	Machine Shop
10.1.4	Final product inspection	15% of the defects are due to same reason/cause of repetitive nature in a month	Assembly Dept.
10.1.5	Assembly Damages	When the value is above 0.1% of the monthly production	Assembly Dept.
10.1.6	Assembly rejections	Percentage of rejection is analyzed on quarterly basis and if it is more than 1% of production, Vendors are advised through QAF:18 for corrective and preventive actions. In case Number of Vendors is more than one, proportionate percentage is considered.	Q.A. Dept.
10.1.7	Warranty claim replacements	1.5% defects reported are due to a single reason	Q.A. Dept.

10.1.8	Customer complaints	Any nature	Marketing Dept.
10.1.9	Pre Delivery Claims	Transport Damages, Pre Delivery Defect. (Product defect) 0.1% of Tiller/Reaper/Engine dispatch Packing Defect – "0" Defect	Stores Dept.

10.2 Evaluation

Concerned Depts. analyze and evaluate CAP correction taken on above potential areas regularly and establish a system to prove that there is visible improvement. Critical areas and root causes are identified using statistical methods. These are reported and discussed in the MRM.

PROCEDURE FOR INSPECTION AND TESTING (QSP/QAD/14)

1.0 PURPOSE

To indicate the sequence of activities to be followed for all raw materials, bought out components and in-process items used in the assembly to conform to standards/specifications and the final product satisfies the specifications and to recommend corrective and preventive actions to eliminate non-conforming products.

2.0 SCOPE

Covers all raw materials, bought out components, in-process components, sub-assemblies, production consumables, tools, finished engines, Power Reapers, Power Tillers & Implements/Accessories.

3.0 RESPONSIBILITY

Department head of Q.A. is responsible to see that the procedure is followed by all individuals in the Department.

4.0 PROCEDURE

4.1.0 Receiving Inspection

4.1.1 Materials received along with Material presentation tag from Stores and based on Daily Report for Inspection, Receiving Inspection Report is originated from Computer. The items are inspected against drawings and connected Quality Plans. On inspection these are segregated as Accepted, Rejected and Re-workable and tagged using ACCEPTED (QAF:07), REJECTED (QAF:08), RECTIFICATION (QAF:09) Tags. The inspectors record their findings in the respective Receiving Inspection Report and it is verified by Chief Mechanic/Superiors. On approval of the RIR, entries are made in the Computer which will generate IGRR (STF:01) information in the RIR on non-conformities, sample size accepted, inspected by, Identification and Traceability details are also entered in computer. Concessions if any are regularized as per procedure for control of non-conforming products (QSP/QAD/12).

Finalised RIRs for a month shall be kept for one more month for later reference purposes. Eg:- If current month is November, October RIR is kept in the section till 1st week of December.

4.1.2 Sampling techniques are specified for incoming inspection of components, raw materials and machined parts. However where 100% inspection is carried out, such dimensions are listed in Quality Plan itself. Sampling details are covered in sampling table. When an item is rejected against a sampling plan in Q.P., further acceptance is done after 100% inspection depending on the requirements, i.e. no Re-sampling. Whenever the sample size is not as per the sampling plan (Eg.1/100, 5/Lot), acceptance is made if the lot is fully accepted. In case, the lot is rejected, sampling plan No.3 under IS 2500 approved by the company is accepted.

4.1.3 The inspection remarks are given in IGRR to enable the Vendor to take up immediate corrective actions. Copies of IGRR are collected by Stores for processing as per procedure for Preservation of Products (QSP/STR/18) along with the material.

4.1.4 Defective components identified during assembly are collected for a joint inspection by Quality Assurance and Assembly personnel. Items identified as rejection/damages are returned to Stores against MRN jointly signed by QA and Assembly.

4.1.5 If inspection is carried out at Vendor's premises, authorized inspector issues Receiving Inspection Report (temporary) to vendor for forwarding the same along with inspected materials. After material receipt and allotting RCV No. by Stores, the RIR is forwarded to QA, based on which IGRR is finalized by QA.

4.1.5.1 A material control register is being maintained at vendors site, for company to verify the material used. During site audit, the same is verified by our Quality Engineer or Auditor. Vendors provide material test certificates periodically for our reference. Moreover, a confirmatory test is carried out on a regular basis, to ascertain the same, depending on the item, non-conformity feed back and necessity.

4.1.5.2 Annual vendor site audit is planned by QA (HO) based on the criticality of the component. Audit findings are informed to the vendor with a view to bring the vendor in line with our Quality System requirements.

4.1.5.3 As part of continued quality maintenance, a system of component conforming inspection test is carried out on regular basis. The items are selected based on various non-conformities noticed and criticality of the components from the recent batch of supply.

4.1.5.4 Based on the conformance during incoming inspection and analysis of defects during production and warranty period, Self-Certification status is awarded to suppliers for such components where proper quality is built in. Line rejection analysis and Warranty Claim analysis is done specifically for such vendors having Self-Certification. Self Certified vendor has to provide-(1) Certificate of conformance to P.O. and specifications (2) Material Test Certificate with Traceability (3) Self Inspection Report. In case the rejection is more than 1% of the supplies during a quarter of the year, Kamco has the right to ithdraw the Self-Certification status.

4.2.0 In-process Inspection

4.2.0 In-process Inspection control of components machined in Machine Shop is based on the inspection quality plans. First piece of every machine set up is inspected by Q.A. Staff and the set up is cleared for production, only if the first piece is accepted.

4.2.2 Otherwise, the set up is corrected and another piece is produced. This process is continued till the set up gives acceptable product. If concessions are required, procedure for control of Non-conforming products (QSP/QAD/12) is followed.

4.2.3 Outright rejections noticed will be accounted through Material Rejection Note (MRN) which will indicate whether rejection is on account of material defect or process defect. MRN is originated by Q.A.

4.2.4 Based on the MRN, Vendors are informed for initiating corrective actions.

4.2.5 Material defect noticed during machining operation by the sub-contractor is indicated in the IGRR. Monthly consolidated statement is provided to vendor by QA Dept.

4.3.0 Product (Final) Inspection

4.3.1 Stage inspection of Engine, Transmission and KMB is carried out by Assembly Department as per assembly quality plans. On satisfactory completion finished Tillers/Engines are offered to Quality Assurance. These Tillers/Engines are tested for performance parameters by Quality Assurance Department as per Quality Plan for Tillers/Engines acceptance and observations are noted.

In case of Power Reapers after Pre Delivery Inspection of engines by the manufacturer to rectify any transit damages these are assembled and on satisfactory completion of assembly the reaper is presented to QA. These reapers are tested as per Quality Plan for finished reaper inspection.

4.3.2 Re-work, adjustments or replacements of defective parts are attended to by Assembly based on the observations of Q.A. The rectification details are recorded in the report itself. Re-inspection is carried out as per the same plan for acceptance. Accepted Tillers are identified by QC passed stickers. At KU accepted Engines are identified by Inspected sticker. At MU accepted Reapers are identified by Inspected sticker. These Tillers/Engines/Reaper are then transferred to Stores by Assembly through Tiller/Engine/Reaper Transfer Note.

4.3.3 Periodic confirmation of Engine performance is carried out by QA, Athani. Depending on the production, QA fix the number of Engines to be submitted by each unit.

Eg. Less than 100 - 1 No. in alternate month
100 to 300 - 1 No. in each month
Above 300 - 2 Nos. in each month

(Note:- Clause 4.3.3 is not applicable for Reaper engines)

4.4.0 Sample Approvals

4.4.1 When sub-contractors/Vendors submit samples of components they are inspected and detailed report given in sample Inspection Report Format indicating the approval or otherwise with a copy to Purchase.

4.4.2 Indenting Departments clear the acceptance of general items, production consumables. For instruments and gauges, they are inspected at calibration cell and based on their clearance, the respective IGRR is approved by the concerned Dept.

4.5.0 Routine Reports

4.5.1 Daily Acceptance Reports for in-process components is prepared and forwarded to concerned Departments.

5.0 Related Documents, Formats and Work Instructions are available in the Department Quality Manual.

I. DOCUMENTS

SL.NO.	DOCUMENT DESCRIPTION	DOC NO.
1	Master List of Quality Plan for Critical Category Components of Power Tiller	QAW:01
2	Master List of Quality Plan for Medium Category Components of Power Tiller	QAW:02
3	Master List of Quality Plan for General Category Components of Power Tiller	QAW:03
4	Master List of Quality Plan for Standard Category Components of Power Tiller	QAW:04
5	Master List of Quality Plan for group wise Raw materials of Power Tiller	QAW:05
6	Sampling Plan	QAW:06
7	Inspection Authority for release of finished products	QAW:07
8	Inspection Authority for Components Inspection	QAW:08
9	Quality Plan for Tiller acceptance	QAW:09
10	Quality Plan for Engine Acceptance-ER 90 Engine	QAW:10
11	Quality Plan for Implements/Accessories	QAW:11
12	Work Instructions to Quality Plan for Tillers acceptance QAW:09	QAW:12
13	Work Instructions to Quality Plan for Engine acceptance QAW:10/QAW:19	QAW:13
14	Master List of Quality Plan for Critical Category Components of ER90 Engine	QAW:14
15	Master List of Quality Plan for Medium Category Components of ER90 Engine	QAW:15
16	Master List of Quality Plan for General Category Components of ER90 Engine	QAW:16
17	Master List of Quality Plan for Standard Category Components of ER90 Engine	QAW:17
18	Master List of Quality Plan for Group wise Raw Materials of ER90 Engine	QAW:18
19	Quality plan for Engine Acceptance-DI Engine	QAW:19
20	Master List of Quality Plan for Critical Category Components of DI Engine	QAW:20
21	Master List of Quality Plan for Medium Category Components of DI Engine	QAW:21
22	Master List of Quality Plan for General Category Components of DI Engine	QAW:22
23	Master List of Quality Plan for Standard Category Components of DI Engine	QAW:23
24	Master List of Quality Plan for RAW Materials of DI Engine	QAW:24
25	Quality plan for Reaper Acceptance	QAW:25
26	Work Instructions to Quality Plan for Reaper Acceptance	QAW:26
27	Master List of Quality Plan for Critical Category Components of Power Reaper	QAW:27
28	Master List of Quality Plan for Medium Category Components of Power Reaper	QAW:28
29	Master List of Quality Plan for General Category Components of Power Reaper	QAW:29
30	Master List of Quality Plan for Standard Category Components of Power Reaper	QAW:30
31	Inspection Authority for Power Reaper	QAW:31

SL.NO.	DOCUMENT DESCRIPTION	DOC NO.
32	List of Process	QAL: 01
33	Action Plan for Objectives	QAL: 02
34	RISK Assessment	QAL: 03
35	Action Plan for achieving opportunities	QAL: 04

II. FORMATS

Sl.No.	Format Description	Format No.
1	Receiving Inspection Report	QAF:01
2	Finished Tiller Inspection Report	QAF:02
3	Sample Inspection Report	QAF:03
4	Daily Acceptance Report (In-Plant)	QAF:04
5	In-Process Rejection Report	QAF:06
6	Green Tag – Accepted	QAF:07
7	Red Tag – Rejection	QAF:08
8	Yellow Tag – Rectification	QAF:09
9	Non-Compliance Report	QAF:10
10	Instrument Call Notice	QAF:11
11	Calibration History Card	QAF:12
12	Finished Engine Inspection Report	QAF:13
13	Master Record Index for Department Quality Manual Amendments	QAF:14
14	Calibration Card	QAF:15
15	New Instrument/Gauges Inspection Data	QAF:16
16	Non-Conformance Advice and Correction Request	QAF:17
17	Line Rejection Analysis and Correction Request	QAF:18
18	Warranty Claim – Non Compliance Report to Vendors (WC-NCR)	QAF:19
19	Vendor Quality Audit Report	QAF:20
20	Engine Performance Test Record	QAF:21
21	Periodic Confirmation Inspection of Power Tiller Components	QAF:22
22	In-process Rejection Intimation	QAF:23
23	Report to MRM	QAF:24
24	Defective Parts Call Back	QAF:25
25	Tag for Call Back	QAF:26
26	Tag for Modified Item	QAF:27

PROCEDURE FOR MAINTENANCE AND CALIBRATION OF MEASURING INSTRUMENTS/EQUIPMENT (QSP/QAD/15)

1.0 PURPOSE

1.01 In order to critically utilize the resources of the company and to have uniformity in procurement, corporate level planning is envisaged.

1.02 To ensure identification/procurement of measuring and test equipment is done keeping in view correct specification and acquisition, including range, precision and durability under specified environmental conditions.

1.03 To control, calibrate and maintain inspection/measuring/testing equipment with systematic methods of calibration periodically.

2.0 SCOPE

This covers:

(i) All measuring instruments including gauges used by manufacturing Depts. And Quality Assurance.

(ii) Inspection instruments loaned to sub-contractors.

(iii) Instruments used by Service Engineers.

3.0 RESPONSIBILITY

3.01 Department Head of Quality Assurance at AU is responsible for all aspects of the procedure relating to calibration.

3.02 Department Head of Production at AU is responsible for all aspects of the procedure relating to Tool Crib issues.

3.03 In other Units, Department Heads of concerned departments are responsible for all aspects of the procedure relating to calibration.

4.0 PROCEDURE

4.01 A Technical Standing Committee consisting of following Officers will meet after beginning of theyear upon approval of the budget and as and when required to assess themetrology/measuring/test equipment.

For Athani and all the Units

1 GM (Opns) i/cConvener
2 DGM (PU) Member
3 Sr. Manager (MTLS) Member
4 H.O.D (QA), (AU) Member

4.02 The terms of reference of this Committee are:

- To identify new equipment to be procured based on intended use.
- To discuss/define inspection methods
- To ensure phased modernisation of measuring/test equipment.
- Based on this Committee's report, Purchase Dept. initiate action of procurement/ manufacture of instruments.

INSPECTION/ISSUE OF NEW INSTRUMENTS

4.03 New measuring equipment/instruments and gauges on receipt are inspected by calibration cell at HO.

4.04 For Athani Unit the Calibration Cell and concerned depts. in other Units arranges for unique identification of the instruments and gauges. History card for all equipment/instruments are maintained by the cell at HO and concerned Dept. in other Units. Refer Master list Doc.No.QAR:02 and History Card Format QAF:02.0.

4.05 All measuring/testing equipment are taken to stock by concerned departments.
Jigs and Fixtures (both procured as well as in house manufactured) are taken to stock in concerned depts.
No separate calibration is arranged by Q.A. for Jigs & Fixtures available in Machine Shop.

Machine Shop maintains a Master list for Jigs & Fixtures. Jigs & Fixtures accuracy is confirmed by checking the component during first piece inspection of the process and periodical checking of components. When the accuracy required for a particular operation nears the allowable limit, drill bushes, butting pads & locating pins in the Jigs & Fixtures are checked and replaced/rectified as the case may be.

A History Card of all Jigs & Fixtures which indicates various work carried out on the Jigs & Fixtures is maintained by Machine Shop.

Based on History Card Analysis frequency of repair/replacement is established and wherever required, appropriate control/procurement is initiated.

4.06Periodical Calibration and Records

At Athani Calibration Cell conducts inspection, calibration, repair of instruments and maintain records to ensure accuracy of instruments as per calibration instruction. In other Units concerned depts. organize the calibration of instruments and gauges.

4.07 Frequency of calibration of instruments is finalized by concerned Department based on manufacturer's recommendations or past experience. These are documented in master list itself.

4.08 Primary responsibility of getting the instruments calibrated periodically rests with users/custodians. In Athani Unit Calibration Cell sends "Instrument Call Notice" QAF:11 to custodians well in advance before it is due for calibration. Heads of user departments ensure that all the instruments and gauges are calibrated from calibration cell outside agencies within the time frame.

4.09 Calibration is carried out as per calibration instructions identifying method of calibration, calibration points, acceptable error value at each point. It also indicates the master used, environmental conditions and tamper proofing if any.

4.10 Entries of activities are made in the history card of each instrument. Calibration sticker indicating the date of calibration and due date of next calibration is affixed on each instrument. Calibration sticker is affixed whenever item is not in contact with oil grease. In such cases only a paint mark of white colour is put on the gauge. Instruments out of calibration are identified with Rejected Sticker affixed.

4.11 Calibration of master/reference instruments by external approved agencies is carried out as decided by Dept. Head. Certificates of calibration traceable to National/International Standrds are to be obtained from Calibration agencies. Calibration carried out HQ, for further Units, calibration certificate will have calibration card (QAF:13) only.

4.12 When on inspection, a measuring or test equipment is found to be out of calibration on receipt for calibration, following actions are initiated:

i) Periodicity of calibration is reviewed.
ii) Previous inspection and test results are verified.

4.13 In case an instrument with error beyond specified value is released for use, following steps are followed.

(i) Yellow sticker paint indicating the calibration status is affixed on the instrument.

4.14 **Handling and Storage:**

All instruments are stored and transported with care to avoid damages.

4.15 Under no circumstances should measuring instruments be opened or repaired by personnel other than the Calibration cell. In case any repairs arranged/done by any department, it should be re-calibrated before use.

4.16 In order to ensure safe/reliable storage of measuring instruments, and for optimum utilisation of resources. Head of Production Dept. ensure that all measuring equipment are returned to Tool Crib after use.

4.17 In-charge of concerned Dept. ensures that all gauges are cleaned and properly located in cup boards and its designated locations. Gauges which are not in common use are preserved by applying petroleum jelly. Gauges are stacked one above the other or allowed to be in contact with one another.

4.18 Action of defective and worn-out instruments:

Detailed report of instruments/gauges found damaged/worn-out are prepared by the calibration cell in-charge.

4.19 A Committee consisting following Officers recommend disposition of defective and worn-out instruments.

Athani Unit

01 Divisional Head of Quality Assurance (Convener)
02 Department Head of Quality Assurance
03 In-charge of calibration cell.

For other Units

01 Unit Head
02 Department Head of Quality Assurance
03 Department Head of Works/Assy.

The Committee meets at the end of the Financial Year so as to facilitate declaration of stock at the year end.

(i) Reviews the instruments damaged and institutes corrective action to reduce incidence of damage.

(ii) Recommends disposal of measuring instruments, which are beyond economical repair.

4.20 For those instruments which are identified by the Committee as "Beyond economic repair", the In-charge of Calibration cell at AU and Unit Head in other Units prepares a report on defective instruments and distributes the same among those mentioned below through proper channel.

01 Managing Director
02 Divisional Head of Finance

4.21 Measuring instruments, which are identified by the Committee as beyond economic repair are disposedoff and recorded in history card and master list updated. Head of Quality Assurance at Athani Unit and Unit Head in other Units authorizes the disposal through Stores Department.

5.0 Particulars of Quality Records, Formats, and Work Instructions are available in Department Quality Manual.

PROCEDURE FOR DATA ANALYSIS (QSP/QAD/16)

1.0 PURPOSE

To analyze the data generated providing information for decision making process for effective operation of the business.

2.0 SCOPE

This procedure is applicable to:

- Bought out inspection
- In-plant inspection
- Assembly rejections
- Warranty claims
- Final product inspection
- Assembly damages
- Customer complaints, customer satisfaction
- Vendor performance rating

3.0 RESPONSIBILITY

3.1 Department Heads of Quality Assurance and Machine Shop are responsible for co-ordinating the activities related to identification of appropriate statistical techniques to be used for different applications.

3.2 Heads of concerned depts. are responsible for applying appropriate statistical techniques to be used in the respective areas of operations.

4.0 PROCEDURE

4.1 Department Head of Quality Assurance identifies appropriate acceptance sampling plans. These sampling plans are based on feedback from production/final assembly and will be reviewed as and when required.

4.2 The sampling plan is used considering the quality, grade and performance of the vendor in his previous supplies and assembly line rejections. Whenever required, the Supervisor in consultation with Section Head/HOD imposes tightened inspection sampling plan or loosened inspection sampling plan on such vendors. For all these decisions past performance of the vendor is the main criterion.

4.3 In Machine Shop wherever the process defect percentage is higher than the permissible limit, the concerned MRN'S are analyzed using statistical techniques.

4.4 Statistical Process Control techniques identified are:

Area	Statistical Techniques identified
Bought out inspection	Charts/graphs, C & E diagrams
In-plant inspection	
Assembly rejections	
Warranty claims	Charts/graphs
Final Product inspection	Charts/graphs, C&E diagrams
Assembly damages	Charts/graphs, C&E diagrama
Customer Complaints, customer satisfaction	Charts/graphs, questionnaire
Vendor performance rating	Charts/graphs

Further techniques may be identified by Q.A. and respective departments, based on specific needs.

4.5 Based on data analysis by HODs and subsequent review by Management Review Committee, departmental targets and performance are evaluated. Targets are revised/re-adjusted, based on such evaluation with respect to continual improvement planned/achieved.

4.6 The respective records are maintained by HODs

PROCEDURE FOR RESEARCH AND DEVELOPMENT DEPARTMENT (QSP/RND/17)

1.0 PURPOSE

The major activities in R&D department are:-

1.1. Design and development of Agricultural machineries/implements.

1.2. Continual improvements of existing products is taken up based on feedback from other departments, market requirement ,vendor suggestions ,employee suggestions and self-generated ideas.

1.3. Preparation of Drawings, Item Master, Bill of Materials, Process Sheet and computerization of suchdocuments.

1.4. Obtaining necessary statutory certificates/approvals like Type approval for new products from the authorized agencies.

1.5. Coordinating with QA Department for getting statutory renewal certificates like COP from authorizedagencies. .

1.6. Technical support to other departments like materials, production , QA and marketing.

1.7. Archives control of CAD Centre.

2.0 SCOPE

This covers activities with regard to Design, Development of new products and up gradation/valueengineering of existing products and its accessories/implements.

3.0 RESPONSIBILITY

HOD of R&D is responsible to ensure that the procedure is followed by all in the Department.

4.0 PROCEDURE

4.1

4.1.1 To keep all drawings in safe custody, maintain them properly and issue copies to indenting department.

4.1.2 To keep all test certificates in safe custody and issue certified copies to relevant departments.

4.2

4.2.1. Receipt of Design suggestion request **RDF:01** from concerned department in order to overcome Procurement/production/process problems and customer complaints/suggestions.

4.2.2 Design requests are analyzed by R&D and feasibility report presented to Design ReviewCommittee consists of HOD (R&D) -Convener,HOD (Mktg), HOD (Mtls),HOD(QA) and HOD (Prdn) as members. The committee scrutinizes the necessity and Takes decisions and records the minutes of DRC meeting **RDF:02**. which is subsequently approved by MD. Committeegives clearances either for trial or regular production which are implementedbythe concerned Dept. On the basis of recommendations from DRC, new designs/changes may bedirectly implemented for procurement, or on trial basis before implementation in accordance withthe criticality of the component. A plan shall be prepared for the design and development **RDF: 06**.

*If the committee decides to go for trial, Design trial notes**RDF: 03**isprepared by R&D**.**

Trial report **RDF: 04** as well as feedback report **RDF: 05**is collected after trial from the concerned**.** The result of trial to be submitted to DRC for further action.

*If the committee decides to implement the suggestions directly , Design Change Request **RDF:14** is prepared by R&D**.** The details are circulated among Production, QA, Materials and Marketing depts. and their feedback is obtained. In case of major changes validation shall be done by conducting trials and testing to ensure performance and recorded in Design Validation **RDF :12**.

4.2.3 If feasible Design Change Note **RDF:15** shall be sent to concerned depts.

4.2.4 After obtaining the design change implementation report from the concerned departments, design change feedback report will be given to marketing department **RDF:23** for getting the effectiveness of changes implemented. The report will be further analyzed by R&D department and the details will be submitted to the DRC meeting.

4.3

4.3.1 For new design, prepare new drawings with the support of the design calculations **RDF :07**/design review **RDF:10** etc.

4.3.2 Design & Development input requirements relating to the products/ implements shall be identified from

1) Design suggestions/comments from concerned departments/customer/vendor etc.
2) Feasibility report
3) Similar proven design if any
4) BIS requirements/CMVR
5) Customer feedback
6) Data from journals/Indian standards
7) Manufacturing process and advancement of selection of alternative material etc

Record of the above shall be maintained.**RDF:08**

4.3.3 Design & Development Control

4.3.3.1 Design Review

After completing the above process the whole process will be reviewed completely by a team of officers authorized by HOD.

Record of the above shall be maintained.**RDF:10**

4.3.3.2 Design &Development verification

Before releasing of design output documents, design &development verification shall be performed by officers of Asst Manager /HOD level by doing calculation or comparing the new design with the similar proven design if available to ensure that the design output meets the Design requirements.

Record of the above shall be maintained.**RDF:11**

4.3.3.3 Design &Development validation:-

To ensure that product conforms to defined user needs / requirements. Design &Development validation is done by HOD /officers designated by him.For a completely new product, validation shall be done by in house testing/trial or certification from approved testing agencies if required.

Record of the above shall be maintained.**RDF:12**

4.3.4 Design& Development output requirements are either or all of the below.

1) Specifications& features
2) Part Drawings/BOM/Process sheets/Assy. Drawings
3) Prototype test report.
4) Operation& Maintenance manual

Record of the above shall be maintained.**RDF:09**

4.4 Document correction

4.4.1 After obtaining clearance through Design Change Request **RDF :14,**necessary corrections are Thencarried out in the concerned drawings and Bill of Materials and Master Listof Drawings. Details of the changes are entered in the Revision Register.

4.4.2 New/Altered drawings/Bill of Materials and Master List of Drawings and alteration details are reviewed by an officer not below the rank of Asst. Manager in the Department before release.

4.4.3 Design change Note RDF 15 is issued along with Hard Copies of New/modified drawings to Quality Assurance and Materials/Purchase Departments of respective Units through Design Change release Note RDF 22. Design changes are informed by Design Change Note **RDF : 15** to Purchase, Stores, Production, Marketing and Systems Departments of Athani Unit .If required issue the same to QA, Purchase , production , store of other Units also. Implementation of Design Changes by concerned departments is confirmed by means of Design Change Implementation Report.(**RDF :16**)

4.4.4 Product/ component drawings are issued in two categories viz. 'Controlled Copy' and 'Tender Purposes'. Controlled copies are issued to QA and Materials Depts. for their departmental use. Controlled copies are issued to Materials Dept. also for dispatching the same to existing vendors based on their indent. Drawings in the second category ie. 'Tender Purpose' are issued to Materials Dept. based on their indent. Other drawings are issued to respective indentures in the categories mentioned above in accordance with the request and purpose.

4.4.5 Soft copies of Drawing in pdf Format are issued with appropriate encryption to concerned deptst based on their e-mail /Indent.

4.4.6 Master List of Drawings ,Process Sheets& Bill of Materials are maintained in R&D Dept

1.DOCUMENTS

Sl.No	Document Description	Document No.
1.	Master List of Drawings-KAMCO Power Tiller	ENL:01
2.	Bill of Materials of KAMCO KMB200 Power Tiller	ENL:02/1 to ENL:02/12
3.	Bill of Materials of KAMCO Super DI Power Tiller	ENL:03/1 to ENL:03/12
4.	Master List of drawing of KAMCO Power Reaper	ENL: 06
5.	Bill of Materials of Power Reaper KR 120M	ENL: 07/1 to ENL:07/4
6.	Machine Shop Process Sheets	ENW:11 to ENW:29
7.	Assembly Shop Process Sheets of KAMCO KMB200 Power Tiller	ENW: 31 to ENW: 42
8.	Assembly Shop Process Sheets for Super DI Power Tiller	ENW:31 DI to ENW:42 DI
9.	Assembly Shop Process Sheets for Power Reaper KR 120M	ENW:201 to ENW:204
10.	Bill of materials of KAMCO Power Reaper KR120H	ENL:08/1 to 08/4
11.	Assembly process sheet of KAMCO Power Reaper KR120H	ENW: 201H to ENW:204H
12	Bill of Materials of Kamco Power Reaper KR 120DS	ENL:09/1 to ENL: 09/4
13	Assembly process Sheet of Kamco Power Reaper KR 120 DS	ENW: 201D to ENW: 204D
14	Bill of Materials of Kamco Power Reaper KR 120B	ENL: 10/1 to ENL: 10/4
15	Assembly process Sheet of Kamco Power Reaper KR 120 B	ENW: 201B to ENW: 204B
16	List of Process	ENL: 11
17	Action Plan for Objectives	ENL: 12
18	RISK Assessment	ENL: 13

II. FORMATS

Sl.No.	Format Description	Format No.
1	Design Suggestion Request	RDF:01
2	Minutes of DRC Meeting	RDF:02
3	Design Trial Note	RDF:03
4	Design Trial implementation Report	RDF:04
5	Design Trial Feedback Report	RDF:05
6	Design &Development Plan	RDF:06
7	Design Calculation	RDF:07
8	Design &Development Input	RDF:08
9	Design &Development Output	RDF:09
10	Design Review	RDF:10
11	Design &development Verification	RDF:11
12	Design &Development Validation	RDF:12
13	Prototype Test Chart	RDF:13
14	Design Change Request	RDF:14
15	Design Change Note	RDF:15
16	Design Change Implementation Report	RDF:16
17	Report to MRM	RDF:17
18	Minutes of Department meeting	RDF:18
19	Technical Specification of Products	RDF:19
20	Measurement of Continual improvement	RDF:20
21	Master Record Index for Department Quality Manual Amendments	RDF :21
22	Design Change release note	RDF:22
23	Design Change Feedback Report	RDF: 23

PROCEDURE FOR PRESERVATION OF PRODUCT (QSP/STR/18)

1.0 PURPOSE

The purpose of this procedure is to spell out in detail how various items are protected and preserved at all stages.

2.0 SCOPE

This procedure is applicable to all areas where materials are handled and stored.

3.0 RESPONSIBILITY

3.1 It is the responsibility of the respective HOD of the Department to ensure compliance to this procedure.

3.2 All the issues and receipts in any nature are to be entered in computer regularly by the concerned.

4.0 PROCEDURE

Annexure A gives details of handling of material including finished Tiller/Reaper at various depts.

4.1 STORE

Annexure B shows details of storage of materials at various stages including finished product in depts.

4.2 Material Receipt

4.2.1 All materials including raw-materials, components, and production consumables which are received from vendors/sub-contractors, directly through transporters, along with despatch notes are received. Based on the despatch documents RCV No. is allotted in computer. The items are verified for physical damages and quantity/packaging/quality discrepancies. Discrepancies if any are intimated to the concerned vendor and Purchase Dept. through STF-12.

4.2.2 On completion of above, received quantity is entered and the items is submitted to QA for inspection/approval with Material Presentation Tag:

4.2.3 In the case of production consumables materials along with RIR are submitted to the concerned dept. for inspection and acceptance.

4.2.4 Inspection details of components are entered by QA and IGRR is generated.Daily Acceptance Report is used for arranging material collection. Payment advice is approved by HOD Stores/Purchase for effecting payments to suppliers.

4.2.5 Accepted components identified by the component code are collected and stored in respective storage racks (Refer location map available in Stores). All stock materials are properly preserved for long storage viz. Oiling, Packing FIFO etc. For short shelf life items preservation is carried out as per schedule available in Department Quality Manual DQMA/STR/08.

4.2.6 Urgent items which are cash purchased for production are received after inspection and accounted through Inspection and Goods Received Report (IGRR)(STF:01)

4.2.7 Through Inter Location Stock Transfer Issue/Receipt, stock transfer can take place from one Unit to the other and copies are sent to Stores for accounting Stock Transfers.

4.2.8 All transaction in the stock is entered in the Bin Card/Cardex. The Bin card entries are made immediately on receipt/issue. The cardex entries are made at the end of the day.

4.2.9 Finished products in the form of finished components, Tillers/Reapers and Engines are received from production areas (Machine Shop and Assembly) along with supporting documents. Refer Machine Shop (QSP/PRD/10) and Assembly (QSP/PRD/07) procedures for details.

4.3 Issue of Materials

4.3.1 Raw materials for outside machining, Components/consumables for production, Parts for sub-assembly are issued in convenient batches against Stock Issue cum Delivery Note.(MLC)/Stock Issue/Transfer note

4.3.2 In all the above cases the store stock is updated along with proper entries being made in bin cards/cardex.

4.4 Disposal of rejected materials

4.4.1 Rejected items (as per IGRR) are returned to concerned Vendor along with supporting documents.

4.4.2 Rejected materials received by Stores from Machine Shop and Assembly due to material or process defects are disposed off by Stores. These rejected materials are to be identified and approved by QA prior to their reaching Stores. Refer to QSP/QAD/14, Procedure for Inspection and Testing.

4.4.3 Disposal of rejected items is carried out by Stores by sending them to vendors or by declaring as scrap. Scraped items are separately stored and maintained till they are disposed off after authorization from Managing Director/Board of Directors. A scrap register is maintained to account the same.

4.4.4 Stock of materials is available in the computerized Cardex. Inventory is controlled based on this stock by Purchase Dept.

4.4.5 Short shelf life items, (as per the list available in Department Quality Manual|) are visually verified periodically to assess the fitness to use. If found not okay, such items are referred to QA for re-inspection. The preservation method for these items is given in Department Quality Manual.

4.4.6 Documents, Formats, Quality Records Maintained in Dept. are available in the Department Quality Manual.

4.5 Packaging

4.5.1 The Finished Engines despatched to customer/dealers are packed in separate wooden box for avoiding damage during transit.

4.5.2 The Finished Tillers including Tool kit and Manuals are despatched to various far off destinations with a specially designed mounting frame (DWG:11 25 000) to keep the tiller vertically down, in order to accommodate more number of Tillers in a single truck in which case oil and water are drained.

4.5.3 Farmers Kit: - The items coming in Farmers Kit are packed in separate cardboard cartons.

4.5.4 Tool Kit: - The items coming in Tool Kit are packed in separate plastic/cotton bags.

4.5.5 Finished Reapers and manuals are dispatched to various destinations with mounting frame.

4.5.6 Packing Kit:- Various packings used in specific sub assy. are specially packed in Polythene covers to avoid any damage.

4.5.7 Export of Items:- Tiller, Reaper, Engine as well as spare parts meant for export are covered with plastic covers, and then put in sea worthy wooden boxes/crates.

4.6 Despatch/Delivery

4.6.1 On Instructions from Marketing Dept. in the form of Despatch Advices despatch of finished products, after proper packaging is made by Stores through appropriate mode of transport as per Despatch Advice along with supporting documents.

4.6.2 Damages occurred on Tiller during packing are to be properly monitored and bench marked using checklist. Wherever contract employees are engaged for packing of Tillers super check by Stores Supervisor (T.A.) is resorted to make sure the packing are made strictly as per requirements so that customer complaints & insurance claims are avoided.

4.6.3 Tiller/Reaper/Engine:- Finished Tiller/Reaper/Engines are FOR our works.

4.6.4 Spare Parts (Domestic) :- FOR destination

4.6.5 Exports:- FOB Cochin or CIF Destination as mutually agreed.

4.7.0 Preservation/protection

4.7.1 Tiller: - Rust preventive is applied on all plated parts

4.7.2 Exports:- Rust preventive is applied on all plated parts before packing. The Tiller/Reaper/Engine is fully covered with Polythene sheet/Tar coated paper is fixed to all sides of the sea-worthy wooden box.

5.1 Parts Warehouse

5.1.1 All components are received from vendors directly/through transporters along with invoices/Delivery notes. Based on dispatch documents RCV no. is allotted & IGRR is generated.

5.1.2 Defect free items are stored in respective storage bins. As long storage is not intended Oiling/preservation is not required regularly, but as and when required such action are undertaken.

5.1.3 Through inter location stock transfer Issue/Receipt, stock transfer can take place and the same is accounted in computer cardex.

5.1.4 All transactions in stock are done through computerized system in cardex.

5.1.5 Materials for outside machinery, packing etc, are also accounted through cardex.

5.1.6 Procedure for disposal of rejected material is same as in 4.4.

5.1.7 Spare parts are packed in Polythene covers/duplex/corrugated card board boxes/Tubular packing/Blister packing. After primary packing bar coded stickers are affixed and secondary packaging is done using card board boxes /wooden boxes.

5.1.8 Spare parts are despatched on FOR destination basis as per DAS raised by marketing along with invoices and documents.

5.1.9 Spare parts are issued to sales counter through stock transfer notes.

I. DOCUMENTS

Sl.No.	Document Description	Doc. No.
1.	List of short shelf life items for visual verification	STL:01
2.	Details of Preservation Method/Frequency of components	STW:02
3.	Lay out of Stores	STW:03
4.	Check List for despatch of Tillers	STW:04
5	List of Process	STL: 02
6	Action Plan for Objectives	STL: 03
7	RISK Assessment	STL: 04

III. FORMATS

Sl.No.	Format Description	Format No.
1.	Inspection and Goods Received Report (IGRR)	STF:01
2.	Master Record Index for Department Quality Manual	STF:02
3.	Stock Issue/Transfer Request	STF:03
4.	Stock Issue/Transfer Note	STF:03-C
5.	Stock Return Request	STF:04
6.	Stock Return Note	STF:04-C
7.	Inter Location Stock Transfer Issue	STF:05-C
8.	Stock Issue Cum Delivery Note (MLC)	STF:06
9.	Bin Card	STF:07
10.	Inter Location Stock Transfer Receipt	STF:08
11.	Material Presentation Tag (MPT)	STF:09
12.	Material Gate Pass	STF:10
13.	Delivery Note	STF:11
14.	Discrepancy Note	STF:12 C
15.	Report to MRM	STF:13
16.	Packing Slip	STF:16

ANNEXURE – A

HANDLING OF MATERIALS AT VARIOUS DEPARTMENTS

Sl. No.	CATEGORY/ LOCATION	STORE/PWH	Q.A.	MACHINE SHOP	ASSEMBLY
1	Unmachined: i. Castings	Fork lift/Walkie Trucks/Electric Stacker/Pallet Trolley	Fork lift/Pallet Trolley/Electric Stacker	Fork lift/Pallet Trolley/Jib & Overhead Crane	---
	ii. Aluminium Castings	Fork lift/Walkie Trucks/Electric Stacker/Pallet Trolley	Fork lift/Pallet Trolley/Electric Stacker	Fork lift/Pallet Trolley	---
	iii. Forgings	Fork lift/Walkie Trucks/Electric Stacker/Pallet Trolley	Fork lift/Pallet Trolley/Electric Stacker	Fork lift/Jumbo Electric	---
2	Machined: i. Castings	Fork lift/Walkie Trucks/Electric Stacker/Pallet Trolley/Jumbo Electric	Pallet Trolley/ Electric Stacker/ Jumbo Electric	Fork lift/Pallet Trolley/Jib & Overhead Crane	Forklift/ Pallet Trolley/ Jumbo Electric/ Walkie Trucks
	ii. Aluminium Castings	Pallet Trolley/ Jumbo Electric/ Walkie Trucks/ Fork lift/Electric Stacker	Fork lift/Pallet Trolley	Fork lift/Pallet Trolley	Pallet Trolley/ Jumbo Electric/ Walkie Trucks
3	Big items: i. Fabricated	Fork lift/Walkie Trucks/Electric Stacker/Pallet Trolley/Jumbo Electric	Pallet Trolley/ Electric Stacker/ Jumbo Electric/ Walkie Trucks	---	Pallet Trolley/ Electric Stacker/ Jumbo Electric/ Walkie Trucks
	ii. Sheet Metal	Fork lift/Pallet Trolley/Walkie Trucks/Electric Stacker/Jumbo Electric	Walkie Trucks/ Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric

ANNEXURE – A

HANDLING OF MATERIALS AT VARIOUS DEPARTMENTS

4	Small Items: i. Fabricated	Bins/Pallet Trolley/Jumbo Electric/Walkie Trucks/Electric Stacker	Bins/Pallet Trolley/ Walkie Trucks/Jumbo Electric /Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric
	ii. Sheet Metal	Bins/Pallet Trolley/Walkie Trucks/Electric Stacker	Bins/Pallet Trolley/Walkie Trucks/Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric
5	Special Items: i. Cam Shaft	In special bins/Pallet Trolley/Jumpo Electric/Walkie Trucks/Electric Stacker	Walkie Trucks/ Jumbo Electric/ Electric Stacker/ Wooden Rack	Pallet Trolley/ Jumbo Electric	Pallet Trolley/ Walkie Trucks/ Jumbo Electric/ Fork lift
	ii. Crank Shaft	In special bins/Pallet Trolley/Jumpo Electric/Walkie Trucks/Electric Stacker	Walkie Trucks/ Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric
	iii. Bearings	Pallet Trolley/Jumbo Electric/Walkie Trucks/ Electric Stacker	Walkie Trucks/ Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric
	IV. Oil Seals	In bins using Jumbo Electric & Walkie Trucks/ Electric Stacker/ Pallet Trolley	Walkie Trucks/Pallet Trolley/Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/ Jumbo Electric

ANNEXURE – A

HANDLING OF MATERIALS AT VARIOUS DEPARTMENTS

6	Others: i. Gears	In bins/Pallet Trolley/Jumbo Electric &Walkie Trucks/Electric Stacker	Walkie Truck/ Pallet Trolley/ Jumbo Electric/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/Jumbo Electric
	ii. Shafts	In bins/Pallet Trolley/Jumbo Electric &Walkie Trucks/Electric Stacker	Walkie Truck/ Jumbo Electric/ Pallet Trolley/ Electric Stacker	---	Pallet Trolley/ Walkie Trucks/Jumbo Electric
7.	Finished Tiller/Engine: 1. All the finished Tillers/Reapers are moved from place to place on tyres. 2. All the finished Engines are moved from place to place on trolley. 3. Power Tillers/Reapers packed in sea worthy wooden boxes meant for exports are handled with fork lift.				

ANNEXURE-B

STORAGE OF MATERIALS AT VARIOUS DEPARTMENTS

SL.NO.	CATEGORY/ LOCATION	STORE/PWH	Q.A.	MACHINE SHOP	ASSEMBLY
1	**UNMACHINED**				
	1. CASTINGS	Bins/designated Areas	Bins/designated Areas	Wooden platform	---
	2. ALUMINIUM CASTINGS	Bins/designated Areas	Bins/designated Areas	Wooden platform	---
	3. FORGINGS	Bins/designated Areas	Bins/Wooden boxes/designated Areas	Wooden platform	---
		Bins/designated Areas	Bins/designated Areas	Wooden platform	---
2	**MACHINED**				
	1. CASTINGS	Bins/Racks/De-signated Areas	Bins/designated Areas	Wooden platform	Bins/ Wooden platform
	2. ALUMINIUM CASTINGS	Bins/designated Areas	Bins/Wooden boxes/designated Areas	Wooden platform	Bins/ Wooden Platform
3	**BIG ITEMS**				
	1. FABRICATED	Designated Areas	Designated Areas	---	Designated Areas
	2. SHEET METAL ITEMS	Designated Areas	Designated Areas		Bins/Designated Areas

ANNEXURE-B

STORAGE OF MATERIALS AT VARIOUS DEPARTMENTS

4	**SMALL ITEMS**				
	1. FABRICATED	Bins	Bins	----	Bins
	2. SHEET METAL	Bins	Bins	----	Bins
	3. MACHINED CASTINGS	Bins	Bins	Bins	Bins
5	**SPECIAL ITEMS**				
	1. CAM SHAFT	Special Wooden Rack	Special Wooden Rack	Special Wooden Rack	Special Wooden Rack
	2. CRANK SHAFT	Designated Areas in Bins	Bins	----	Bins
	3. BEARINGS	Bins/Wooden Cup boards	Bins	----	Bins
	4. Oil Seals	Bins/Wooden Cup boards	Bins	----	Bins
6	**OTHERS**				
	1. GEARS	Bins	Bins	----	Bins
	2. SHAFTS	Bins	Bins	----	Bins
	3.STANDARDITEMS LIKE BOLTS,NUTS	Bins/Desig-nated Areas	Bins	----	Bins
	Finished Tillers/Reapers/Engines are stored in separately ear-marked area.				

PROCEDURE FOR HUMAN RESOURCEDEVELOPMENT (HRD) (QSP/HRD/19)

1.0 PURPOSE

To improve human effectiveness through a planned and effective management process.

2.0 SCOPE

2.1 To identify human resource requirements, job specifications.
2.2 To evaluate and select suitable personnel
2.3 To maintain the competence of personnel through HRD methods, including training.
2.4 To periodically appraise the performance of personnel and the effectiveness of training where applicable.

3.0 RESPONSIBILITY

The HR Dept. at Athani will have corporate control on the training in all Units. Responsibility to assess training needs rests with the concerned Dept. Heads/Unit Heads. Training programs as per Approved Training Calendar is arranged by HR Dept. in the Athani Unit and Unit Heads. The Dept. Heads will also plan proper utilization of the trained personnel.

4.0 PROCEDURE

4.1 A Personal Record Sheet HRF:01 is prepared for every employee which will give all personal particulars of the employee in regard to the educational qualification, experience, employment records and details of training received while in employment with KAMCO. Particulars in the personal record sheet up to Sl.No.7 will be filled in by the H R Dept. In Athani Unit the Personal Record Sheet received from H R Dept. will be maintained by HRD Section. In the other Units, Personal Record Sheets will be maintained by the Unit Head/HR Dept.

4.2 New appointees are put on an Orientation Training in the functionally related Depts. of the concerned Units before he/she is posted to the desired department. This training will be of one or two weeks duration depending upon the candidate and the employment proposed in KAMCO. In the Corporate Office, the training will be arranged by HRD. In the Units, this training will be arranged by the Unit Head or the person/dept. assigned with such a responsibility. An Orientation Training Report (HRF:02) is prepared for all new appointees. A person will be posted to a Dept. only after the orientation training is completed successfully. The Orientation Training Report will be sent to the H R Dept., after completion of training, for posting of the candidate.

4.2(a) In the case of transfers of employees from one department to another, an on the job/orientation training will be given in the new department, for a duration of maximum of one week. This will be applicable to all permanent employees(except Work Assts. And Peons) who are new to the particular department.

4.3 Other than Orientation Training referred in (4.2) in service training will be given only to permanent employees confirmed in service. In order to have uniform and need based training, corporate level Training Calendar is prepared at the Head Office at Athani. HRD Committee will consist of the following members.

1. General Manager (HR) i/c - Member(Convener)
2. General Manager-(Opns)i/c- Member
3. Dy. General Manager-(Fin) - Member
4. Dy. General Manager-(PU) - Member

4.4 Dept. Heads in Athani will assess the training needs of the employees in their dept. at the end of each Calendar Year and forward the same to HRD Section. In the other Units, training needs will be assessed by the Dept. Heads and will be forwarded to HR Dept by the Unit Head. HRD Section at the Head office will consolidate the training needs.

4.4.1 The training requirements forwarded to HR Dept.as per 4.4 above will be examined by the HRD committee. When training requirements of Units are considered by this Committee, respective Unit Heads are invited. Training Calendar will be prepared by the HRD Committee for approval by Managing Director. HRD Section will communicate the Annual Training Calendar to the Depts. of Athani and to the Units for implementation.

4.4.2 The HRD Committee will meet as often as necessary to review the Training Reports and also the Evaluation Sheets. Unit Heads are invited for such meetings.

4.4.3 At the end of the year, HRD Section will submit details of the training arranged against the Approved Training Calendar to MD with a copy to MR. Progress of training will be reported to the Management Review Meeting by HR Dept.

4.5 On receiving training each employee of Athani Unit is required to submit a Training Report (HRF:03) to HRD Section through the Dept. Heads. Employees of other Units will similarly submit the Training Report to the Unit Head or the person/Dept. assigned with the responsibility of training, which will be sent to HRD Section at H.O. Workshop, Seminars and short term courses are exempted from submitting the Training Report. The Training Report will be reviewed by the HRD Committee. If an employee is sent for training outside the Unit, effectiveness of training received by the employee is assessed by the concerned Dept. Head in all Units after six months and an Evaluation Sheet (HRF:04) is prepared. In Athani Unit, this will be sent by the Dept. Head to HRD Section. In other Units, this will be sent to the Unit Head or the person/Dept. assigned with the responsibility of training, who will forward the same to HRD Section at Athani. The Committee will review the Evaluation Sheet. If the Committee feels that the assessment should be brought to the notice of MD, a report will be submitted to him for information.

4.6 HRD Section maintains Personal Record Sheet periodically assessed by the HRD Committee to assess the employee's competence.

4.7 Evaluation of new employees after Orientation Training is initiated by HRD.

4.8 **RECORDS –**

1. Personal Record Sheet	HRF:01
2. Orientation Training Report	HRF:02
3. Training Report	HRF:03 (in English and Malayalam)
4. Evaluation Sheet	HRF:04
5. Report to MRM	HRF:05
6. OTJ/Orientation Format (Transfer only)	HRF:06

PROCEDURE FOR H R DEPARTMENT (QSP/PER/20)

1.0 PURPOSE

To ensure that right candidates are recruited as per requirements.
To ensure that employees' safety is managed effectively.
To ensure that employees' welfare is managed effectively.

2.0 SCOPE

Covers all personnel.

3.0 RESPONSIBILITIES

Department Head of HRM will be responsible to see that the procedure is followed by all Officers and staff in the Department.

4.0 PROCEDURE

4.1 The recruitment, promotion and pay fixation will be carried out as per the recruitment and promotion rules notified by the Company from time to time.

4.2 A Safety Committee is constituted by the Management from time to time. Equal No. of nominees of Management and Unions constitutes the Committee. The Committee meets every three months to assess safety requirements as per the Factories Act, 1948 and recommendations if any to the Management for consideration.

4.2.1 PROTECTION OF EYES

Workmen, who are working in grinding machines, milling machines, lathes and doing welding & fettling are provided with Goggles for protection of eyes.

4.2.2 PRECAUTIONS IN CASE OF FIRE

Fire extinguishers are provided in all departments. Selected employees based on their age and aptitude are given training to use fire extinguishers. A list of trained employees in fire fighting is displayed in the factory premises.

4.2.3 **UNIFORMS**

All eligible workmen are provided with uniform as a safety precaution.

4.2.4 **SHOES AND SOCKS**

All workmen in the Factory and Plant area are provided with Shoes and Socks as a safety measure.

4.2.5 **EXCESSIVE WEIGHTS LIFTING**

No person is allowed to lift heavy components. Cranes are provided for lifting the heavy components and these Cranes are tested and certified by competent authority as per Factories Act 1948.

4.2.6 **PROTECTION AGAINST DUST**

All workmen, working in places where dust is present, are provided with face masks.

4.2.7 **FIRST AID**

First Aid Boxes are provided in Production Depts. and employees handling First Aid are trained. List of Personnel trained in First-Aid is displayed in the Factory premises.

4.2.8 **ACCIDENTS**

All the accidents, are recorded and reviewed quarterly by HOD (HRM) and submits a brief report to Management, for any Corrective and Preventive Action. This is also discussed in the Management Review Meeting.

4.3 Following welfare schemes are in operation as per special Bye-laws prepared for each scheme:

4.3.1 Conveyance Advance

4.3.2 Group Personal Accident Insurance Scheme through Kerala State Insurance Department.

4.3.3 KAMCO Employees Group Gratuity-cum-Life Assurance Scheme in association with Life Insurance Corporation of India.

4.3.4 KAMCO Welfare Centre.

RECORDS

1.	Safety Equipment Issue Register	PLR:01
2.	First Aid Box Maintenance Record	PLR:02
3.	First Aid Training Record	PLR:03
4.	Crane and Compressor Test Record	PLR:04
5.	Accident Register	PLR:05
6.	Minutes of Safety Committee Meetings	PLR:06

5. LIST OF DOCUMENTS

Sl.No.	DOCUMENT DESCRIPTION	Doc. No.
1	List of Process	HRL : 01
2	Action Plan for Objectives	HRL : 02
3	Risk Assessment	HRL : 03

Cross Reference

The Factories Act 1948 – Chapter 4.
See Annexure (page 137) for statutory functions in all units

PROCEDURE FOR FINANCE AND COMMERCIAL ACCOUNTING (QSP/FIN/21)

1.0 PURPOSE

1.1 To ensure the Company's resources are fully utilised to satisfy the stake holders owners, customers, suppliers, employees and society at large and stay competitive in the market.

1.2 To ensure proper recording of all transactions in time relating to all financial operations of the company.

1.3 To ensure collection and compilation of data for Management Information System and timely reporting.

1.4 To ensure optimum level of inventory to keep finance cost low through appropriate controls.

1.5 To compile and prepare reports for pricing of end product by the Management, preparing of budget and exercise budgetary control in all financial aspects.

1.6 To ensure that the employees are satisfied by providing their eligible benefits correctly and timely.

2.0 SCOPE

The scope of this Quality System is further limited to achieve timely actions thro' System Procedure, up to date records maintenance and its retrieval and thereby to satisfy the stake holders in the Company. The financial transactions are recorded based on the Statutory Accounting requirements under Company's Act, Accounting Standards and other statutes and guide lines issued by ICAI.

3.0 RESPONSIBILITY

Divisional/Dept. Head of Finance is responsible to ensure that the procedure is followed by all Officers and Staff in the Depts.

4.0 PROCEDURE

Procedure relatedto various activities in the Divn. Is on the basis of Accounting Standards. This procedure mainly deals with the following functions for better customer/stake holders satisfaction.

1. Budget & Budgetary Control.
2. Management of Receipts
3. Management of Payments
4. Management of Assets
5. Management of Units
6. Auditing
7. Costing
8. Statutory Transactions
9. MIS

4.1 BUDGET & BUDGETARY CONTROL

4.1.1 Annual budgets are prepared for both Capital and Revenue based on the requirements furnished by various units and departments. The Departmental requisitions are analysed and after consultation with Departmental Heads and Corporate Divisional Management Group, same is finalised based on the disposition of funds. Consolidated budgets are presented to the Management/Board for approval.

4.1.2 Approved budget figures are informed to concerned Depts. for their execution and control.

4.1.3 Budget control of the Company is exercised by the Costing Dept. based on the Expense Statement of various Depts.

4.1.4 The budget is reviewed and revised if found required based on the deviations of actuals from budget. Such changes are submitted to Management/Board through a revised budget for approval. This revision is intimated to concerned Depts. for implementation.

4.2 MANAGEMENT OF RECEIPTS

Payments from dealers/customers received through Marketing Dept. is acknowledged by issuing proper receipts. Customer wise/dealer wise accounting is adopted. Documents outstanding are informed to Marketing Dept. once in a month for further actions.

4.2.1 Insurance, Freight outward, bank negotiations etc. are accounted and maintained to arrive the cost of sales. Daily cash sales proceeds in the Sales Counter and other receipts are verified and accounted.

4.2.2 Reconciliation of payments/receipts with dealer is prepared by Accounts Dept. and settled with Dealer.

4.3 MANAGEMENT OF PAYMENTS

4.3.1 Subject to the availability of funds, payment commitments are honored on due dates. Statutory remittances, payments to employees, various payment against services rendered and payments to suppliers constitute the outflow of funds. All payments are supported by approved vouchers. Authority for approval is determined by the Delegation of Powers issued by the Management from time to time. As far as possible payments to suppliers are effected as per order terms and conditions. Payments are passed based on IGRR. Stores Dept. forwards the IGRR giving sufficient processing lead time to Finance. Payments are usually effected by way of Cheque, which are forwarded/handed over directly along with all details of such payments.

4.3.2 Accounts of vendors are reconciled; with their accounts if submitted and statement is furnished on specific request. Position of outstanding for more than 6 months are intimated to the party through Purchase Dept.

4.3.3 Advance payments are settled within a time frame of 45 days. Any advances remaining unsettled beyond this period, is brought to the notice of Divl. Heads and followed up with the concerned depts.

4.4 MANAGEMENT OF ASSETS

4.4.1 Finance Dept. ensures that the entire assets of the Company are utilised to the most efficient manner and they are secured against all possible risks.

4.4.2 Finance Dept. maintains the records of all assets including Plant & Machinery, Fixed Assets, Furniture& Fittings of the Company.

4.4.3 Annual stock verification is arranged for above assets jointly with user Depts. and reconciled with the records kept by FIN. Obsolete/damaged items are deleted from records based on the procedure for disposal.

4.4.4 Make appropriate insurance and other statutory obligations to safe guard the assets of the Company.

4.4.5 Inventory control is the basic responsibility of Purchase and Stores Dept. Supply schedules are monitored and reviewed as and when required based on the production and spare sales. The effectiveness of Inventory Management is reviewed by Finance Dept. through regular inventory checks and advise necessary CAP to Depts.

4.5 MANAGEMENT OF UNITS

4.5.1 All the Units are under corporate control from Head Office. Their operations are constantly monitored to see that Company objectives are fulfilled. Unit inspections are also carried out at periodic intervals and policy deviations if any are brought to the notice of corrective actions.

4.5.2 Funds required for all Units are arranged by Finance Dept. based on Budget sanctions and to the requirements of Units. Marketing functions are centralized and payments from customers and dealers are usually received at Head Office.

4.5.3 Internal Audit Dept. is vested with Corporate functions. This Dept. audit the accounts of Units and confirm the compliance to the accounting manual and system procedure.

4.6 AUDITING

4.6.1 Internal Audit Dept is vested with Corporate Functioning . Internal Audit take care of the 'CARO' requirements of Company's Act and also act as a 'Watch Dog' of the entire Organisation. The primary responsibility of the Dept. is to ensure that the policy decisions of the Management is strictly followed by the functional departments and is verified by the Internal Audit Dept. General Audit functions are carried out as per "Accepted Audit Practices" and general guidelines issued by ICAI and also according to the Audit Manual approved by the Company. Internal Audit undertakes auditing of Payroll /Purchase/Work Orders/Bills payables, perpetual inventory checks of Stores of all Units.

4.7 COSTING

4.7.1 Costing records are maintained as per Cost Accounting Record Rules and they are subjected to Cost Audit ordered by Company Law Board.

4.7.2 Costing Dept. advises Management and Depts. the potential areas of cost reduction.

4.7.3 Costing Dept. analyze the cost of production on yearly basis to facilitate Management to take buy/make decision.

4.7.4 Costing Dept. advises Accounts Dept. the cost of Rejections as per MRN/Warranty Claims to be deducted from the vendors. Actual deduction is effected by Accounts after sufficient time is given for vendor to appeal.

4.8 STATUTORY TRANSACTIONS

4.8.1 Salary and other payments, recoveries and their remittances etc. in the case of employees are done in time.

4.9 MANAGEMENT INFORMATION SYSTEM (MIS)

4.9.1 The following reports are given to the Management for proper control and policy formulations.

Sl.No.	Reports Generated	Period	Nature	Submitted
1	Bank Balance Position	Daily	Confidential	DGM
2	Consolidated Receipts & Payments	Monthly	Confidential	DGM/MD
3	Monthly Operation Report	Monthly	Confidential	DGM/MD
4	Consolidated MIS Report	Quarterly	Confidential	DGM/MD/BOARD
5	Internal Audit Report	Half Yearly	Confidential	MD/BOARD
6	Negotiation Documents – Pending Clearance	Monthly		DGM/MD
7	Statement (Account) of Dealers	Annually		DGM(M)/MD

MIS of confidential nature is not physically audited under this System Procedure but its submission is verified with the concerned officials.

5. LIST OF DOCUMENTS

Sl.No.	DOCUMENT DESCRIPTION	Doc. No.
1	Accounts Manual	FIM:01
2	List of Process	FIL : 01
3	Action Plan for Objectives	FIL : 02
4	Risk Assessment	FIL : 03

PROCEDURE FOR I.T. FUNCTIONS (QAP/EDP/22)

1.0 PURPOSE

To ensure that the electronic data is securely managed within the network of computers in KAMCO.

2.0 SCOPE

All Units of KAMCO.

3.0 RESPONSIBILITY

Divisional/Department Head of Systems will be responsible to ensure that the procedure is followed by all Officers and Staff in the Dept.

4.0 PROCEDURE

4.1 Hardware/Software requirements are reviewed and assessed as and when it requires.

4.2 All Dept. may send their H.W requirements for additions or modifications through email to system department. These requests are assessed as and when received.

4.3 Systems Dept. shall forward with an initial assessment and remarks to Divisional Head. Div. Head can assess the request considering budget and necessity. Div. Head can send the request for final approval of MD or reject the request with reason.

4.3.1 The same procedure may be followed for major changes required in Software.

4.3.2 A Register of all Computers and peripherals in the Company shall be maintained with the following details.

1) IGRR No. and Date
2) P.O. No. and Date
3) Suppliers Name
4) Warranty/AMC Start and End date
5) Service Contract vendor.
6) Anti-virus installed/not installed Computer peripherals excluding power supply/regulator equipment's shall not be out of warranty/AMC not more than three months.

4.4 DATA MANAGEMENT AND SECURITIES

Users are identified and created by the System administrator by assessing the total requirements of the Company.

System security is defined so that no Dept. can access other Dept. resources without proper sanction.

4.5 SECURITY AGAINST VIRUS

Server and nodes will be provided with any reputed online anti-virus software which will beupdated at least on monthly basis.

4.6 BACK UP

4.6.1 A daily data backup of database server is to be take and copied to at least one desktop hard disk in addition to server hard disk.

4.6.2 Back up copy or data on every Friday is sent to MD`s office replication purpose.

PROCEDURE FOR INFORMATION TECHNLOLOGY – INFORMATION SECURITY MANAGEMENT (QSP/SYS/23)

1.0 SCOPE

Information Security Management (ISM) is for use by those who responsible for initiating, implementing or maintaining in their Organization. ISM provides a common basis for developing Organizational Security Standards and effectiveSecurity Management Practice and to provide in inter-organization/Units dealings.

2.0 DEFINITION

Information Security - Preservation of Confidentiality, integrity and availability of information.
Integrity: Safeguarding the accuracyand competencies of Information and Processing Methods.
Availabilty : Ensuring that authorized users have access to information and associated assets

3.0 SECURITY POLICY

Security Policy - KAMCO recognizes information is an asset, has value to Organisation and need tobe suitably protected to ensure business continuity, minimize business damage and maximize return on investments and business opportunities.

Objective -To provide Management direction and support for information security.Organisationhas set a clear Policy direction and demonstratesupport throughissue and maintenance of KAMCOInformationSecuritypolicy. This document is approved by Management, published andcommunicatedamongemployees,as appropriate.KAMCO tries to comply ISO (IEC 17799-2000(E)) applicable to InformationTechnology - Code of Practice for ISM. ISM documents are applicable toElectronic Data Information only. Other informationare covered underdocument and data control (Ref. Procedure QSP/MRO/02 & 03 of ISO 9001-2000).

1. An organizational I.T committee shall be decided by MD and can be reconstituted as and when he requiresso.

2. The committee under takes
   a. Reviewing and recommending I.T plans and policies for the company

b. Reviewing the long term and short term I.T plans and policies of the company.

c. Network connectivity policies and plans.

d. Monitoring significant charges in exposure of information assets.

e. Reviewing and monitoring information security incidents.

f. Evaluation of I.T system audit conducted by sub committees.

g. Identifying new areas to be computerized.

PHYSICAL ASSETS

Resource Registers and Maintenance of systems

1. H.O.D should ensures that no new programmes, screen savers, games, back ground pictures or any types at external files should installed, copied or executed other than preinstalled software forcompanies purpose, in the systems entrusted to them. Any noticed is reported to IT Committeeand System Manager for appropriate action.

2. Computers having CD writers, Readers, Floppies or any other mechanism which will help to PORT external data should be separately identified and need special sanction from IT committee and should need extra care

3. SOFTWARE MANAGEMENT

SOFTWARE ACCESS

1. Software shall be divided into three major classes.

A.System Software : Operating system, Communication systems, different drivers, Antivirussoftware's, etc - which are exclusively used for system generation,upkeeping and maintenance.

The selection and implementation procedures of system software will be decided by I.Tcommittee time to time.

B. ERP Software. : Activities of different departments, divisions units and totalcompany itself is integrated and made online using the customized ERP system.

Implementation and secured by the following system.

1.1 For the whole Company (Corporate level)

A. MD's level (Corporate level)
B. GM's level (Inter Divisional level)
C. DGM's level (Divisional level)

1.2 For Departments (Department level)

A. Sr.Executive level
B. Supervisory level
C. Assistants level

1.3 Considering these levels, Department Heads can decide how their Application menu choicescan be divided into these three levels.

Example:

Step-1

Sr.ESuprAssi

1.Cash Voucher,1,0,1	Y	YY	
2.Bank Voucher,1,0,1	Y	Y	N
3.Sales Voucher,1,0,1	Y	Y	N
4.Purchase Voucher,1,0,1	Y	YY	
5.General Journal Voucher-Fin,1,0,1	Y	N	N
6.Receipt / Payment Allocation,1,0,1	Y	N	N
7.Bank Reconcilliation,1,0,1	Y	Y	N
10.Credit Note,1,0,14	Y	YY	
11.Debit Note,1,0,1	Y	YY	
12.Cash/Bank Book,2,0,1	Y	Y	N
13.Sales Journal,2,0,1	Y	Y	N
14.Purchase Journal,2,0,1	Y	Y	N
15.General Journal,2,0,1	Y	Y	N
16.General Ledger,2,0,1	Y	Y	N
17.Sub Ledger,2,0,1	Y	YY	
18.General Ledger Trial Balance,2,0,1	Y	YY	
19.Ledger Summary,2,0,1	Y	YY	
20.Transaction Summary,2,0,1	Y	N	N
21.Profit Statement,2,0,1	Y	N	N
22.Balance Sheet,2,0,1	Y	N	N
23.Ageing Analysis,2,0,1	Y	N	N
24.Receipt / Payment Allocation,2,0,1	Y	N	N
25.Account Hierarchy,3,0,1	Y	N	N

..... Etc

A table like above is prepared and notified to Division / Departments and based on this table three level roles can be assigned.

2. IDENTIFYING USERS

2.1 Now Department Heads can allot works to different Employees in different Category.

Eg.

Assistants

---

1. Vargheese. No . XXX
2. MadhuNo . XXX

Etc...

Supervisory

---

1. Gopalan No XXX
2. Sundaran No XXX

Etc...

2.2 Special Category

If Department Head want a different category of Role to be defined apart from the abovethat can also be considered.

Eg.

A different Role for Cashier shall be constituted and can be assigned to a particular employee.

3.For the Whole Company (Corporate level)

We are having the following online modules:-

1. Financial Accounting.
2. Inventory Accounting
3. Sales Accounting
4. PF Trust
5. Maintenance
6. Calibration
7. Personnel & Administration
8. Attendance
9. Payroll
10. Incentive

Corporate Management can decide how these modules shall be distributed among SeniorExecutives through a table similar to Department allocation table. Here Management can fully or partially allot various modules among senior executives.

4. Systems Department shall create suitable ROLES and USERS who shall have stipulated rightsandto ensure that users shall not operate other options than allotted.

INFORMATION ASSETS (HANDLING & STORAGE):
---

1. Proper Back Up System is established to store Company's database by the Systems Department.

2. A Register/Document indicating the retention period of Company's database is warrantee in Five years.

3. Media of storage is decided by Systems .Department under the approval of I.T. Committee from time to time considering the latest Technology. It is documented and maintained by System Manager andyearly revised by I.T. Committee.

4. Disposal of media:-

Media shall be disposed securely and safely when no longer requiredwith prior approval of Committee . A disposal Register maintained for this purpose.

5. Defective media is also disposed as above.

6. Replacement or up gradation is done under the supervision of Systems Departmentand ensuresno strategic data is carried/taken to outside the Company by the Vendor. All such incidents shouldbe properly recorded in the register and should be informed and Audited by I.T.Committee.

7. Exchange of media is made with written permission from I.T.Committee.

USER ACCESS MANAGEMENT:

1. Information assets can be classified in the following Groups:-

    1. Transactions & Personnel Database.
    2. Technical Database.
    3. Departmental Database.

    Transaction & Personnel Database need Server access to user. Different users are created with different roles and each user is assigned unique Password with right to change passwords.

2. Technical Database:

Technical database like drawings and other details are under the responsibility of R&D and maintained under Quality Management System.

3. Departmental Database:

H.O.D. is responsible for Departmental Data Security. Systems. Department providingnecessary support and advise.

LIST OF DOCUMENTS

Sl.No.	DOCUMENT DESCRIPTION	Doc. No.
1	List of Process	SYL : 01
2	Action Plan for Objectives	SYL : 02
3	Risk Assessment	SYL : 03

PROCEDURE FOR IDENTIFICATION OF RISKS AND OPPORTUNITIES - QMS

1.0 Purpose:

The purpose of this procedure is to outline the process for identifying the risks and opportunities with respect to QMS.

2.0 Scope

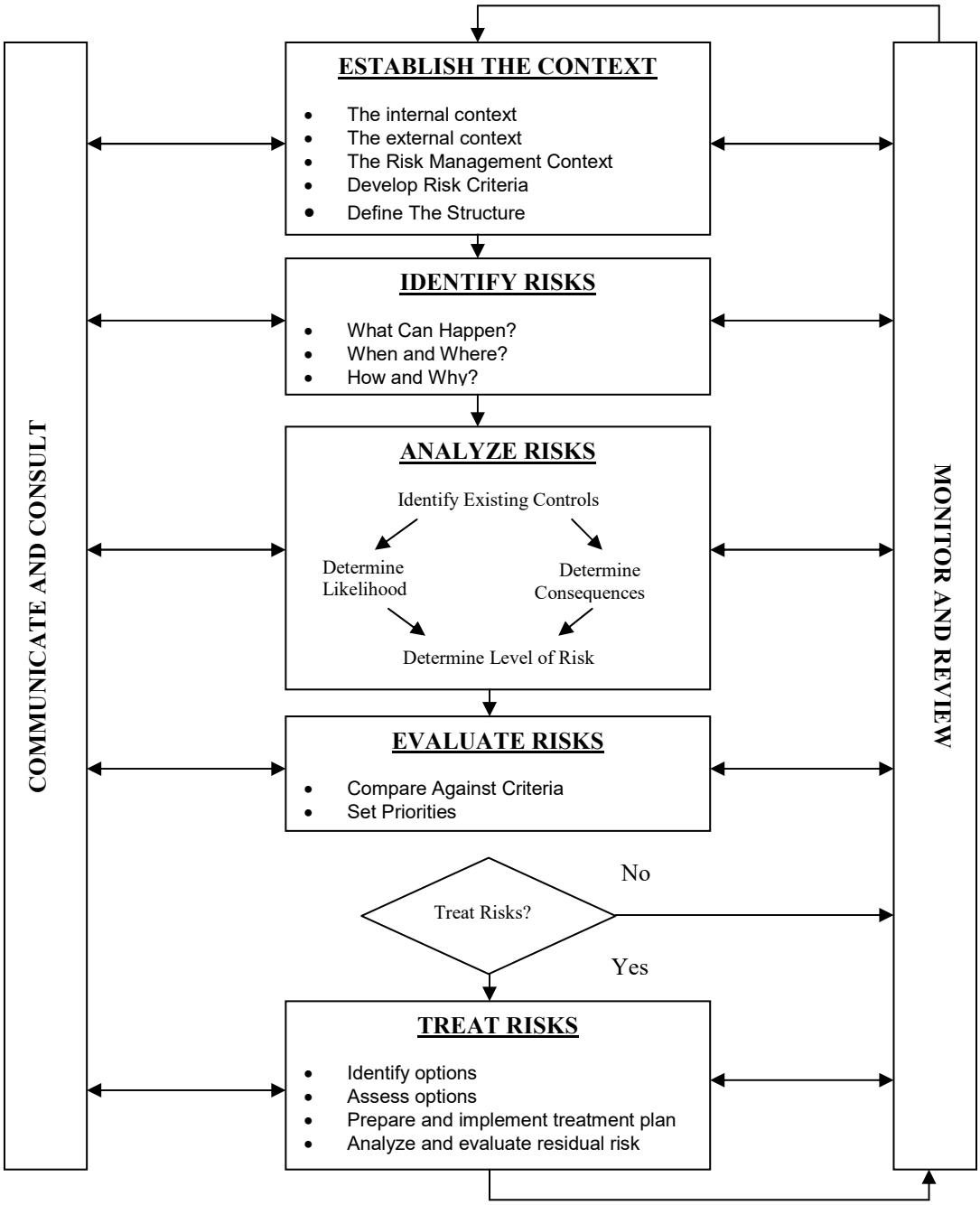
All activities carried out in the company affecting QMS.

3.0 Responsibility

MR & Team

4.0 Procedure

The procedure for identification of RISKS and Opportunities is as shown in the figure below:


ESTABLISH THE CONTEXT
The internal context
The external context
The Risk Management Context
Develop Risk Criteria
Define The Structure
IDENTIFY RISKS
What Can Happen?
When and Where?
How and Why?
ANALYZE RISKS
Identify Existing Controls
Determine Likelihood
Determine Consequences
Determine Level of Risk
EVALUATE RISKS
Compare Against Criteria
Set Priorities
Treat Risks?
No
Yes
TREAT RISKS
Identify options
Assess options
Prepare and implement treatment plan
Analyze and evaluate residual risk
COMMUNICATE AND CONSULT
MONITOR AND REVIEW

RISK MANAGEMENT PLAN

Existing risk controls are evaluated against the following criteria to determine effectiveness, and whether further Treatment may be necessary.

EXISTING CONTROLS ASSESSMENT	
EFFECTIVE	Indicates effective risk controls are in place resulting in minimal net risk.
ADEQUATE	Indicates risk controls are in place and generally effective, however, an opportunity for refinement exists to further reduce risk. Evaluate for further risk treatment.
FAIR	Indicates risk controls are presently being developed, or are only partially effective. Application of risk treatment is required to mitigate risk.
POOR	Indicates risk controls have not yet been developed, or are ineffective. Application of risk treatment is required as a matter of priority.

RISK MANAGEMENT PLAN

LEVELS OF LIKELIHOOD CRITERIA			
	LEVEL	**LIKELIHOOD**	**PROBABILITY OF OCCURRENCE**
LIKELIHOOD	1	Rare	10%
	2	Unlikely	30%
	3	Possible	50%
	4	Likely	70%
	5	Almost certain	90%

LEVELS OF CONSEQUENCES CRITERIA			
	LEVEL	**IMPACT**	**EFFECT**
SEVERITY	1	Insignificant	No impact
	2	Minor	Minor impact
	3	Moderate	Some impact/ action required if necessary.
	4	Major	Moderate impact/ action required
	5	Severe	Severe impact/ action required

RISK MANAGEMENT PLAN

The **overall Risk Level** is determined using the Risk Assessment Scoring Chart, and is assigned a level of Low, Moderate, or High.

RISK ASSESSMENT SCORING

LIKELIHOOD						
	5 ALMOST CERTAINTY	L	M	H	H	H
	4 LIKELY	L	M	M	H	H
	3 POSSIBLE	L	L	M	M	H
	2 UNLIKELY	L	L	L	M	M
	1 RARE	L	L	L	L	M
		1 INSIGNIFICANT	2 MINOR	3 MODERATE	4 MAJOR	5 SEVERE

SEVERITY

RISK	ACTION PARAMETERS
High	The activity **MUST NOT** proceed. Alternate controls put in place to reduce the risk rating to LOW or MEDIUM.
Medium	The activity can proceed so long as the highest level and most appropriate risk control measures have been identified and implemented.
Low	The activity may proceed with normal supervision after implementing the control measures

5.0References

ISO 9001 - 2015 - Quality Management System Standard

6.0Records

Risk Management Form

ANNEXURE - STATUTORY FUNCTIONS

Requirements	Statutory/ Regulatory	Periodicity	Month	Units	Dept Responsible
Submission of Annual Returns (Form21) to Inspector of Factories & Boilers	S	Annual	January	In all Units	HR
Remittance of Land Tax	S	Annual		In all Units	HR
Renewal of Panchayat License	S	Annual	Februay	In all Units	HR
Payment of Profession Tax for 2nd half	S	Half yearly	March	In all Units	HR
Annual Return of Pension Fund Contribution	S	Annual	April	Athani for all units	HR
Annual Return of Provident Fund Contribution	S	Annual		Athani for all units	HR
Gratuity Policy Renewal	R	Annual		Athani for all units	HR
ESI Contribution Return (Form 5) Half yearly(within 45 days from March 31)	S	Half yearly	May	In all Units	HR
Kerala Labour Welfare Fund Act Contribution - Half yearly	S	Half yearly	June	KU(for KU, PU & MU)and AU	HR
Submission of Half Yearly Returns(Form 21) to Inspector of Factories and Boilers	S	Half yearly	July	In all Units	HR
Building Tax Payment	S	Annual	September	In all Units	HR
Payment of Profession Tax for 1st half	S	Half yearly		In all Units	HR
Competent Person Renewal	S	Annual		Athani for all units	HR
Renewal of Factory License	S	Annual	October	In all Units	HR
ESI Contribution Return (Form 5) Half yearly(within 45 days from September 30)	S	Half yearly	November	In all Units	HR
Kerala Labour Welfare Fund Act Contribution - Half yearly	S	Half yearly	December	KU(for KU, PU & MU) and AU	HR
Return of Pension Fund	S	Monthly	Monthly	In all Units	HR
Return of Provident Fund	S	Monthly		In all Units	HR
Sales Tax Registration Renewal	S	Annual	April	Athani for all units	Finance

DISTRIBUTION OF CONTROLLED COPIES OF QUALITY SYSTEM PROCEDURE MANUAL

COPY NO.	COPY HOLDERS
01	Managing Director
02	Management Representative
03	ISO Co-ordinator (KU)
04	ISO Co-ordinator (PU)
05	ISO Co-ordinator (MU)
06	Certification Agency

COPY NO.	
ISSUED TO	
ISSUED BY	Management Representative
DATE	01.08.2020