NASHCO GENERAL TRADING LLC - UAE

QUALITY MANUAL

STATUS	Copy No.

Approved by : **K. Mohamed Nazar (Chairman)**

Date : 01-11-2015

Authorized by : **Avinash Sagar KM (Managing Director)**

Date : 01-11-2015

CONTENTS

SECTION 1

INTRODUCTION, SCOPE & CONTACT ADDRESS.

INTRODUCTION.

NASHCO General Trading LLC was started in the year 2010. This Company is one of the renowned Company of NASHCO International Trade linkl in INDIA. with its Head Office located at the India Kerala.

NASHCO extends the very professional experience and Customer focussed approach to all Business needs falling into our expertise. This has reflected in obtaining highest reputation in the Industry. The whole business activites of ***NASHCO*** . are being administered through Trading.

NASHCO has given emphasis for Customer satisfaction through continuous efforts for improving its technical capabilities and Quality Management System. Management, as the core of ***NASHCO*** . plays a vital role for achieving its objectives by :-

- Identifying potential task upon the entrusted orders and resolving them effectively within the required period.
- Expert determination of each problem.
- Maintaining a long-term relationship with Customer.

Trading Facilities of NASHCO :

We are Supplying Industriel components, Building Materials, Medical & General components. Etc.

Manufacturing Facilities of NASHCO :

The manufacturing facilities encompasses Plastic Injection Machine and Poly Carbonate Sheet & ThermoForming for facilitating the product flow from raw material to finished product.

Machine shop facilities include : -

- Plastic Injection M/C
- Thermo Formin

Assembly Shop :-

The product passes through various assembly stages where required assembly and stage inspection / testing is done in line with the documented system & inspection plans. Movement of product through various stages is done using conveyor system.

Finally the product is tested and ensured prior to packing.

➢ **Manufacturing Facility:**

To support the above requirements, The following manufacturing facilities:-

- Plastic Injection - 390 Ton
- Plastic Injection – 238 Ton
- Plastic Injection – 138 Ton
- Plastic Injection – 108 Ton
- Plastic Injection – 80 Ton
- Plastic Injection – 60 Ton
- Thermo Forming
- Pastic Regrinding M/C
- Other related Machinery and Equipment for Production.

➢ **Product Range of MDS**

- Plastic Injection, Blow, Thermoforming Moulds.
- Sheet Metal Dies
- Pressure and Gravity Die Casting Dies.
- Rubber and Bakalite Moulds.
- Spinning Dies.
- Jigs and Fixtures.
- Spare Parts for moulds / dies and machinery maintenance.
- Repair and modification of dies and moulds.
- Production of Plastic Parts / Components.

➢ **Work Force :**

NASHCO has a highly motivated team of skilled and experience personnel to execute the confirmed order successfully. The present work force, acts as the backbone of our Company to succeed the competition in the filed of its business.

Contact Address :

Name of the Company	---	*NASHCO* **GENERAL TRADING LLC - UAE**
Postal Address	---	AJMAN United Arab Emirates POST BOX - 18144 - . UAE
Telephone No.	---	+ 971 6 7434943
Mobile UAE	---	+ 971 508536542
Mobile K.SA	---	+966 504140485
Mobile INDA	---	+91 984 666 1609
E – mail	---	nashcogroup@gmail.com nazarnashco@gmail.com

NASHCO Bank account details	**Bank : NATIONAL BANK OF RAS AL KHAIMA** **UAE DIRHAM Account** **IBAN: AE4104 00000 1923 8512 3001** (US DOLLAR Account IBAN: AE1404 00000 1923 8512 3002) BRANCH: AJMAN SWIFT: NRAKAEAK Bank Address : RAK BANK , POST BOX 1531 DUBAI - UAE ROUTING CODE: 804020101	

SECTION 2

POLICY, RESPONSIBILITIES & COMMUNICATION

2.0 Quality Policy and Objectives :

2.1 The following is the Nashco Group Quality Policy which reflects the Company's goal of developing a culture and capability committed to the achievement of customer satisfaction and continual improvement.

The Department Managers / Heads are responsible for determining the objectives and measurement of the Process performance. The performance of the Process is measured according to the Objective / Measurement Matrix at the defined interval and incase of non-achievement of the target, the route cause (s) is identified and appropriate actions being carried out for improvement.

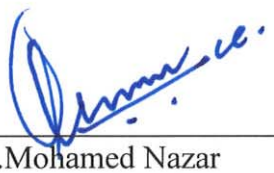
QUALITY POLICY

"Achieve customer satisfaction and meet requirements through continuous improvements of the Quality Management System"

Employee participation

and

Continuous improvement



K.Mohamed Nazar
Chairaman- Nashco Group
Mobile: 00966 504140485

2.2. GENERAL STATEMENT.

The fundamental understanding and need for quality is an established element of the Nashco culture. The knowledge and importance of achieving quality has been communicated to all staff through a phased education program. External customer satisfaction is recognized as an essential business requirement in today's highly competitive environment and this is reflected in the Company Quality Policy.

All the Nashco processes have been analyzed in detail with Process Owners appointed for all the key processes within the Core Business Process and for the critical support processes.

The concept of Process Owners is to ensure that adequate technical competence is available to the understanding and development of the Nashco processes and their inter-working.

Process based approach has ensured that the quality system has been developed based on business needs and objectives throughout to achieve effective working with full focus on customer requirements, both internal and external.

The Process Owners and their key team members have been trained in process analysis techniques and procedure writing skills to ensure the required capability is available in developing the quality system and its documentation.

Subsequently, a quality system has been established based on the detailed analysis of the Nashoc Group individual activities and processes and internal customer / supplier interfacing requirements and mechanisms. The resulting procedures and documentation provide an essential baseline of "know-how" for effective management control, audit and improvement.

The Executive management Nashco take prime responsibility for the successful implementation of any quality initiatives through their Quality Council.

The Senior Management of the Nashco meet on a regular basis to conduct reviews of the ongoing suitability and effectiveness of the Nashco quality system, taking account of audit results, improvement opportunities, overall performance measures and customer feedback information. These reviews are minuted and any required actions are fed back to responsible management for information and any required actions response, including the Quality Council.

Internal audits are planned and controlled by the Quality Assurance Department with the Nashco Quality Manager, using a distributed resource of internal auditors, selected and trained from a variety of disciplines across the Nashco organization. This ensures an adequate skills spectrum and ongoing credibility and effectiveness of the auditing system.

2.3 AUTHORITY, RESPONSIBILITIES AND COMMUNICATION.

- The Quality Council is responsible to communicate and demonstrate commitment to the Quality Management System and provide required inputs for the improvement of Quality Management System. The Quality Council approve the Quality policy & objectives, review the progress of implementation, resolve any issues identified, authorize resources, appoint Management Representative and promote awareness and communication of activities.

- The Management Representative for the Nashco acts with the authority of the Nashoc Quality Manager, supported by the Quality Council, to ensure the Quality System's continuing compliance with the requirements. He has the overall responsibility for the ongoing maintenance and support of Nashco Quality System.

- The assigned Process Owners are responsible for ensuring that the Nashoc processes are technically capable of consistently achieving their required objectives.

- The Departmental Managers / Heads and Supervisors are responsible for ensuring the continuous, fully effective implementation and functioning of the individual processes and of the total Quality System through continuing compliance with established documented practices, methods, techniques and general requirements.

- The communication between various levels and functions is addressed in the procedures. The Factory / Dept. Manager is responsible to receive, record and respond for communication s pertaining to general administration.

- Authorities and Job Responsibilities are identified in the approved Job Descriptions which are maintained and controlled by the Organization and Development Department of the Nashco.

- Also key responsibilities for personnel involved in any of the Quality System processes are addressed within each procedure describing this process

SECTION 3

QUALITY SYSTEM DOCUMENTATON STRUCTURE

3.0 QUALITY SYSTEM DOCUMENTATION STRUCTURE.

3.1 Introduction :

The Quality System Documentation Structure for Nashco is aligned to the Business Process.

The Business Process is a diagrammatic representation of the work flow through the Nashoc Group business. The central section represents the "Core Business Process" through which value is added and which is directly focused on the delivery of products to the external customer. Around this are the Support processes, without which the Core Business Processes could not continue to successfully function.

All the procedures, work instructions and other supporting documentation are directly related to this model and to the individual processes identified in the model. The procedure set provides an easy to follow, process based description of the total quality system. Responsibilities (authorities / interrelationships) for the process activities are described and clarified within the procedures and work instructions. Any documentation generated by the processes when in use (records, plans, reports) are also identified.

The documentation set for the Nashco Quality System is hierarchically structured into four levels. These are described below.

3.2 Quality Manual. (Level 1 document).

The Quality Manual is the level 1, or top level document within the Nashco documentation hierarchy. The Quality Manual is intended as an introductory description of the Nashco business and its structure, pointing to that documentation within which the working detail is described.

The essential inclusions are, policy, organization and a top level description of the Nashco business based on the Business Process of this manual. It essentially provides a functional specification for each Core and Support process and at the same time addresses the process linkages (quality system architecture), thus providing a basic insight into the nature and structure of the Nashco business. The relationship of the individual processes to the clauses.

This Manual shall be reviewed annually and amended as appropriate.

3.3 Procedures. (Level 2 documents).

Each individual procedure describes an individual process related to an appropriate core process or support process within the Nashco Business Process. A process is a parallel and / or serial sequence of events and activities through which work is done to achieve a desired result.

Each procedure in the Nashco documentation set begins by stating the purpose of the process and scope of the process described by the procedure. The purpose describes what the process is expected to achieve when working effectively. The "Scope" defines the start and finish points of the process. All the individual start and finish points of the processes in the Core Business Process set connect together to give the overall logical flow of work through it. Records or other documentation generated by the process when operating are described. Retention times are given for the individual records. Any required additional detail on how work is done within individual activities of the process is described in an appropriate work instruction. These are cross referenced in the procedure.

3.4 Work Instructions. (Level 3 documents).

Work instructions will not normally be required where operator skills, education and / or experience are appropriate or sufficient to the task in hand. However, this will be weighed against the risks to continuity of achievement in the event of operator change.

Work instructions provide the lower level descriptive detail on how to perform a particular activity in a process. These are provided where it is agreed that the absence of such a document would impair the effective and consistent achievement of the required results. Work instructions will include any required reference to special methods or tools required to successfully perform the activity and to any standards or specifications with which the finished work must comply.

All work instructions included in the overall documentation set are referenced in the procedure set listed in Quality Manual.

3.5 Reference Documents. (Level 4 documents).

Documents at this level include records, plans, minutes of meetings, reports, etc. which are documents usually generated by the processes when in use. Standards and specifications, checklists, codes of practice will also be included at this documentation level.Quality Records are maintained for the retention times specified within each of the Quality System Procedures. They are maintained and controlled by the Process Owner who is responsible for ensuring their availability to the concerned personnel as an essential requirement for effectiveness of his process.

Records are maintained in a good condition and by the way that ensures easy accessibility and retrieval.

SECTION 4

QUALITY SYSTEM OVERVIEW.

4.0 QUALITY SYSTEM OVERVIEW.

This section addresses the Business Process model for Nashoc Group which equates to the Quality System, the subject of this Quality Manual.

In the succeeding process is individually described in functional terms against their purpose within the overall Business Process Structure.

4.1 BUSINESS PROCESS - BRIEF DESCRIPTION OF CORE PROCESS.

4.1.1 Inquiries / Orders for Products / Services are received from Customers and are reviewed technically. Anything outside the scope of Engineering Industries Co. capability is formally regretted and communicated to the Customer. Also, any clarifications required are resolved with the customer through Sales.

4.1.2 After confirming that the enquiry is feasible, it is progressed and concept design, cost estimation and delivery schedule are received from respective department. Based on this a Quotation is prepared and sent to the Customer. A design review is conducted during the proposal stage to evaluate the accomplishment of design & manufacture through all stages.

4.1.3 Upon acceptance of the quotation by the Customer and receipt of confirmed order, a Sales Order is prepared and distributed to the concerned function for further processing.

4.1.4 Upon receipt of the Sales Order, the Design Dept. progresses the completion of design against a specifically prepared Design Plan. The concept design prepared during the enquiry stage is reviewed against any new requirement provided by the Customer and modification if any are carried out accordingly.

4.1.5 The Production / Fabrication drawings and Assembly drawings are then prepared and where required approved by Customer before being distributed to Production.

4.1.6 Based on the Sales Forecast, Orders in hand, production capacity and stocks, a Master Production Schedule (MPS) is developed. From this Material Requirement Plan (MRP) and Material Purchase Plan are prepared.

4.1.7 The Purchase Requisition are then raised as per the Purchase Plan and forwarded to Purchasing Function for further processing.

4.1.8 A Monthly Production Schedule (MPS) is then prepared referring to Master Production Schedule (MPS), delivery commitment and other influencing factors and material availability are checked to meet the Schedule. In case of non-availability of materials in stock, Purchase Requisitions are raised and forwarded to Purchase Function for processing.

4.1.9 Upon receipt of the Purchase Requisition(s), enquiry / request for quotation is prepared and forwarded to vendors referring to the Approved Vendor List (AVL). Purchase Orders are then issued against the accepted Quotations / Proforma Invoices.

4.1.10 Received material is initially checked for quantity and any obvious damage and subsequent inspections are then carried out in accordance with the established Inspection Plans. Accepted material is properly identified and transferred to Stores.

4.1.11 Any non-conforming material is segregated, identified and dealt with as per the established Control Non-Conforming Materials Procedure.

Material is subsequently issued to production in response to the OBOM / formal Store Requisitions.

4.1.12 The required material along with the necessary production documents received from PPC are provided to the concerned Work Station for making the parts (including welding, Heat treatment as applicable) in accordance with production schedule provided by PPC. Parts produced are inspected in accordance with drawings and appropriate Inspection Plans. Any non conformance, is identified and dealt as per the established Control Non Conforming Materials Procedure.

4.1.13 The parts are finally assembled as per the Assembly Drawings and inspected as per appropriate Inspection Plan.

4.1.14 Where required, the Finished Products are validated through applicable performance / reliability test in line with established test description / inspection plan for validation. In case of non-satisfactory performance, the required changes are made to ensure satisfactory performance.

4.1.15 Finished Products are then transferred to Finished Product Stores in line with the established Handling Practices and necessary documents are updated for stock control. Upon receipt of Dispatch Order from Sales, Delivery Note and necessary documents required for shipping are are prepared and products are dispatched to the Customer accordingly and acknowledgements are obtained.

Where required, products can be inspected by Customer representation by prior arrangement before dispatch.

SECTION : 5

CORE AND SUPPORT PROCESS SUMMARIES

5 CORE AND SUPPORT PROCESS SUMMARIES.

5.1 Respond to Customer Enquiry and Confirm Order :

5.1.1 The purpose of this process is to ensure full understanding of the Customer requirements to deliver a quotation and / or respond against a Customer enquiry within the agreed time. Also to ensure that the Engineering Industries Co. is capable for executing the work according to the Customer requirements.

5.1.2 An annual sales forecast is prepared in line with Market requirements and forward to PPC to enable planning for the corresponding years.

5.1.3 Customer enquiries are initially reviewed technically to ensure that they are within the capability of **Nashco** to satisfy the Customer requirements. If not, then the Customer is informed through a regret letter.

5.1.4 If acceptable, the Enquiry is progressed and Design, Costing, delivery details are requested from the respective departments.

5.1.5 Upon receipt of the above, a Quotation is prepared based on the estimated cost & delivery and forward to Customer along with design / technical details.

5.1.6 The Quotation is then followed up and queries if any are resolved to the Customer satisfaction to seek a confirmed order.

5.1.7 Upon receipt of Purchase Order from the Customer, it is reviewed for Customer requirements with concerned Department and discrepancy if any, are resolved with Customer accordingly.

5.1.8 Upon final acceptance of Purchase Order, a Sales Order is issued to all concerned Departments to enable the commencement of all activities.

5.1.9 In case of amendments to P.O a revised Sales Order is issued upon review and acceptance of amendments.

5.1.10 Upon complying the payment terms and conditions a Dispatch Order is authorised to release the delivery of product to Customer.

5.1.11 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented. Customer satisfaction / Customer feed back information is collected and where required, appropriate improvement actions being implemented to ensure Customer satisfaction.

5.2 Design Tool:

5.2.1 The purpose of this process is to develop in response to an inquiry cost effective concept design for Tool, BOM & submit technical details (where applicable) for offer preparation.
Also following receipt of order, to prepare necessary detailed design / technical submittal (where applicable) along with assembly / production drawings, BOM referring to the applicable standards and customer requirement.

5.2.2 On receipt of Customer requirements through Design Request, the technical specifications are reviewed in detail and incase of any incomplete or ambigious data, it is then clarified with Customer.

5.2.3 A Design plan is then developed and reviewed at appropriate stages to monitor the progress.

5.2.4 A concept design is then prepared according to Customer Specification and applicable design standards followed by a verification to ensure that the design output meets customer specification and other applicable regulations if any.

5.2.5 A Design review is then conducted to evaluate the accomplishment of design through all stages of its development. In the event of any potential problem in its execution, appropriate actions are proposed.

5.2.6 The concept deisgn including technical details are forwarded to PPC and Sales Department to enable costing & quotation submission. Where modifications are required by Customer, an updated concept design is forwarded to Customer through Sales for approval.

5.2.7 Upon approval and confirmation of order, detailed design, production / assembly drawings are prepared and issued to PPC to enable commencement of production.

5.2.8 Product design validation is carried out as per Performance Test Description and results are recorded. Failures if any, are investigated and any design changes are incorporated to ensure satisfactory performance. These test records are maintained as design validation records. Product performance records at Customer premises are received and maintained as design validation records.

5.2.9 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemente

5.3 Schedule Production and Request Materials:

5.3.1 The purpose of this process is to ensure that manufacturing is carried out according to a given sequence considering the customer requirements, also provide production documentation and request materials to ensure availability on time taking into account the lead times and the other constraining factors.

5.3.2 The Master Production Schedule (MPS) is prepared considering Annual Sales Forecast, Sister Factory Requirements and other influencing factors such as capacity, stocks, current orders etc. and which is reviewed on a quarterly basis and updated according to the changes in requirements.

5.3.3 A Material Requirement Plan (MRP) is then prepared considering MPS and spare parts required. Further the Material Purchase Plan is prepared using MRP as the basis and considering all influential factors such as stock, current orders, economical batch quantity etc.

5.3.4 The due Purchase Requisition are then raised considering lead time, re-order level etc. and forward to Purchasing Dept. for actioning.

5.3.5 A Monthly Production Schedule is then prepared based on orders received, MPS taking into consideration of capacity, delivery commitment, material availability etc, and distributed to the Production Department.

5.3.6 The production documents such as Work Order, Route Card, and Bill of Materials are prepared in line with Monthly Production Schedule and minimum Work Order quantity and distributed along with production drawings to Production Department to commence the production.

5.3.7 The production status is then monitored and upon completion a Dispatch Order is raised to Sales Department to coordinate payments and delivery of products.

5.3.8 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.4 Purchase Materials/Products:

5.4.1 The purpose of this process is to ensure that materials / parts are made available in time according to the specified requirements through competitive bidding.

5.4.2 On receipt of the purchase requisitions from PPC Dept., Purchasing respond by raising requests for quotations from the appropriate approved vendors.

5.4.3 On receipt of responses from suppliers, the quotations are entered onto a Quotation Comparison Sheet and reviewed and compared and where necessary re-negotiated. For accepted quotations, Proforma Invoices are requested, which when received, lead to the Purchase Orders (P.O) being raised. The P.O's are then followed up to ensure receipt of material on time.

5.4.4 Shipping documents (Bill of Lading, Packing List , etc.) are received from the vendor and customs clearance is organised through the appointed Clearing Agent through whom payment is organised within time and it is ensured that the materials are brought into **Nashco** facilities.

5.4.5 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.5 Receive, Store and Issue Materials/Parts.

5.5.1 The purpose of this process is to ensure that purchased materials / parts are received in accordance with the specified requirements. Also, to ensure proper storage / control and make materials / parts ready for issue.

5.5.2 When received, materials are initially checked for quantity and any obvious damage which if apparent, is dealt with either through liaison directly with the vendor or through insurance agencies for imported materials. The materials are unloaded in accordance with established handling practices and moved to the receiving area.

5.5.3 The received materials are inspected, identified and recorded in line with the appropriate Inspection Plan. The Goods Receiving Report (GRR) and the inspection report are completed and maintained. Any rejections are dealt with as per established

'Control Non Conforming Materials procedure" and a copy of the inspection report along with the GRR are sent to Purchasing.

5.5.4 The materials are allocated in stores as per the Floor Plan and the Stock Card is updated. The stock condition is checked on a 6 months basis and any rejections are dealt with according to the established Control Non-Conforming Materials Procedure.

5.5.5 Materials are prepared for issue in line with the Work Order and O.B.O.M. A Goods Issue Voucher is prepared upon material issue and the stock is updated accordingly.

5.5.6 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.6 Produce Parts

5.6.1 The purpose of this process is to ensure that all parts are produced in accordance with the defined scheduling practices and complying with approved production drawings, specifications and within agreed time frame, ready for Store / use in subsequent operation for final assembly as required.

5.6.2 On receipt of Production Documents, the materials are issued according to Store Requisition for consumable items and OBOM for Raw-Materials which are then allocated to the concerned work centres according to the appropriate handling practices.

5.6.3 The machines are set-up and a First-Off is produced according to Process Sheet, Drawings and Work Instructions which is inspected for each operation in line with the appropriate Inspection Plan. On acceptance of First-off, the mass production is commenced for this operation. Any first off non conformity are investigated and actioned to get successful first off.

5.6.4 Parts are produced in line with Drawings and QC Process Sheets and self-inspection is conducted for each operation. Parts are also QC inspected on a confirmation exercise according to the appropriate Inspection Plan and a daily report is developed with a copy to Production.

If rejections exceed the agreed limit, a Defect Report is raised, production is paused and investigations are carried out for identifying causes and any necessary actions are taken. All rejects are dealt with according to the established Control non conforming materials procedure.

5.6.5 Parts requiring Heat treatment, Painting are processed as per established 'Heat Treat Parts' and 'Paint Parts' procedure respectively.

5.6.6 Parts are transferred to the Store where they are labelled. The Goods Receiving Report or In process Receiving Report is prepared and the stock is updated with the parts allocated in line with the Stores Floor plan and appropriate Handling Practices.

5.6.7 Where parts require Welding, it is carried out in accordance with established 'Welding Procedure Specification' employing qualified welders in accordance with applicable codes / standards.

5.6.8 All Plastic Parts, Rubber Parts are produced as per the established Procedures which is similar in structure with Produce Parts Procedure.

5.6.9 The Production is monitored on daily basis through Daily Production Reports and controlled.

5.6.10 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.7 Final Assembly & Packing

5.7.1 The purpose of this process is to ensure that finished products are assembled in accordance with document requirements, in line with the production schedule and then packaged to documented requirements with correct accessories and customer documentation.

5.7.2 The received production documents are reviewed and materials required for assembly of finished products are received from Stores against OBOM, Stores Requisition. Any discrepancies are resolved with Stores / PPC.

5.7.3 Upon allocation of materials to concerned work stations, the Assembly activities are commenced according to Process Sheet and Work Instructions. The assembled product is inspected at every stage of assembly in line with established inspection plan.

5.7.4 Upon completion of the Product assembly and satisfactory inspection, the finished products are validated through applicable performance / reliability test in line with established test description & inspection plan and the results are recorded where required customer approvals are obtained.

5.7.5 Any rejection from inspection, Test are identified and dealt with as per established Control Non-Conforming Materials Procedure.

5.7.6 The Product is then labelled and packed with required accessories and a final inspection is conducted. The finished products are then transferred to Stores through Transfer Slip in line with established Handling Practices.

5.7.7 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.8 Receive, Store and Dispatch Finished Products:

5.8.1 The purpose of this process is to ensure that the finished products are received in accordance with the specified requirement, stored in a good condition, handled, and loaded as per prescribed requirements to ensure delivery in time and in good condition in the required quantities with necessary dispatch document.

5.8.2 The Finished Products are received from Production and reviewed against the Transfer Slip. The Products are then allocated in Stores as per Stores Floor Plan following established handling practices.

5.8.3 The Finished Product Receiving Report (FPRR) is prepared and stock cards are updated accordingly.

5.8.4 In case of any Customer inspection is required prior to release of the product, it is arranged in coordination with Sales and QC and acknowledgement is taken.

5.8.5 In case of exports, the necessary Export documents are prepared to facilitate the export delivery.

5.8.6 Upon receipt of Dispatch Order from Sales Dept., the Finished Products Issue Voucher (FPIV) and Delivery Note are prepared and the products are dispatched to the Customers along with applicable shipping documents following established handing practices. The stock cards are also updated for issuance.

5.8.7 The stock condition is checked on a six monthly basis and any deteriorated / damaged products are identified and dealt with as per the established Control Non-Conforming Materials Procedure.

5.8.8 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.9 Respond to Customer Complaints.

5.9.1 The purpose of this process is to ensure that customer complaints are received, analyzed and understood and that appropriate actions are taken to satisfy the customer and to prevent recurrence.

5.9.2 All complaints are received, recorded, reviewed initially to determine major or repetitive in nature.

5.9.3 Where more investigation is required, it is done in liaison with the Factory Manager by forming an Investigation team / expert concerned with the objective of finding out the root cause. On completion of investigation, the remedial action is determined and implemented to achieve customer satisfaction and where appropriate corrective actions are initiated to prevent recurrence. An Improvement Opportunity Report (IOR) is also raised where a need arises.

5.9.4 The Complaints are reviewed on a regular basis to determine common elements and concerns and to prepare summary information for Management Review to initiate further improvements as required.

5.9.5 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.10 Maintain Equipment.

5.10.1 The purpose of this process is to ensure that required maintenance work of processing equipment is planned, implemented and controlled, to maintain process capability, to prevent and minimize unplanned down time.

5.10.2 Maintenance requirements are determined through reference to individual machine performance records leading to the development of an overall ''Master Preventive Maintenance Plan' defining maintenance frequencies to avoid breakdown and which are optimised in line with production, availability requirements.

5.10.3 Spare part requirements are also determined based on individual machine performance records and appropriate stocks are planned and organised with Purchase Department to ensure availability in line with planned maintenance frequencies.

5.10.4 A Monthly Maintenance Plan is prepared and accordingly the required Preventive Maintenance activities are performed. Also the breakdown maintenance are performed on receipt of Requisition from respective production sections.

5.10.5 Machine performance records are maintained, which are reviewed on a quarterly basis against the established planned maintenance requirements. Any needed adjustments to maintenance frequencies are incorporated into the plan.

5.10.6 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.11 Control Non-Conforming Materials:

5.11.1 The purpose of this process is to ensure that materials/ products that are non-conforming to the specified requirement are prevented from being used unintentionally or being delivered to customers. Also to provide, implement and confirm an agreed disposition for the non-conforming materials/ products.

5.11.2 When non-conformity is identified a defect document is raised and the details are entered on 'Non Conforming Material Record' for action by Q.C. The materials initially labelled, identified as per established guidelines and where required transferred to the 'Non-Conforming Material Area'.

5.11.3 The material is initially reviewed and if immediate action is possible, this is implemented by those responsible for the material followed by inspection and test as appropriate. Any required work instructions are made available or are prepared accordingly.

5.11.4 In case of major defects, actions to eliminate the route cause of non- conformities in order to prevent the recurrence are identified, implemented and the effectiveness is ensured.

5.11.5 In the event that there is no immediate action possible, then the documentation is submitted to the 'Material Review Board' to investigate the non conformity and to decide disposition, which may be:

- Use As Is
- Rework
- Assign for Alternative Use
- Reject / Scrap

5.11.6 Each disposition status is followed through according to agreed procedures, e.g. authorised concessions or production permits are raised for "Use as Is". The non-conformity documentation is updated and closed out accordingly. Where required, the customer's concurrence is formally negotiated through the 'Quality Assurance', **Nashco**

5.11.7 A collective analysis report of 'Defect Reports' is prepared and discussed in the 'Management Review Meeting'.

5.11.8 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.12 Approve and Maintain Vendor:

5.12.1 The purpose of this process is to ensure that vendors / sub-contractors are approved on the basis of demonstrated capability to provide supplies of materials / components which consistently meet the **Nashco** requirements, e.g., 'Purchase Orders' in terms of drawings, technical specifications, delivery and cost. Also to ensure continual monitoring of vendors' / sub-contractors' performance.

5.12.2 When a new vendor is required to be added to the 'Approved Vendor List', or a new material / part is required to be purchased (maybe by an existing vendor), various sources of information are addressed such as Industrial Directories, recommendations from originator, to identify potential sources. Enquiries are then directed to the vendors in respect of the nature of items requiring to be purchased.

Responses are analysed to develop a short list which is followed by requests for quotes and information on the prospective vendor's quality system, production capacities, and delivery terms as per the 'Vendor Inquiry Checklist'. Sample material / parts are also being requested where applicable.

5.12.3 A 'Vendor Evaluation Committee' manages the evaluation taking into consideration material / part criticality, existing experience of vendor is for new material / part, vendor registrations, response to earlier information request.

5.12.4 Where appropriate, samples are inspected and tested by the 'Vendor Evaluation Committee' in liaison with the related departments which maybe followed up by a vendor visit and assessment in line with established guidelines. A report and recommendations is then finally produced through the Committee.

5.12.5 Trial orders are placed and deliveries monitored for an agreed period at the end of which a final evaluation report is issued recommending acceptance or rejection of the vendor to the 'Approved Vendor List' (AVL).

5.12.6 All vendors on the AVL are monitored based on the criteria established in the 'Vendor Rating System'. Any performance deterioration is notified to the vendor and appropriate corrective action is requested. Any failure to improve results in ultimate removal from the AVL.

5.13 Train Staff:

5.13.1 The purpose of this process (which is overall managed and controlled through Nashco is to identify training needs, develop training plans and deliver training to ensure personnel have the required capability for assigned tasks and that appropriate records are maintained.

The required training can either be "on the job" training or through external / internal delivered courses / seminars etc.

5.13.2 It is the Responsibility of individual department heads to determine the training requirements for their staff and to submit these to the Organisation and Development department within **Nashco**. However, on the job training is the direct responsibility of the Engineering Industries Co. line management who must develop and submit appropriate plans for this.

5.13.3 All inputs for training are reviewed with department heads to confirm needs, to establish priorities and to ensure ability to deliver where external sources are involved. Agreed requirements are then consolidated into an overall "Annual Training Requirement" for **Nashco**, which is reviewed by the **Nashco** Board. When approved, the Training Plan is developed and circulated to all concerned department heads.

5.13.4 Training can either be delivered in-house or externally, dependent on available resources and training capabilities.

5.13.5 The Training Plan is reviewed on a bi-annual basis and on completion of individual training sessions; the training is reviewed for effectiveness in liaison with both the trainer and each individual trainee. Training records are updated accordingly.

5.13.6 An **Nashco** Orientation Programme is developed for each employee newly joins **Nashco** which includes visiting the Quality Dept. for awareness **Nashco** Quality Systems.

5.13.7 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.14 Control Documentation:

5.14.1 The purpose of the 'Control Documentation Process' is to ensure that the Nashco Quality System documentation is established and maintained and that specifically:

- Each document is uniquely identified.
- Each document is approved and authorised by nominated personnel.
- The latest versions are available to persons who need them.
- That obsolete versions are taken out of use.
- That the index of the documentation set for the quality system is defined and maintained.

5.14.2 Any new document to be introduced into the 'Quality System' must first be authorised by the Quality Manager and any subsequent requests to update procedures.

He then responds by liaising with the appropriate Process Owner for the procedure in question.

5.14.3 All procedures and work instructions and related forms, are indexed in a central file, which is maintained by the 'Quality Department' with the 'Documentation Controller'.

5.14.4 The distribution of all key documents is controlled by Distribution Lists which are also subject to documentation change control.

5.14.5 The 'Documentation Controller' controls a central file in which all the master copies of 'Quality Manuals', 'Procedures' and 'Work Instructions' are held (both hard copy and CD) and he is responsible for issuing controlled copies against the agreed distribution lists. He is also responsible for managing and controlling the issue of amendments to these and for receiving and destroying returned obsolete copies.

For every issue of documentation made, (Quality Manual, Procedure and Work Instructions) 'Documentation Controller' shall monitor the return of Document Transmission Slip to ensure receipt.

5.14.6 All requests for changes to procedures (and related documents) are directed in the first instance to the 'Quality Manager' who then liaises with the responsible 'Process Owner' to determine acceptance or rejection and to affect the changes.

Any subsequent incorporation of changes to the master procedures (or related documents) is organised by the 'Documentation Controller' who controls and maintains the Master word processing CD's. Changes are approved (signed) by the Process Owner prior to any distribution of the revised procedure version.

5.14.7 Any uncontrolled copies of the 'Quality Manual', procedures or related documentation are stamped, "Uncontrolled copy will not be updated".

5.14.8 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.15 Conduct Internal Audits:

5.15.1 The purpose of this process is to ensure the effective implementation of the documented quality system to identify any non-conformance through scheduled audits and to eliminate them in a timely and effective manner.

5.15.2 Internal quality audits are scheduled by the 'Quality Assurance Department'. The Schedule is formally approved and addresses every process of the documented quality

System. The frequency of audits is dependent on status and importance of each process but audits are required to be conducted at least once every year on each process.

5.15.3 Audits are conducted against the schedule in line with established procedures.

5.15.4 The audits are conducted by qualified auditors who are not directly responsible for the process (or department) to which they have been assigned to audit. The auditor resource is spread across the organisation to ensure an appropriate mix of skills and experience.

5.15.5 Completed audits are reported in a standard report format and any non-compliance is formally recorded on 'Corrective Action Requests' attached to the report. Reports are addressed to the responsible auditee (Manager or Process Owner)

5.15.6 The manager or 'Process Owner' responsible is required to respond to the report by initially defining the time scales for corrective action as well as identifying the actions to be taken.

5.15.7 Follow up audits are performed on completion of the actions to verify their effectiveness and the Corrective Action Requests are closed out accordingly.

5.15.8 The findings of internal audits are summarised by the Management Representative for ultimate presentation to the Management Review Committee who review the continuing effectiveness and suitability of the 'Engineering Industries Co. Quality System'.

5.15.9 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.16 Conduct Management Reviews:

5.16.1 The purpose of this process is to ensure that the quality system established in the Engineering Industries Co. continues to be suitable and effective in consistently achieving the planned levels of quality and the overall aims of the business.

5.16.2 'Management Reviews' are conducted by the 'Management Review Committee' at least two times a year. Reviews are conducted against a standard agenda. The Review Secretary, with the 'Quality Assurance Department', ensures availability of all relevant material and required attendees - other than the 'Management Review Committee Members'.

5.16.3 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.17 Identify Improvement Opportunities:

5.17.1 The purpose of this process is to ensure any non conformance or opportunity for improvement, from any source, (other than internal audits), are identified, recorded, analysed and progressed in a timely and effective manner.

5.17.2 The need for corrective action can occur at any time during the operation of the Nashco Quality System'. As such, it is necessary to have a corrective action process, which is available at any time to any one.

5.17.3 In the event of any non-conformance or "Improvement Opportunity" being identified, other than through the 'Internal Audit System', an 'Improvement Opportunity Report' (IOR) must be raised and sent to the 'Quality Assurance Department' by the originator. IOR's can also be generated as a follow up to investigating customer complaints. The IOR provides details of the nature of the Non-conformance / Improvement Opportunity, and indicates which department or person is responsible.

5.17.4 The 'Quality Assurance Department' reviews it to identify and agree a Solution Owner to progress any required corrective action.

5.17.5 The 'Quality Assurance' liaises with the 'Solution Owner' to determine the need for a team and, if required team membership, the team being determined against the nature of the IOR report details.

5.17.6 Time scales, action plans and other appropriate information are determined by the 'Solution Owner' (with the team if appropriate).

5.17.7 The 'Solution Owner' initiates investigative action and identifies the immediate actions to be taken, updating the IOR accordingly.

5.17.8 The 'Solution Owner' feeds back progress (and any updated plans), to 'Quality Assurance' in writing, on a regular basis. In the event of slippages, or no feedback, 'Quality Assurance' prompts action as appropriate.

5.17.9 When the solution to prevent re-occurrence is defined, the IOR is again updated. When tested and demonstrated to be acceptable, or otherwise, this is recorded on the IOR. Following feedback, 'Quality Assurance' closes out the IOR on the file.

5.17.10 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.

5.18 Calibrate Instruments.

5.18.1 The purpose of this process is to ensure that all measuring equipment used for either product or in-process measures which directly affect product quality, is identified and registered. Also to ensure that their required measurement accuracy is maintained through conducting appropriate calibration and adjustments at prescribed frequencies against certified equipment traceable to recognised national / international standards or documented references.

5.18.2 An equipment register is maintained indicating the calibration source (internal or external). Based on the register, a calibration schedule is also maintained with calibration frequencies based on manufacturers' recommendations and / or known instrument performance. The schedules are periodically reviewed for any required frequency adjustment.

5.18.3 Equipment can either be calibrated in house in the **Nashco** Calibration Laboratory or externally by approved contractors. Movement logs are maintained to track the location of equipment and which indicate the advance notice required to external contractors.

5.18.4 Calibration Status is continually monitored for ready identification of due dates and hence timely availability of the equipment for calibration. All records are maintained by the **Nashco** Calibration Laboratory in liaison with Quality Control. Any instrument failing to meet calibration requirements is identified and separated. Where required replacement is made available (calibrated in line with the established **Nashco** procedure) and where it is not possible, alternative arrangements are made to enable effective production to continue.

5.18.5 All instruments are suitably labelled to indicate their calibration status.

5.18.6 The performance of the process is measured against the Objective / Measurement Matrix at defined interval and in case of non-achievement of the target, route cause(s) are identified and required improvement actions implemented.