Volume 1 – QUALITY POLICY MANUAL
(Policy, scope, organisation and systems)

Volume 2 – QUALITY PROCEDURE MANUAL
(General procedures and responsibilities)
COMPANY PROFILE

Established in 1855 on the existing site, close to the centre of Birmingham, Currie & Warner was originally established as a brass foundry. Until the end of the 19th century the company was mainly a supplier and machinist of brass castings for the piano and gas lamp industry.

With the first availability of production turning machines, at the start of the 20th century, the company began to move more in the direction of being a turned-parts producer.

Progressively, the emphasis changed from casting work to machinists of brass bar, until in the early 1950's the first available multi-spindle automatic lathes were introduced from the Wickman Machine Tool Company, which was sited only 20 miles away in Coventry.

However, it was not until the early 1980's that the company's profile began to blossom, as one of the country's leading manufacturers of high volume, precision turned parts, specialising exclusively in brass or copper-based alloys.

The catalyst was the management "buy-out" in 1982 by the current owner, Mr Martyn Lloyd, who instigated a move towards technical innovation at the highest quality level.

With the award in 1986, of the UK quality standard certification BS 5750 Part II, the momentum for change had reached a peak.

At that time, Currie & Warner's export achievement's were nil, but with the technical expertise built up over many years and the newly acquired quality registration, the company set about exporting to Europe and USA.

Today, the company is considered as one of Europe's leading exponents of specialist turned parts in brass, with an enviable record in both the UK and overseas markets.

The principal elements to this success, has been the ingenuity of the company's engineers in developing specialist tooling techniques, to overcome some of the most complex machining problems.

More recently, the company has seen a considerable investment in computerised systems to accurately control all aspects of design, manufacture, quality and administration.

As Currie & Warner moves into the next century further high-technology investment will ensure the company's status as a leader in the highly competitive turned parts industry.
VOLUME 1 – QUALITY POLICY MANUAL

CURRIE & WARNER HOLDINGS
GROUP STRUCTURE

The Currie & Warner Group

Group Chairman
Martin Lloyd

Turned Part Division
Managing Director
Keith Sedgebear

Currie & Warner Ltd

Electrical Products Division
Managing Director
Tush Thakore

Peppers Cable Glands

Hose Product Division
Managing Director
Andrew Lloyd

Samco

GroupDirector
(Matthew Lloyd)

Group Accountant
(Chris Bates)

Silflex
PRODUCT DISTRIBUTION

Gas Industry
Water Fittings and Plumbing (HVAC)
Electrical Industry
Pneumatic Industry
Telecommunications
Window Fittings
Automotive
Fire protection
Life Jacket Inflation Devices
Renewable Energy

Exporting to
Denmark
USA
Sweden
Germany
Bulgaria
Hungary
Mexico
China

PRINCIPAL COMPANY MANUFACTURING CAPABILITY

2 off Wickman 2 ¼” x 6 spindle automatic machines
16 off Wickman 1 ¾” x 6 spindle automatic machines
11 off Wickman 1” x 6 spindle automatic machines

A variety of single spindle capstan’s, rotary transfer machines and special purpose secondary operation machines.
QUALITY POLICY STATEMENT

Currie & Warner Ltd is committed to a quality policy, which shall ensure delivery of its products and services "defect free and on time".

The policy of the company is to:

(i) manufacture and supply parts which fully conform to the customer's requirements, relating to quality, reliability and delivery.

(ii) use the company’s considerable experience and knowledge in the production of repetition turned parts, to assist customers in the cost effective design and development of both existing and new products.

(iii) ensure that suppliers of raw materials, goods and services conform to all requirements, ensuring that Currie & Warner are provided with raw materials, goods and services of a consistently high quality, to enable the company to meet its commitments to all customers.

(iv) continually improve the effectiveness of the quality management system by the setting and achieving of quality objectives / improvement opportunities within a given time scale.

(v) maintain an adequate level of profit while ensuring that performance and reliability are as a minimum comparable with any similar competitor.

(vi) ensure that all specified standards as well as any statutory or regulatory requirements are strictly adhered to.

(vii) recognise that the responsibility for quality lies with all employees of the company and hence to stimulate and encourage interest and pride in their work.

(viii) conduct periodic quality audits to ensure that all parts of the quality management system continually conform to our quality manual and hence the requirements of ISO9001:2008.

(ix) communicate the quality policy of Currie & Warner throughout the organisation.

(x) hold regular system review meetings so as to continually review the suitability of the quality policy and all aspects of the quality management system.

Signed ..........................................                                      Date ...........................................
(K.G.Sedgebear - Managing Director)
**BS EN ISO 9001:2008**

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4 Quality management system

Related Documentation:

BS EN ISO 9001:2008 Requirement 4

Currie & Warner Ltd Quality Policy Manual

Currie & Warner Ltd Quality Procedure Manual

Currie & Warner Ltd Authorised Documents Folders

Currie & Warner Ltd Authorised Stamps Folders

Quality Control Procedures:

QCP 01 - Document control
QCP 02 - Issue and control of drawings
QCP 12 - Quality records
4   Quality management system

4.1 General requirements (BUSINESS PROCESS)
4 Quality management system

4.2 Documentation requirements

4.2.1 General
The quality system has been defined and documented in different volumes.
Volume 1.

The quality policy manual, documents the quality policy of the company, and is based on the requirements of BS EN 9001:2008.

Volume 2.
The quality procedure manual is cross referenced to the quality policy manual and contains the procedural documents which describe how policy is turned into practice.
They also demonstrate how the company considers, plans and controls its operations to meet the customer’s specified requirements.
The procedures define the quality related records, which are maintained and analysed to assist control of the system.

4.2.2 Quality Manual
The quality manual shall include details and the justification for any exclusions from BS EN ISO 9001:2008.
The scope of Currie & Warner’s activities shall be the manufacture of precision turned components to customer specifications whilst specialising in technically difficult components to close tolerances and high surface finishes.

4.2.3 Control of documents
It is Currie & Warner's policy to ensure the effective operation of the quality system, through the control of essential company quality documents.
Controlled documents shall include:

The quality policy manual
The quality procedure manual
Drawing specifications
Product quality plans
Product component drawings
National & International standards

The documents are issued to nominated individuals and the latest issues are available at working locations as necessary.
4 Quality management system

Changes and modifications are authorised by nominated representatives prior to use. Wherever possible the nature of the change shall be identified. Individuals controlling the issues shall ensure that all holders have up to date information. The system provides for the withdrawal of obsolete documents. Should they be retained for reference only they shall be suitably identified i.e. stamped "OBSOLETE". The review of quality documents shall be carried out by the original issuing authority, which in most cases shall be under the direct control of the Quality Assurance Manager.

4.2.4 Control of records
Currie & Warner Ltd recognises the need to demonstrate objective evidence, to show effective control of the product and quality system. Documented procedures provide for the identification, computer data input, hard copy print out and rapid retrieval of quality records.

The type of records controlled are as follows:-

Calibration records
Internal audit reports
Training records
Nonconformity reports (customer complaints / returns, internal rejects, corrective / preventive actions)
Raw material purchase orders
Supplier rejects
Supplier approvals
Records of inspection

Records shall be retained that demonstrate full product traceability. All records shall be stored such that they are protected from damage, loss or deterioration due to adverse environmental conditions. Quality records shall be retained and disposed of (including the responsibility for disposal) as per the tables in QCP 12. Quality records shall be made available for evaluation by customers as a demonstration of the company’s quality controls.
5 Management responsibility

Related Documentation:

BS EN ISO 9001:2008 Requirement 5

Currie & Warner Ltd Quality Policy Manual

Currie & Warner Ltd Quality Procedure Manual
5  Management responsibility

5.1 Management commitment
The Managing Director shall have ultimate responsibility for the quality management system of Currie & Warner and for the quality of the products of the company.

The Managing Director shall demonstrate his commitment to the quality management system by establishing and signing a quality policy statement, which shall be communicated to all employees via the works notice board and at induction training. The quality policy shall include Currie & Warner’s commitment to meeting both customer and statutory and regulatory requirements.

The Managing Director shall chair regular management system review meetings which shall include the setting and review of quality objectives / improvement opportunities and a review of resources in all areas.

5.2 Customer focus
Currie & Warner’s commitment to customer focus can be demonstrated via membership of the BTMA (British Turned parts Manufacturing Association) and by the regular attendance of trade shows.

Currie & Warner also recognises the need for the accurate determination of all customer requirements, in order to provide complete customer satisfaction.

All customer requirements shall be reviewed prior to the acceptance of sales orders to ensure that:

(i) Currie & Warner has a clear and unambiguous statement of the customer’s needs.
(ii) the requirements are within the current capabilities of the company.
(iii) the need for any additional skills or resources is identified.
(iv) any discrepancies are resolved with the customer’s representative before the order is formally acknowledged.

Upon the above criteria being satisfied a written acknowledgment shall be sent to the customer. Records of the activities relating to customer focus shall be maintained.
5 Management responsibility

5.3 Quality policy
Currie & Warner Ltd is committed to a quality policy, which shall ensure delivery of its products and services "defect free and on time".

The policy of the company is to:

(i) manufacture and supply parts which fully conform to the customer’s requirements, relating to quality, reliability and delivery.

(ii) use the company’s considerable experience and knowledge in the production of repetition turned parts, to assist customers in the cost effective design and development of both existing and new products.

(iii) ensure that suppliers of raw materials, goods and services conform to all requirements, ensuring that Currie & Warner are provided with raw materials, goods and services of a consistently high quality, to enable the company to meet its commitments to all customers.

(iv) continually improve the effectiveness of the quality management system by the setting and achieving of quality objectives / improvement opportunities within a given time scale.

(v) maintain an adequate level of profit while ensuring that performance and reliability are as a minimum comparable with any similar competitor.

(vi) ensure that all specified standards as well as any statutory or regulatory requirements are strictly adhered to.

(vii) recognise that the responsibility for quality lies with all employees of the company and hence to stimulate and encourage interest and pride in their work.

(viii) conduct periodic quality audits to ensure that all parts of the quality management system continually conform to our quality manual and hence the requirements of ISO9001:2008.

(ix) communicate the quality policy of Currie & Warner throughout the organisation.

(x) hold regular system review meetings so as to continually review the suitability of the quality policy and all aspects of the quality management system.
5  Management responsibility

5.4 Planning

5.4.1 Quality objectives
Quality objectives and improvement opportunities shall be discussed, set and reviewed at quality system review meetings.
A method of measurement of the improvement opportunity shall be established and data gathered.
The objective shall continue to be monitored and the measurements taken shall be used to demonstrate any improvement.
An improvement shall confirm that the quality objective has been achieved.
All quality objectives shall be given a time scale in which to be achieved.

5.4.2 Quality management system planning
The quality management system of Currie & Warner shall be planned so that:
(i) the documented quality manual and therefore the quality management system is in accordance with the requirements of ISO 9001:2008.
(ii) quality objectives / improvement opportunities are set, measured, monitored, reviewed and recorded.
(iii) any changes to the system are controlled and recorded as an amendment so that the integrity of the system is maintained.

5.5 Responsibility, authority and communication

5.5.1 Responsibility and authority
Managing Director
The Managing Director shall have ultimate responsibility for the quality management system of Currie & Warner and for the quality of the products of the company.
He shall ensure that the quality management system, as defined by this manual, is practiced by all employees, is communicated throughout the organisation, and is continually reviewed to ensure its effectiveness. He shall also ensure that any necessary training is identified and carried out.

Quality Assurance Manager
The Quality Assurance Manager is responsible to the Managing Director. He shall maintain Currie & Warner’s documented quality management system and all inspection functions practiced within the company including the management of suppliers.
5 Management responsibility

Commercial Director
The Commercial Director is responsible to the Managing Director for the maintenance of the company's customer base and the order intake. He shall also be responsible for the procurement of all raw materials. Therefore it is the Commercial Directors responsibility to drive and develop the company.

Works Manager
The Works Manager is responsible to the Commercial Director and the Managing Director. He shall oversee production planning. He is specifically charged with ensuring that quality aspects are not overridden by production / delivery pressures. He is also responsible for the maintenance of the site and all equipment.

Production Engineering Department
The Production Engineering Department is responsible to the Works Manager. They shall endeavor to prevent / solve any potential quality concerns at the production engineering stage by applying sound engineering techniques to machine layouts and tooling. They are specifically charged with designing quality into the company's products thus achieving customer satisfaction.

All Employees
All employees are responsible for:
   a) adherence to working instructions.
   b) continuous improvement and the achievement of product quality.
   c) notification to quality control and management of any nonconformance.

5.5.2 Management representative
The management representative for Currie & Warner shall be the Quality Assurance Manager, who has been authorised by the Managing Director to ensure that the quality management system is fully implemented and maintained.

The Quality Assurance Manager shall:
(i) promote customer requirements to all employees throughout the organisation via the quality manual, quality plans and when necessary verbal communication.
(ii) report the performance of the quality management system at system review meetings.
(iii) identify any concerns or improvement opportunities to the Managing Director.
5 Management responsibility

5.5.3 Internal communication
The major tool for internal communication shall be the quality manual. Important items regarding the quality management system shall be displayed on the quality notice board.

The minutes of system review meetings shall be distributed to the relevant authority. In the event of either a system (identified during auditing) or product (identified by inspection) nonconformity then all necessary information shall be recorded and passed to the relevant authority as per the procedures for internal auditing (QCP 13) and the control of nonconforming product (QCP 08).

5.6 Management review

5.6.1 General
The quality management system of Currie & Warner shall be reviewed to ensure its continuing adequacy and effectiveness, as a minimum, every 6 months.

The review meeting shall be attended by the following personnel: Managing Director, Commercial Director, Quality Assurance Manager, Production Engineering Manager, Works Manager and Other Designated Personnel.

The Quality Assurance Manager shall chair the meeting and anyone unable to attend shall send apologies and any information required by the meeting agenda.

Records of the meeting shall be maintained in the form of minutes and copies passed to the relevant authority.
5 Management responsibility

5.6.2 Review input
The input of the meeting shall be in the form of an agenda which shall include, as a minimum, the following:
- Review of any follow-up actions required from the previous meeting
- Review of the quality system including any changes required
- Review of internal and external audits (e.g. BSI)
- Review and consideration of the quality policy
- Adequacy of resource in all areas
- Review of corrective and preventive actions carried out and their effectiveness.
- Review of Currie & Warner’s performance (both process and product)
- Review of customer satisfaction / feedback
- Setting of quality objectives / improvement opportunities
- Review of quality objectives / improvement opportunities

5.6.3 Review output
The output of the review meeting shall be the making of decisions / carrying out of actions as required and detailed in the minutes of the meeting.
All actions shall be carried out within designated time scale and reviewed at the next system review meeting.
6 Resource management

Related Documentation:

BS EN ISO 9001:2008 Requirement 6

Currie & Warner Ltd Quality Policy Manual

Currie & Warner Ltd Quality Procedure Manual
6 Resource management

6.1 Provision of resources
Resource requirements shall be determined and deployed so that:

(i) the quality management system is not only maintained but also continually improved.
(ii) customer requirements are achieved.

The adequacy of resources in all areas shall be reviewed at management review meetings and any deficiencies addressed by the setting of appropriate quality objectives / improvement opportunities.

6.2 Human resources

6.2.1 General
All personnel whose activities have an effect on conformity to product requirements shall have their level of competence assessed and recorded. The assessment shall take into account:

(i) the level of education achieved.
(ii) any training undertaken.
(iii) skill level.
(iv) experience.

6.2.2 Competence, training and awareness
Upon joining Currie & Warner all personnel shall be subjected to a company induction. A training record shall be established which will include all relevant information regarding the individuals ability to competently carry out their responsibilities in line with the quality management system and all customer requirements. The training record shall include education, training, relevant skills and experience.

Should a need for further training be identified either immediately, at management review meetings or at any other time during the employment of an individual then a program shall be agreed.

A Training Manager shall be appointed who shall be responsible for:

(i) maintaining all records related to competence, awareness and training.
(ii) supervising the company’s apprenticeship scheme.
(iii) evaluating the effectiveness of all training activities.

Operators shall be given on-going training after first off inspection but before the machine runs to ensure that they are fully aware of the quality / customer requirements of individual parts.
6 Resource management

6.3 Infrastructure
The infrastructure requirements of Currie & Warner shall be assessed, provided and maintained so that customer requirements can be strictly adhered to.

The factory building and offices shall be maintained so that a suitable environment is provided at all times for both employees and product including the storage of product. This shall be the responsibility of the Works Engineer.

All manufacturing equipment (e.g. multi-spindle auto lathes, cleaning plants, swarf plants, heat-treatment plant, heating systems, compressors, etc) shall be subjected to ongoing maintenance. This shall be the responsibility of the Works Engineer who shall delegate the work to either C&W’s maintenance department (priority of work shall be advised by the Production Director) or to subcontractors depending on the nature of the work to be carried out. All maintenance of manufacturing equipment shall be recorded.

The Managing Director shall be responsible for the computer system of C&W. This shall include upgrades, the provision of suitable programs and system backups.

All supporting services to the C&W business i.e. subcontracted transportation, telecommunications, the site security system, subcontracted site cleaning, etc. shall be continually reviewed by the management team of C&W for their continuing suitability and effectiveness. Any outsourced warehousing shall be the responsibility of the Sales Manager and shall be controlled by the computer system.

6.4 Work environment
Currie & Warner shall maintain a working environment conducive to the production of components that fulfill all customer requirements.

The main criteria to achieve a suitable working environment shall be:
(i) temperature.
(ii) level of light suitable for operating machines and monitoring and measuring product.
(iii) housekeeping of a high standard.
(iv) the provision of suitable protection e.g. machine guarding, safety glasses, ear plugs, gloves, overalls etc.

The working environment of C&W shall be continually reviewed by the management team of C&W for its continuing suitability and effectiveness. This shall be demonstrated by carrying out site audits as part of the ISO 14001 system.
7 Product realization

Related Documentation:

BS EN ISO 9001:2008 Requirement 7

Currie & Warner Ltd Quality Policy Manual

Currie & Warner Ltd Quality Procedure Manual

Quality Control Procedures:

QCP 03 – Process Control
QCP 04 – The assessment of subcontractors
QCP 07 – Calibration
QCP 11 – Packaging, preservation & storage of product
7  Product realization

7.1 Planning of product realization
As a minimum requirement all goods that may have an influence on the company’s finished product quality, which are primarily brass & steel rod, are inspected for type, quantity and transit damage.

Product is controlled during manufacture, at firstly carrying out a 1st-off Inspection of 6 samples before the machine is allowed to run.

Our policy of operator control is achieved by production personnel carrying out and recording in-process inspection of 6 components (1 per spindle). This is carried out, as a minimum, every hour with reference to written instructions.

At the end of the production run a last-off inspection of 6 samples is carried out by inspection personnel.

The final inspection of the product is carried out by inspection personnel, to ascertain conformity to specified requirements and is achieved with reference to a specific customer purchase order, or works order specification, together with other inspection verification documents.

All Inspection activities are controlled by the company’s computer system. Inspection data is kept on computer, from which associated data can be traced.

It is the company’s policy to maintain records of all inspection and tests as evidence of quality assurance acceptance.

7.2 Customer-related processes

7.2.1 Determination of requirements related to the product
The company recognises the need for accurate knowledge of a customer’s specified requirements, in order to provide complete customer satisfaction.

A review of customer requirements is carried out prior to acceptance of sales orders. This will include requirements for delivery and post-delivery activities (e.g. completing part shipments, returning packaging materials such as plastic containers) and any statutory and regulatory requirements related to the product.
7  Product realization

7.2.2 Review of requirements related to the product
Currie & Warner Ltd accepts that it has a responsibility to make sure it has a clear and unambiguous statement of the customer’s requirements.

Contracts are defined as the company’s written acknowledgment to the customer. These contracts are reviewed to ensure that they are within the current capabilities of the company, or whether additional skills and resources will be required to meet the obligations of the company. Any subsequent changes to the contract by the customer shall result in an amended acknowledgment being raised.

When orders have been received their contents are reviewed, and any differences are resolved with the customer’s representative before orders are formally acknowledged. The activities relating to contract review are recorded and maintained on file.

7.2.3 Customer communication
Communication with customers takes place via a variety of methods including direct contact during visits, post, fax, electronic mail and telephone. The methods of communication are used to determine product information and details of enquiries, schedules, contracts and contract amendments. Communications with customers will also provide feedback on supplied products including any complaints.

7.3 Design and development
Design is excluded from the activities of Currie & Warner as all manufactured parts are produced to a customer specification.

7.4 Purchasing

7.4.1 Purchasing process
The company’s policy is to purchase goods and services that are controlled to assure conformance with specified requirements.

All procurement documents are systematically prepared and reviewed so that all the technical and quality requirements necessary to ensure the quality of items and materials, are clearly specified.

The company’s policy shall be to purchase from C&W approved suppliers who have been selected and evaluated to ensure any supplied product that contributes in any way towards the quality of the final product is supplied in accordance to C&W’s requirements.
7. Product realization

C&W’s criteria for selection, evaluation and re-evaluation of all suppliers may be based on historical evidence of performance, or on a formal and on-going assessment of their quality system by the Quality Assurance Manager. The re-evaluation shall be carried out every 3 months via the approved suppliers list (which is controlled by the Purchaser) and annually at the quality management review. Where, as a matter of expediency, it is not possible to purchase from an approved supplier, a temporary approval may be granted for one consignment.

In these circumstances additional receiving inspection and monitoring shall be used. Any requirement for subcontracted turned parts shall be at the discretion of the Sales Manager, who may choose to seek advice from the Quality Assurance Manager.

7.4.2 Purchasing information

All purchase orders shall give an accurate description of the product to be purchased including any specific product or system requirements.

All purchase orders shall be reviewed and countersigned by a C&W Director or the General Manager.

7.4.3 Verification of purchased product

Whilst Currie & Warner Ltd follows a policy of purchasing goods and services from approved suppliers, a level of goods inwards inspection is adopted corresponding to the level of confidence we have in the supplier.

As a minimum requirement all goods that may have an influence on the company’s finished product quality, which is primarily brass rod, shall be inspected for type, quantity and transit damage. The company will not release incoming product for use until it has been inspected or otherwise verified.

In the event of purchased items requiring verification by C&W or C&W’s customer at the subcontractor’s premises then this information shall be specified on the purchasing documents.

7.5 Production and service provision

7.5.1 Control of production and service provision

Currie & Warner Ltd is acutely aware, of the need to plan its manufacture around customers JIT requirements.

To assist in planning to meet these manufacturing demands, the company makes full use of its computer system for all production provision and development of production schedules. Production schedules are implemented through internal component drawings, quality plans, tooling layouts and route cards.
7 Product realization

Manufacturing supervisors, are responsible for ensuring that, the working environment is conducive to producing work of the required standard.

Production engineers who are well qualified and trained, are charged with the responsibility to "engineer quality into the company’s product" at the earliest and every stage.

All work instructions in the form of internal component drawings, tooling layouts, tool drawings, and special gauge drawings are produced using CAD workstations - specifically AutoCad.

The internal component drawings are a reproduction of the customer’s drawings and issue and are a controlled document.

While management is responsible for planning quality into our products, by ensuring materials and resources in the form of monitoring and measuring devices are available, the individual operator is responsible for the quality of his work and carrying out the monitoring and measuring.

To assist our workforce in obtaining the standard required, they are provided with written instructions in the form of production schedules, tooling layouts, quality plans and route cards.

The efforts of the production operatives to monitor and measure, is supported by an independent inspection function.

This function is not designed to relieve the operators of their responsibility to control the quality of their own work, but to verify that the monitoring and measuring activities are effective.

Currie & Warner recognises the need to carry out suitable maintenance on all equipment having a direct bearing on the finished product so as to ensure continuing process capability.

Servicing is excluded from the activities of Currie & Warner at present because the components are manufactured to customer specifications and any servicing requirements of finished customer articles are normally carried out by the customer.

7.5.2 Validation of processes for production and service provision

Special processes are excluded because there are no processes in use at Currie & Warner where the resulting product cannot be verified by subsequent monitoring and measuring.

7.5.3 Identification and traceability

It is the policy of Currie & Warner Ltd, to provide systems for product identification and traceability. To achieve this, the company has introduced a fully computerised system with data entry at various points in the manufacturing process.

Materials that are held in the raw material stores are identified by labelling which details product type, source of supply and inspection status.
7  Product realization

During work in progress, the job is controlled and identified by the internal works order no., individual route cards on every container of product and computer controls. This computer control, enables constant "live" monitoring of the customers product at all stages, to ensure delivery targets are met.

All of Currie & Warner's products are traceable, through the route card no. and inspection report no., which appear on every box of product, back to an individual delivery of material and hence source of supply.

All traceability, material supply, production and inspection data is held on computer. Currie & Warner Ltd recognises the need to indicate the monitoring and measurement status of products at all stages, to ensure that a verification stage is not missed, nor unnecessarily repeated.

Goods received into the company are not released for use until they have been verified as conforming to requirements and the necessary labeling and documentation have been completed. During production, inspection status is indicated by the inspectors stamp against the appropriate inspection stage on the route card.

Data entry into the computer system at each operation, also identifies to the system the stage reached and inspection status of every container of work.

The status of products released after final inspection for storage or despatch to customers is also indicated by the "PASSED FINAL" identification on the route card.

At any stage nonconforming product is identified with a red label attached to the route card and by data on the computer system.

It is the company’s policy to maintain records of all inspection and tests as evidence of quality assurance acceptance.

7.5.4 Customer property

Any material or components supplied by a customer for inclusion in / or with the product supplied by Currie & Warner Ltd, will be inspected at goods inwards.

A request by a customer for additional receiving inspection or testing to be carried out, will be clarified at the time when customer related processes are reviewed and any necessary written instructions issued.

Before being released to a storage area, "free issue" items are identified as "purchaser supplied material" with the customer’s name and product type, to safeguard against unauthorised use or improper disposal.
7 Product realization

The company understands that, whilst such items do not pass into Currie & Warner’s ownership, we have complete responsibility for controlling their storage, handling and use, before such items are returned to the customer.

If at any time such "free issue" items are found to be damaged or not suitable for their intended use, the customer shall be informed immediately and further instructions requested.

7.5.5 Preservation of product

The company recognises the need for the protection and preservation of product quality, and emphasis is placed on correct handling, storage, packaging and delivery methods.

Currie & Warner Ltd has a particular desire, to move in the direction of packaging and transit materials, which are regarded as environmentally friendly in the manner in which they can be disposed of by the customer after use.

Component handling at all stages of production and packing is considered vital, particularly with respect to the delicate nature of the company’s products.

The correct handling of products includes the use of suitable containers and packaging, from goods receiving, to formally handing the product over to the customer. This includes suitable identification, labeling and accompanying documentation.

Identification of product boxes at the packing stage is crucial to maintaining the company’s traceability and shall include both customers data and the company’s data.

The company provides suitable storage areas relevant to the needs for preservation, safety, length of time in stores and ready access.

7.6 Control of monitoring and measuring devices

The monitoring and measurement system of Currie & Warner Ltd, is designed to show that the accuracy of all inspection, monitoring and measuring equipment, is suitable for its own particular use and will ensure the conformity of product to determined requirements.

As a minimum, all equipment used to verify product conformance to process requirements shall be included in the system. All monitoring and measuring activity shall have traceability to National and / or International standards.

This is achieved, by ensuring that the primary devices or equipment used for in-house calibration, are certified by an approved laboratory. Any equipment that cannot be calibrated in-house shall be sent to an external approved laboratory.
7 Product realization

All equipment shall be identified and given a unique record, which is created and maintained on computer. The record shall include the allowable usage of the equipment, the capability of its use, its traceability to known standards (if applicable) and the number of days that the particular piece of equipment has been in use.

An allowed usage frequency shall be established for each piece of monitoring and measurement equipment based on experience and historic data accumulated over a number of years.

A recall system generated from computer records shall be operated to ensure that equipment is re-calibration once the due date has been reached.

All monitoring and measuring equipment shall be handled with the utmost care.

In the event of any monitoring and measuring equipment being damaged it shall be immediately re-calibrated and appropriate actions carried out as necessary (this may include readjustments and if necessary the removal of the equipment from the system).

In the event of any product being manufactured whilst using monitoring and measurement equipment that is subsequently proved to not conform to its particular calibration requirement, then the product shall be reassessed using conforming equipment.

Records shall be maintained of the results of all calibration and verification.
8 Measurement, analysis and improvement

Related Documentation:

BS EN ISO 9001:2008 Requirement 8

Currie & Warner Ltd Quality Policy Manual

Currie & Warner Ltd Quality Procedure Manual

Quality Control Procedures:

QCP 05 – First / last off inspection (ISIR)
QCP 06 – Process & final inspection
QCP 08 – Control of nonconforming product
  QCP 09 – Corrective action
QCP 10 – Preventative action
QCP 13 – Internal auditing
8 Measurement, analysis and improvement

8.1 General
Currie & Warner shall plan and implement all monitoring, measurement, analysis and improvement processes so that:

a) conformity of product to agreed customer requirements is demonstrated.
b) conformity of the quality management system to ISO9001:2008 is maintained (via audits and management review).
c) improvements to the effectiveness of the quality management system are ongoing so as to increase the capability of C&W to consistently meet customer requirements.

Product conformity shall be demonstrated via goods inwards, first off, in-process, process, final and last off inspections. Where felt appropriate by the Managing Director, production engineering or the Quality Assurance Manager, or where the customer specifies as part of the contract, quality control measures shall include capability studies, SPC and statistically based sampling plans.

8.2 Monitoring and measurement

8.2.1 Customer satisfaction
It is the policy of Currie & Warner to achieve total customer satisfaction. This shall be defined as the meeting of, as a minimum, all customer requirements. Customer satisfaction shall be monitored via the customer feedback file. This shall comprise of:
- Customer correspondence (E-mail, Fax, letters, etc.)
- Repeat orders
- Visit reports
- Customer complaints

The customer feedback file (½ the information is kept in the quality department and ½ in the sales office) shall be reviewed by the Sales Manager, as a minimum, every 6 months. All findings shall be made available at quality review meetings.

8.2.2 Internal audit
To determine whether the quality management system of Currie & Warner continually conforms to the requirements established by Currie & Warner and hence to the requirements of BSENISO 9001:2008, a program of internal audits shall be conducted.

The program shall ensure that as a minimum, all processes and areas are audited once per annum.
8 Measurement, analysis and improvement

During quality management review meetings which shall be held, as a minimum, twice per annum, audit results of the previous 6 months shall be taken into account and if considered necessary audit frequencies amended.

The scope and frequency of audits shall be defined on computer generated audit plans and schedules.

The audit program shall be carried out by personnel who are fully aware of the requirements of BSENISO 9001:2008 and who have no direct involvement in the process or area that they are assigned to audit.

The details of conducting and reporting audits shall be defined in a documented procedure (QCP 13 - procedure for internal quality audits).

In the event of an audit nonconformity the root cause of the problem shall be identified. The supervisor responsible for the particular process or area concerned shall carry out any necessary corrections and corrective and / or preventive actions to remedy the problem. The audit result shall be entered onto computer, which will automatically update the schedule such that a repeat audit shall be required during the next calendar month. The follow up audit shall verify the success of the remedial actions taken.

8.2.3 Monitoring and measurement of processes

It is the policy of Currie & Warner to monitor all the processes which make up the quality management system (shown in 4.1 - general requirements).

It is the policy of Currie & Warner to measure, where possible, the processes which make up the quality management system. Measurements of the processes shall be undertaken by the use of monitoring and measuring devices and where deemed necessary by either the Quality Assurance Manager, Production Engineering or the customer the use of statistical techniques.

All process monitoring and measuring shall be achieved by the use of internal audits, verification plans (e.g. Quality objectives / improvement opportunities), statistical techniques and monitoring and measuring devices. All monitoring and measuring of processes shall be carried out by competent personnel and shall be reviewed during quality review meetings.

In the event of product nonconformity, then the process attributed to the nonconformity shall be subject to corrective action to ensure future conformity of the product.

8.2.4 Monitoring and measurement of product

It is the policy of Currie & Warner to monitor and measure all product so as to ensure that customer requirements are achieved. Monitoring and measuring shall be carried out at every stage, which affects the quality of the finished product.
8 Measurement, analysis and improvement

All goods that have an influence on finished product quality, which is primarily brass and steel rod, shall be inspected for type, quantity and transit damage. No incoming product shall be released for use until it has been inspected or otherwise verified.

It is the policy of Currie & Warner to control product during manufacture. Customers order quantities shall be broken down into runs. Each production run shall be subjected to 1st-off (before the machine is allowed to run) and last-off inspection by a member of the quality department.

In-process inspection shall be carried out by production personnel. Product shall be inspected with reference to written instructions (i.e. a drawing and quality plan) and results recorded.

Final inspection of the product, to ascertain conformity to specified requirements, shall be carried out (with reference to the quality plan) by inspection personnel. Product shall not be released for despatch (unless agreed with the customer via the concession procedure) until final inspection has confirmed that the product meets requirements.

Records of all monitoring and measuring activities shall be maintained and entered onto the computer system. Records shall include the company clock number of the individual who performed the inspection activity.

8.3 Control of nonconforming product

Currie & Warner shall ensure that all nonconforming material and product is identified and whenever possible isolated in a designated quarantine area. The identification shall include nonconformance details and where applicable, reference to a nonconformance document (e.g. NCR report).

The controls and authorities relative to the disposal of nonconforming material and product shall be detailed in procedures (e.g. QCP 08 - Procedure for the control of nonconforming parts & material).

Currie & Warner shall ensure that in cases of nonconforming product a corrective and preventive action (where appropriate) is carried out to prevent any future reoccurrence.
8 Measurement, analysis and improvement

Existing nonconforming product shall be disposed of by either sorting the parts, reworking the parts, gaining a customer concession or if either of the former is not viable, then by scrapping the product concerned.

Any concessions requested of a customer shall be agreed in writing before any despatch action is instigated.

Any product that is reworked shall be subjected to the next stage of inspection (either process or final inspection) to demonstrate that the components have been successfully rectified to meet requirements.

Any material that is discovered to be nonconforming after production has commenced (e.g. subsurface defect) shall result in both the material and any product made from the material being quarantined for further disposition. Should the nonconformity be discovered after product has been despatched then the Quality Assurance Manager and the Managing Director shall debate the effects of the nonconformity on the product and if necessary the customer shall be informed.

Records of nonconformity’s shall be maintained which shall include the nature of the nonconformity and any consequential corrective and preventive actions.

8.4 Analysis of data

All data gathered from the monitoring and measuring activities of Currie & Warner shall be analysed during quality review meetings. The data shall be used to determine:

a) the effectiveness of the quality management system by identifying both weak and strong areas.

b) opportunities for improvements to be made (i.e. the areas where a weakness has been detected).

c) areas where preventive actions are required.

The data shall also be used to determine customer satisfaction and the performance of suppliers.
8 Measurement, analysis and improvement

8.5 Improvement

8.5.1 Continual improvement
It is the policy of Currie & Warner to continually improve the effectiveness of the quality management system. Improvements shall be shown and recorded in the minutes of quality review meetings and quality management reviews. Opportunities for improvement shall be discussed and implemented during quality review meetings and at the quality management review. Areas for improvement shall be highlighted on the meeting agenda and recorded in the minutes.

8.5.2 Corrective action
Currie & Warner shall seek to eliminate all defects, errors and / or nonconformities by the implementation of corrective action. The primary aim of corrective action shall be the elimination of the recurrence of defects, errors and failures. All nonconformities shall be reviewed, the cause determined and action implemented to prevent recurrence. Records of corrective actions shall be maintained. Corrective actions taken and their effectiveness shall be reviewed at quality review meetings. Any procedural changes shall be documented.

8.5.3 Preventive action
Currie & Warner shall seek to eliminate the causes of all defects, errors and / or nonconformities by the implementation of preventive action. The primary aim of preventive action shall be to prevent the occurrence of defects, errors and failures in the first instance. Potential nonconformities shall be determined and action implemented to prevent occurrence. Records of preventive actions shall be maintained. Preventive actions taken and their effectiveness shall be reviewed at quality review meetings. Any procedural changes shall be documented.