



Bairstow Brothers (1985) Ltd

QUALITY MANUAL

incorporating the requirements of BS EN ISO9001:2000



| | |
|----------------------|------------------|
| Issue No. | 1 |
| Date | 05/04/2006 |
| Authorised by | Stuart V Kendall |

Table of Contents

| Section No. | Section Title | Section Page |
|-------------|--|--------------|
| 1. | Management Overview | 1 |
| 2. | Quality Policy | 1 |
| 3. | Quality Objectives | 1 |
| 4. | Key Processes | 1 |
| 4.1. | Key Process Overview | 1 |
| 4.2. | Enquiry & Order Handling Process | 2 |
| 4.3. | Production Planning Process..... | 3 |
| 4.4. | General Engineering Production Process | 4 |
| 4.5. | Pressure Lamp Manufacturing Process | 5 |
| 4.6. | PellonWare Manufacturing | 6 |
| 5. | Quality Management System | 1 |
| 5.1. | Introduction | 1 |
| 5.2. | Documentation Requirements [Clause 4.2]..... | 1 |
| 5.2.1. | <i>General [Clause 4.2.1]</i> | 1 |
| 5.2.2. | <i>Quality Manual [Clause 4.2.2]</i> | 1 |
| 5.2.3. | <i>Control of Documents [Clause 4.2.3]</i> | 1 |
| 5.2.4. | <i>Control of Records [Clause 4.2.4]</i> | 1 |
| 6. | Management Responsibility | 1 |
| 6.1. | Management Commitment [Clause 5.1]..... | 1 |
| 6.2. | Customer Focus [Clause 5.2] | 1 |
| 6.3. | Quality Policy [Clause 5.3]..... | 1 |
| 7. | Planning [Clause 5.4] | 1 |
| 7.1. | Quality Objectives [Clause 5.4.1]..... | 1 |
| 7.2. | Quality Management System Planning [Clause 5.4.2]..... | 1 |
| 8. | Responsibility, Authority and Communication [Clause 5.5] | 1 |
| 8.1. | Responsibility and Authority [Clause 5.5.1]..... | 1 |
| 8.2. | Management Representative [Clause 5.5.2] | 1 |
| 8.3. | Internal Communication [Clause 5.5.3] | 1 |
| 8.4. | Management Review [Clause 5.6] | 1 |
| 9. | Resource Management | 1 |
| 9.1. | Provision of Resources [Clause 6.1] | 1 |
| 9.2. | Human Resources [Clause 6.2] | 1 |
| 9.3. | Infrastructure [Clause 6.3] | 1 |
| 9.4. | Work Environment [Clause 6.4] | 1 |
| 10. | Product Realisation | 1 |
| 10.1. | Planning for Product Realisation [Clause 7.1] | 1 |
| 10.2. | Customer Related Processes [Clause 7.2]..... | 1 |
| 10.2.1. | <i>Determination of Requirements Related to the Product [Clause 7.2.1]</i> | 1 |
| 10.2.2. | <i>Review of Requirements Related to the Product [Clause 7.2.2]</i> | 1 |
| 10.2.3. | <i>Customer Communication [Clause 7.2.3]</i> | 1 |
| 10.3. | Design and Development [Clause 7.3]..... | 1 |
| 10.4. | Purchasing [Clause 7.4]..... | 1 |
| 10.4.1. | <i>Purchasing Process [Clause 7.4.1]</i> | 1 |
| 10.4.2. | <i>Purchasing information [Clause 7.4.2]</i> | 1 |
| 10.4.3. | <i>Verification of Purchased Product [Clause 7.4.3]</i> | 2 |
| 10.5. | Production and Service Provision [Clause 7.5]..... | 2 |

| Section No. | Section Title | Section Page |
|-------------|--|--------------|
| 10.5.1. | <i>Control of Production and Service Provision [Clause 7.5.1].....</i> | 2 |
| 10.6. | Validation of Processes for Production and Service Provision [Clause 7.5.2]..... | 2 |
| 10.7. | Identification and Traceability [Clause 7.5.3]..... | 2 |
| 10.8. | Customer Property [Clause 7.5.4]..... | 2 |
| 10.9. | Preservation of Product [Clause 7.5.5]..... | 2 |
| 10.10. | Control of Measuring and Monitoring Devices [Clause 7.6] | 2 |
| 11. | Measurement, Analysis and Improvement..... | 1 |
| 11.1. | General [Clause 8.1]..... | 1 |
| 11.2. | Monitoring and Measurement [Clause 8.2]..... | 1 |
| 11.2.1. | <i>Customer Satisfaction [Clause 8.2.1].....</i> | 1 |
| 11.2.2. | <i>Internal Audit [Clause 8.2.2].....</i> | 1 |
| 11.2.3. | <i>Monitoring and Measurement of Processes [Clause 8.2.3].....</i> | 1 |
| 11.2.4. | <i>Monitoring and Measurement of Product [Clause 8.2.4].....</i> | 1 |
| 11.3. | Control of Non-conforming Product [Clause 8.3] | 1 |
| 11.4. | Analysis of Data [Clause 8.4]..... | 1 |
| 11.5. | Improvement [Clause 8.5]..... | 1 |
| 11.5.1. | <i>Continual Improvement [Clause 8.5.1]</i> | 1 |
| 11.5.2. | <i>Corrective Action [Clause 8.5.2].....</i> | 2 |
| 11.5.3. | <i>Preventive Action [Clause 8.5.3].....</i> | 2 |
| 12. | Company Organisation Chart | 1 |
| 13. | Index of Quality Management System Procedures..... | 1 |
| 14. | Amendment Sheet..... | 1 |

1. Management Overview

Bairstow Brothers (1985) Ltd is an established engineering company, whose principal activities are:

- precision engineering, including tool making
- manufacture of Vapalux paraffin pressure lamps
- manufacture of PellonWare stainless steel catering ware

The company employs a small but flexible workforce at its premises in Halifax, West Yorkshire.

This Quality Manual outlines how Bairstow Brothers (1985) Ltd seeks to maintain and continuously improve the effectiveness of its Quality Management System (QMS) which meets the requirements of BS EN ISO 9001:2000.

2. Quality Policy

Bairstow Brothers (1985) Ltd is committed to providing its customers with the a quality of product that they demand. In addition, the organisation shall strive to constantly improve the level of service offered.

In support of these aims, the organisation has established a Quality Management System consistent with the requirements of BS EN ISO 9001:2000. All necessary resources shall be made available to both maintain this system and to continually improve its effectiveness throughout the organisation.

Quality objectives shall be established at appropriate levels throughout the organisation. These objectives shall be reviewed on a regular basis.

Bairstow Brothers (1985) Ltd shall also ensure that all personnel have appropriate skills and competencies in order to fully meet these objectives.

A handwritten signature in black ink, reading "Stuart V Kendall", is positioned to the left of a vertical red line.

S.V. Kendall
Managing Director

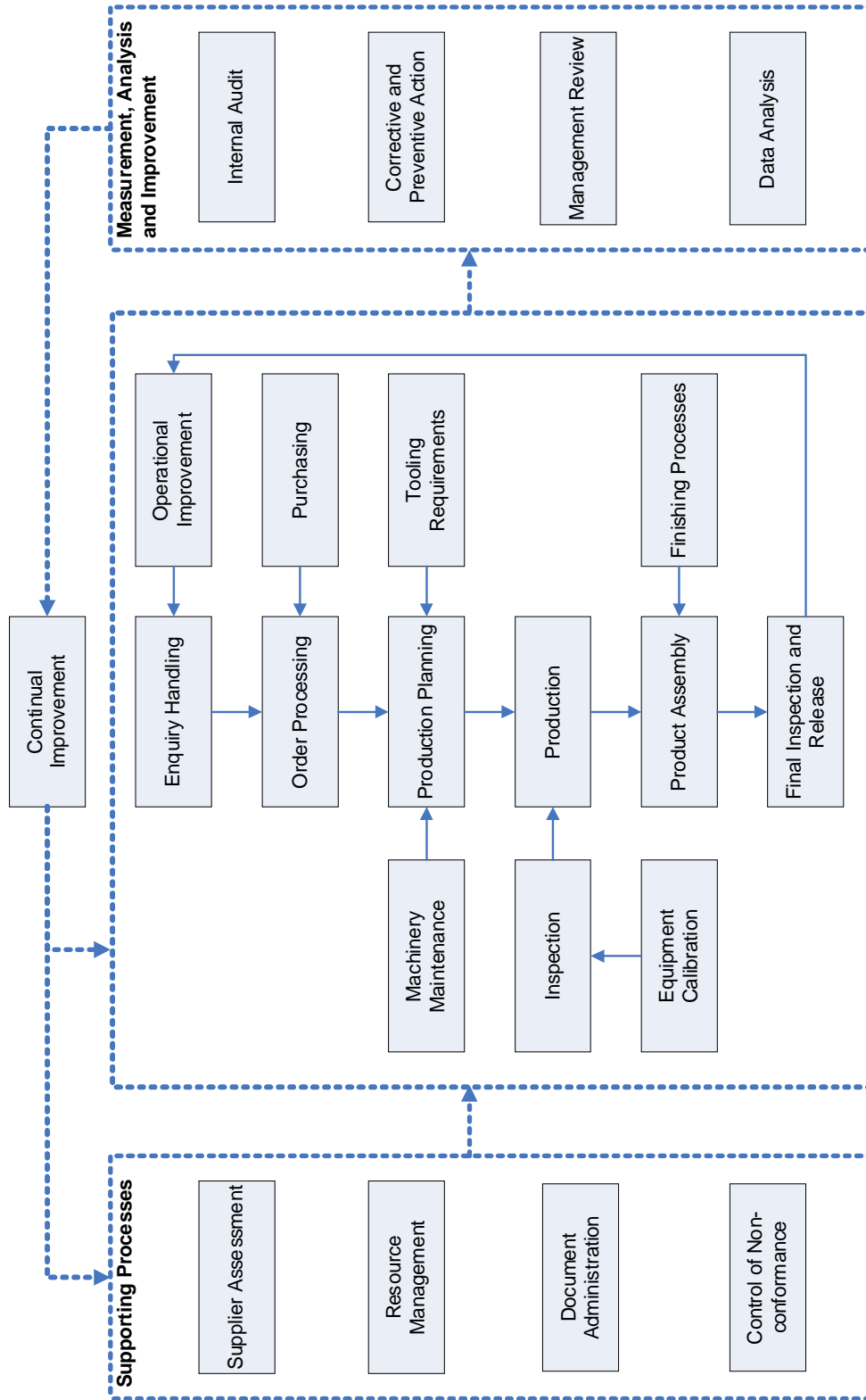
3. Quality Objectives

Bairstow Brothers (1985) Ltd has the following Quality Objectives:

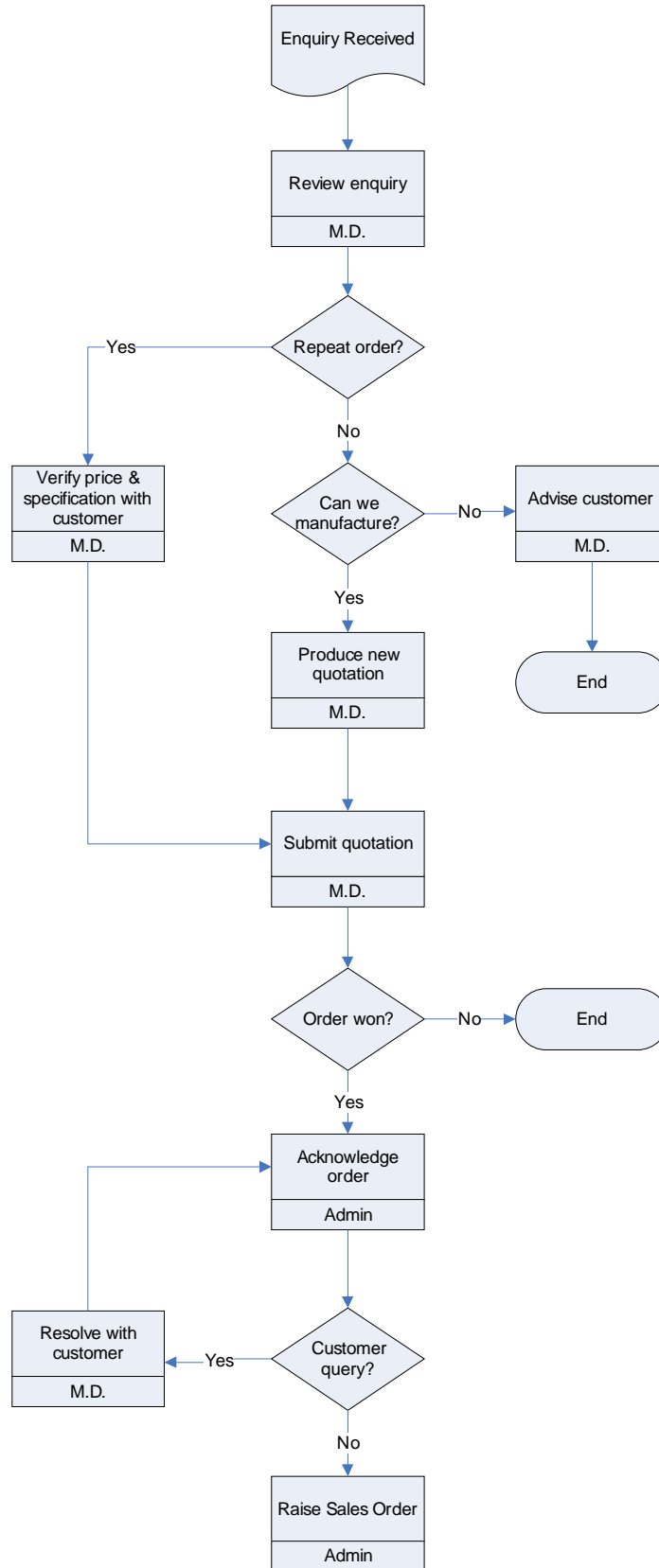
1. To quantify the number of rejected items manufactured
 2. To record the number of Corrective and Preventive Action Reports raised and satisfactorily closed off
 3. To record levels of staff sickness and unauthorised absence from work
 4. To quantify the total number of instances of positive and negative feedback obtained from customers
-

4. Key Processes

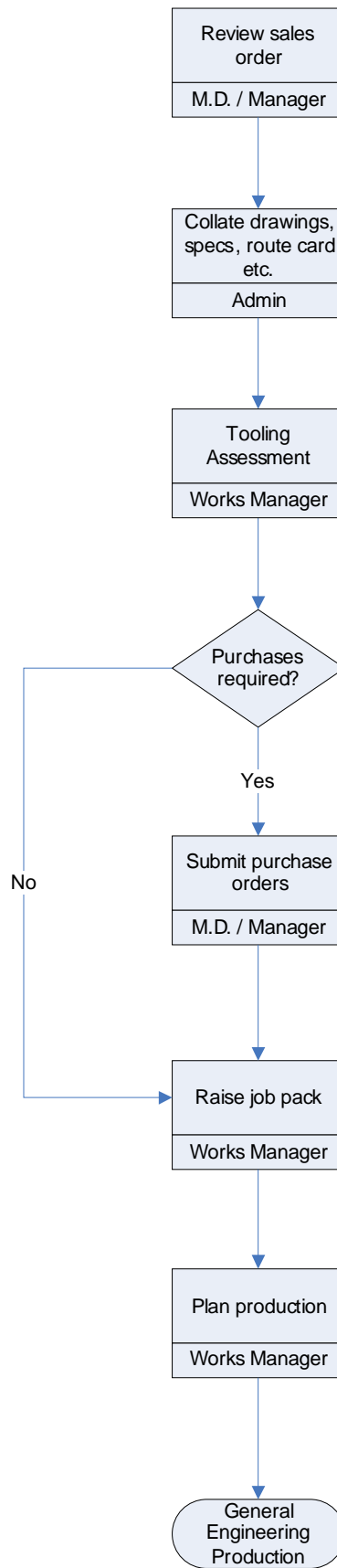
4.1. Key Process Overview



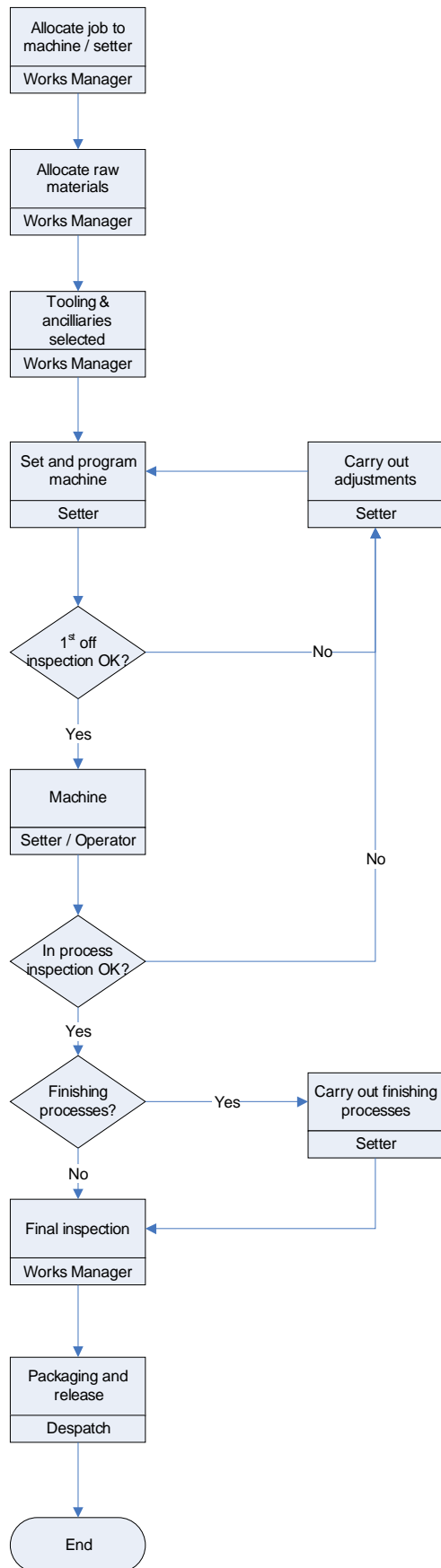
4.2. Enquiry & Order Handling Process



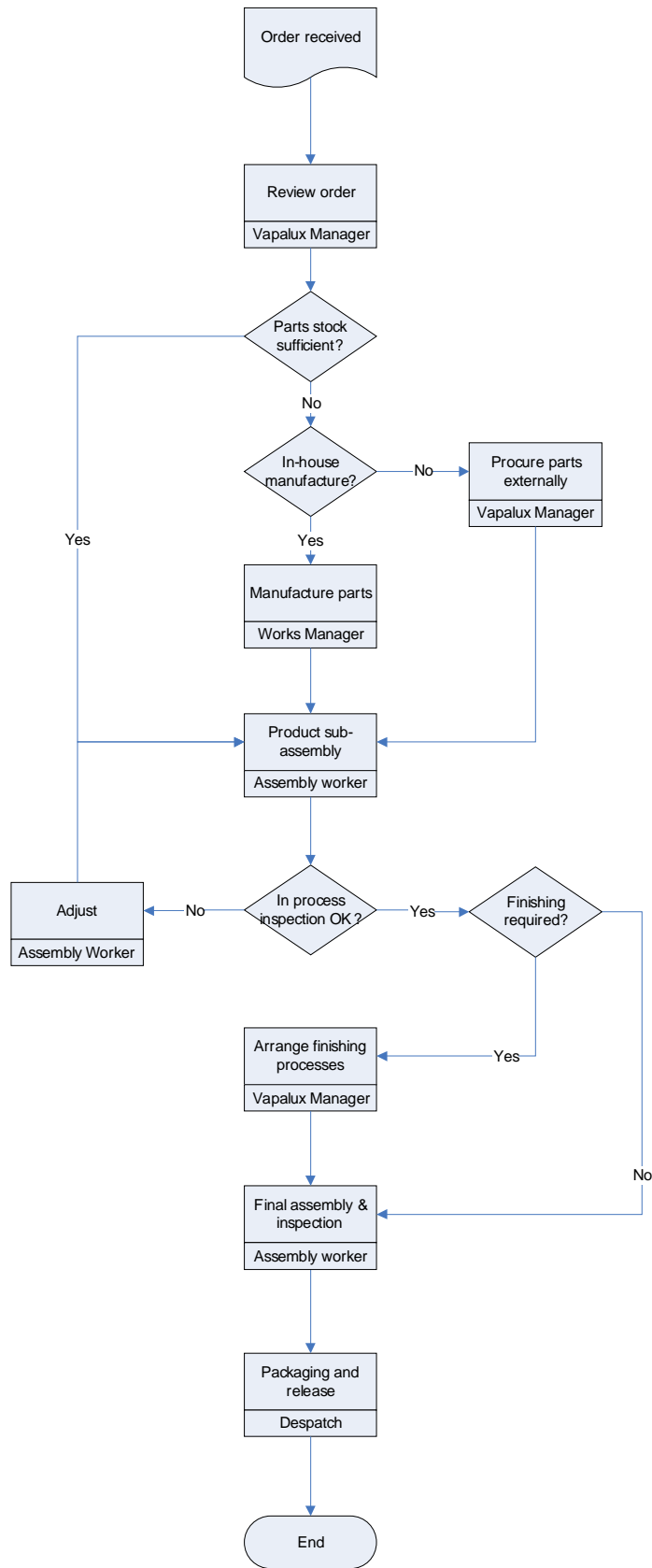
4.3. Production Planning Process



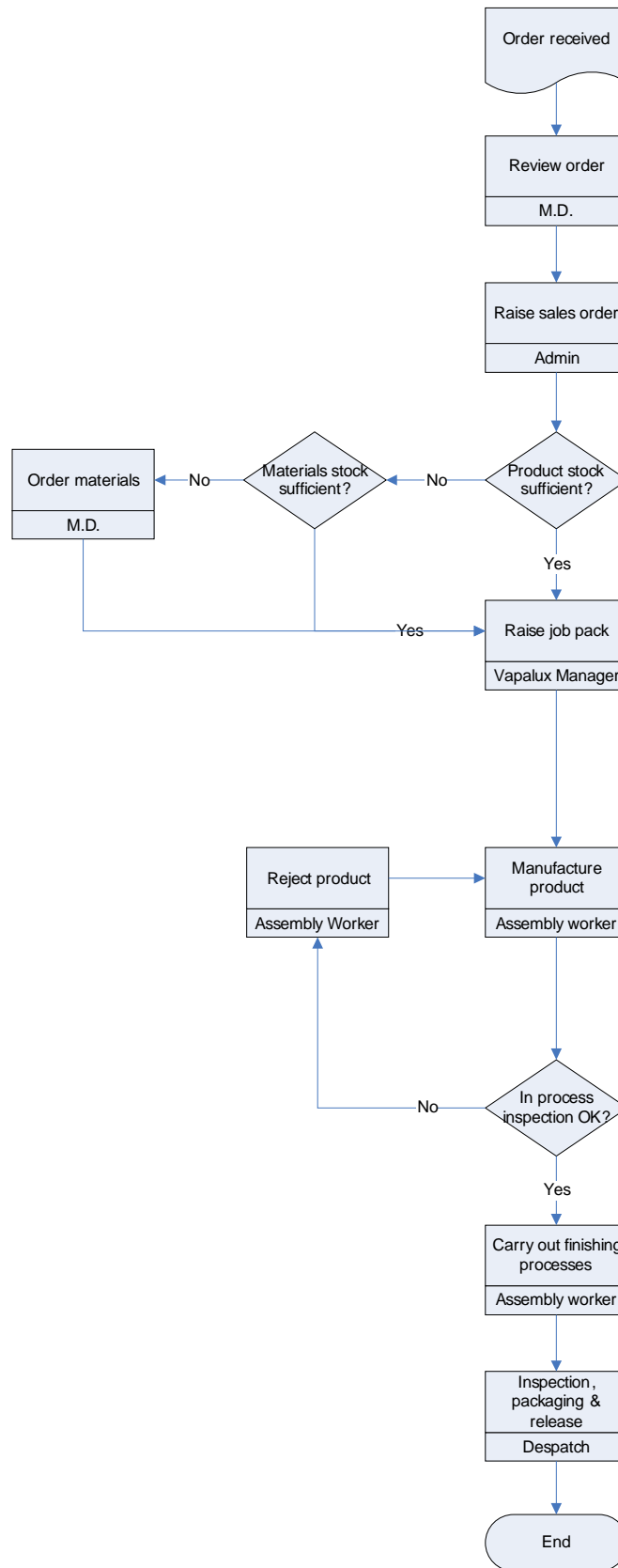
4.4. General Engineering Production Process



4.5. Pressure Lamp Manufacturing Process



4.6. PellonWare Manufacturing



5. Quality Management System

5.1. Introduction

The Quality Management System (QMS) is documented and implemented under the policy issued by the Managing Director.

Throughout this outline, the clause number of BS EN ISO 9001:2000 to which the text refers is shown within brackets adjacent to the section title.

5.2. Documentation Requirements [Clause 4.2]

5.2.1. General [Clause 4.2.1]

The QMS consists of the following documentation:

- Quality Manual (this document), which includes Quality Objectives and Quality Policy
- Quality Procedures (see Index of Quality Management System Procedures)
- Standard forms used by the company within the QMS
- External standards required in order to fully meet customer requirements
- Records that demonstrate the effective operation of the QMS (including job packs, route cards sales orders and engineering drawings)

Because the operations of the company rely on the skills of precision engineers, there is no current requirement for detailed Work Instructions. However, should a requirement for these be identified subsequently, they will be developed and incorporated into the QMS.

5.2.2. Quality Manual [Clause 4.2.2]

This Quality Manual describes what the company will do in order to meet both the requirements of BS EN ISO 9001:2000 and customer requirements.

The scope of the QMS is:

- precision engineering, including tool making
- the manufacture of Vapalux paraffin pressure lamps and
- the manufacture of PellonWare stainless steel catering ware.

5.2.3. Control of Documents [Clause 4.2.3]

[Quality Procedure QP01](#) describes how all the documents within the QMS are controlled. Section 13 of this manual lists all of the documented procedures established.

5.2.4. Control of Records [Clause 4.2.4]

The company retains detailed and appropriate records relating to the operations within the scope of the QMS. [Quality Procedure QP02](#) defines the controls established for the identification, storage, protection, retrieval, retention time and disposal of the records.

6. Management Responsibility

6.1. Management Commitment [Clause 5.1]

The company's top management is fully committed to the ongoing development, implementation and continual improvement of the effectiveness of the QMS. This commitment is demonstrated in the following ways:

- The company's Quality Policy, which underpins the QMS, commits Bairstow Brothers (1985) Ltd to continual improvement of the QMS. The policy is signed by the Managing Director.
- Setting and implementation of Quality Objectives, aimed at improving the QMS and its associated processes and also at improving the level of service offered to customers.
- Providing resources (time, personnel and finance) to carry out such activities as Management Review, internal audits, monitoring customer satisfaction, dealing with customer complaints and making all employees aware of the QMS and the requirements of BS EN ISO 9001:2000.

6.2. Customer Focus [Clause 5.2]

The company's management ensures that efforts are focused on meeting customer requirements. This is principally achieved via rigorous determination of exact customer requirements for each order, along with appropriate customer liaison as necessary.

6.3. Quality Policy [Clause 5.3]

The Managing Director has signed the Quality Policy (see Section 2 of this Quality Manual). Copies of the policy are displayed at appropriate locations and all staff are made aware of its contents during induction training. The policy is reviewed annually at Management Review Meetings and modified as necessary.

7. Planning [Clause 5.4]

7.1. Quality Objectives [Clause 5.4.1]

The company analyses data from the QMS and information being fed back from customers. This information is used to determine where quality objectives are to be set within the company in order to gain maximum benefit. The aim of the objectives is to improve the efficiency and effectiveness of the QMS (and hence the company's operations) and to improve the level of service to customers.

The quality objectives set by the company are measurable and progress towards achieving the objectives is monitored.

7.2. Quality Management System Planning [Clause 5.4.2]

The Managing Director ensures that adequate planning is carried out to ensure that the QMS functions effectively and that quality objectives are properly monitored. Changes to the QMS are planned in order to maintain the integrity of the system.

8. Responsibility, Authority and Communication [Clause 5.5]

8.1. Responsibility and Authority [Clause 5.5.1]

Section 12 of this Quality Manual shows the company organisation chart, showing defined lines of responsibility. More specific responsibilities are defined within company procedures that describe the operation of particular areas of the QMS.

8.2. Management Representative [Clause 5.5.2]

The Quality Controller acts as the management representative and as such ensures the following:

- the processes needed for the QMS are established, implemented and maintained;
- the performance of the QMS is monitored and improvement opportunities are identified;
- awareness of the need to meet customer requirements is promoted throughout the company.

8.3. Internal Communication [Clause 5.5.3]

Communication relating to the effectiveness of the QMS and hence the company's performance with respect to achieving planned requirements is achieved through day to day contact with all staff supported by the following methods of communication:

- internal memos;
- notice boards;
- one to one meetings;
- management meetings and
- team briefings.

8.4. Management Review [Clause 5.6]

The company reviews the continuing suitability, adequacy and effectiveness of the QMS by carrying out regular management reviews. The [Management Review procedure](#) is also used to set and monitor objectives for the improvement of the QMS.

9. Resource Management

9.1. Provision of Resources [Clause 6.1]

The company's management ensure that all necessary resources are provided in order to implement, maintain and continually improve the QMS and also ensure that customer requirements, as defined by contract, are met.

9.2. Human Resources [Clause 6.2]

All members of the company's staff are competent to carry out the task that they are instructed to complete. Where necessary, new or existing employees will receive training either from outside agencies or from experienced colleagues, to ensure that they are capable of performing any new task that they are asked to perform.

The company uses regular supervision and review of performance in order to determine any training needs against established competencies for each job role. Records of all training received by staff are maintained and the ensuing competency in any new skills is evaluated via supervision and review over a period of time.

9.3. Infrastructure [Clause 6.3]

The company's buildings are maintained to adequate standards in order to ensure that product quality is not put at risk.

To further ensure that product requirements are not compromised, all process equipment is adequately maintained in accordance with specified requirements.

9.4. Work Environment [Clause 6.4]

The the work environment is controlled at all times in order to achieve conformity to product requirements.

10. Product Realisation

10.1. Planning for Product Realisation [Clause 7.1]

The company provides a wide range of services and products for their customers. These outputs all rely upon a methodical and systematic approach to planning the business processes. Section 4 of this Quality Manual identifies the key operational processes. These are supplemented by the following processes:

- enquiry / order handling;
- production planning;
- general engineering production;
- pressure lamp manufacturing;
- PellonWare manufacturing.

10.2. Customer Related Processes [Clause 7.2]

10.2.1. Determination of Requirements Related to the Product [Clause 7.2.1]

The company ensures that all customer, statutory, regulatory and other requirements are, as far as can be reasonably identified, determined for all contracts and orders. The Enquiry & Order Handling Process illustrates the key stages in the determination of these requirements.

10.2.2. Review of Requirements Related to the Product [Clause 7.2.2]

Prior to the acceptance of any contractual obligations, the company reviews all aspects of the proposed contract / order and ensures that all order requirements are clearly defined, unambiguous and within the capability of the company to deliver.

10.2.3. Customer Communication [Clause 7.2.3]

The company communicates with its customers in various ways, with respect to all relevant aspects of its business. The principal methods are as follows:

- one-to-one conversation with the customer's representative.
- telephone conversation with the customer's representative.
- written communication (letter, fax or email).

10.3. Design and Development [Clause 7.3]

This clause is excluded from Quality Management System, as no design or development work is carried out by the company. All finished products manufactured by the company are made to established designs and standards.

10.4. Purchasing [Clause 7.4]

10.4.1. Purchasing Process [Clause 7.4.1]

As part of its [Purchasing and Procurement Process](#), the company ensures that goods and services comply with specified requirements by establishing and maintaining an approved supplier base, centrally administered and controlled by the Quality Controller. The criteria used for the selection, evaluation and re-evaluation of suppliers are established.

10.4.2. Purchasing information [Clause 7.4.2]

The company uses established purchasing documents to control the purchasing process, with designated responsibilities ensuring appropriate review before communication to the supplier.

10.4.3. Verification of Purchased Product [Clause 7.4.3]

All purchased materials are checked on arrival by designated personnel, with reference back to stated purchase requirements as appropriate.

10.5. Production and Service Provision [Clause 7.5]

10.5.1. Control of Production and Service Provision [Clause 7.5.1]

The company uses a Job Pack system to control the production activities within its operations. The Job Pack consists of a route card and copies of all other relevant documents (drawings, Operations Sheet, Tooling Sheet, etc) that may be required to carry out production under controlled conditions.

The key activities in the control of production are as illustrated in Sections 4.3 to 4.6 of this Manual.

10.6. Validation of Processes for Production and Service Provision [Clause 7.5.2]

This clause is excluded from the Quality Management System, as all output produced by the company is monitored and verified by inspection or measurement.

Where work which is contracted out by the company, quality is assured by ensuring services are procured from sub-contractors which meet the company's approved supplier criteria.

10.7. Identification and Traceability [Clause 7.5.3]

Appropriate measures are adopted to ensure the identification and traceability of items throughout the manufacturing process. Central to this are the Job Pack and engineering drawing, with materials certification being retained as appropriate.

10.8. Customer Property [Clause 7.5.4]

Any free issue materials that the company is asked to incorporate into the product are afforded appropriate levels of care in order to preserve the integrity of both the item and the finished product. Any problems, shortfalls or non-conformances are documented and processed within the QMS.

10.9. Preservation of Product [Clause 7.5.5]

The company takes all necessary precautions to ensure that the finished product does not suffer any damage whilst being handled either within its own premises or whilst being delivered to the customer.

In particular, machined components are protected appropriately, paint finishes are provided as necessary and care is taken in the selection of packaging materials and hauliers.

10.10. Control of Measuring and Monitoring Devices [Clause 7.6]

The company utilises a wide range of monitoring and measuring devices. These devices are all uniquely identified and are appropriately calibrated within defined categories under the overall control of the Quality Controller. Where applicable, calibration events are traceable back to national standards.

11. Measurement, Analysis and Improvement

11.1. General [Clause 8.1]

The company uses a variety of measures, ranging from inspection activities through to formal internal audits of both processes and procedures in order to demonstrate conformity of product, conformity to the QMS and to drive improvement of the QMS.

11.2. Monitoring and Measurement [Clause 8.2]

11.2.1. Customer Satisfaction [Clause 8.2.1]

In order to measure the satisfaction of its customers, Bairstow Brothers (1985) Ltd is pro-active in obtaining feedback. In addition to the normal face-to-face customer-related activities, the Managing Director carries out formal assessments of the perceptions of key customers on a regular basis. Other measures of satisfaction, including re-order levels and order values are also monitored.

11.2.2. Internal Audit [Clause 8.2.2]

Internal Audits are carried out against planned schedule in accordance with [Quality Procedure QP03](#).

11.2.3. Monitoring and Measurement of Processes [Clause 8.2.3]

All the processes used within the company in fulfilling its objectives are monitored in some way. The prime method of monitoring is via the [Internal Audit](#), [Corrective and Preventive Action](#) and [Management Review](#) procedures, but other more direct measures are made available as appropriate (i.e. rework levels, re-order levels, lead times, achievement of completion dates, etc).

11.2.4. Monitoring and Measurement of Product [Clause 8.2.4]

Comprehensive and appropriate inspection levels are set for all products prior to the commencement of the job and are communicated via the Job Pack system. Final Inspection activities are carried out prior to product release.

11.3. Control of Non-conforming Product [Clause 8.3]

Non-conformances identified at any stage of product realisation, whether these be product or service related, are reported and controlled via the established procedure ([QP04](#)). Following the identification of non-conformance, the action taken shall be appropriate to its real or potential effects.

11.4. Analysis of Data [Clause 8.4]

Appropriate data is identified and analysed in order to ensure that the QMS is both effective and improving. This analysis is presented to the management team at regular intervals and forms the basis of operational and other decisions.

11.5. Improvement [Clause 8.5]

11.5.1. Continual Improvement [Clause 8.5.1]

The company is committed to continually improving both the QMS and the level of service it gives to its customers. The main vehicle for determining what improvements are required and for monitoring progress against quality objectives is the Management Review procedure ([QP06](#)).

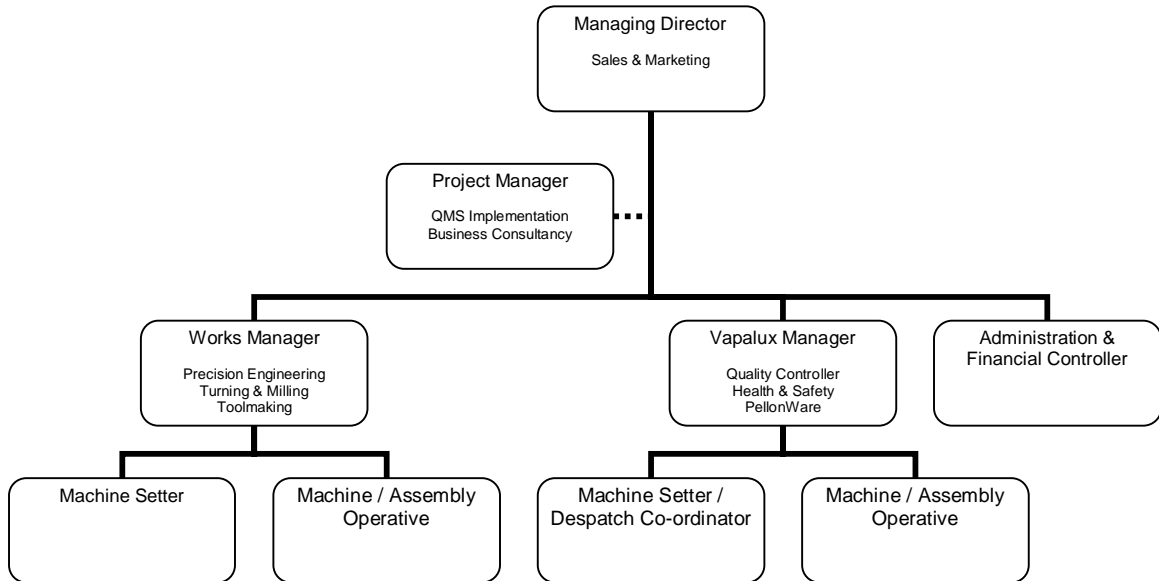
11.5.2. Corrective Action [Clause 8.5.2]

The company will take appropriate actions to stop the re-occurrence of any non-conformances that occur within the QMS. [Quality Procedure QP05](#) describes the Corrective Action process.

11.5.3. Preventive Action [Clause 8.5.3]

The company will constantly try to prevent non-conformance, by looking at any adverse trends (for example, in audit reports, customer complaints, corrective and preventive action reports, supplier rejects, etc). [Quality Procedure QP05](#) describes the Preventive Action process.

12. Company Organisation Chart



Note:

To implement the Quality Management System, the Quality Controller and Project Manager have worked closely with each other. Once the initial requirements of BS EN ISO9001:2000 have been fulfilled, the Project Manager will disengage and the Quality Controller will assume full authority and responsibility for ensuring that the the ongoing requirements of the quality standard are met.

13. Index of Quality Management System Procedures

The following Quality Procedures have been established within this Quality Management System:

| Procedure Ref. | Name of Procedure |
|----------------|---|
| QP01 | Control of Documents |
| QP02 | Control of Records |
| QP03 | Internal Audit |
| QP04 | Control of Non-conforming Product |
| QP05 | Corrective and Preventive Action |
| QP06 | Management Review |
| QP07 | Purchasing and Procurement |

14. Amendment Sheet

| Date | Issue No. | Details of amendment(s) | Approved by | Position |
|----------|-----------|-------------------------|-------------|-------------------|
| 05/04/06 | 1 | First issue | SV Kendall | Managing Director |