Andrew Hodson

Quality Policy Manual

Acewell **Electronics** Ltd

Quality Manual

Written November/December 2011

Andrew Hodson

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Rev	Description of changes	Approved by Quality Representative	Date Approved
1	Original issue (Draft)	Draft	December 2011

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FORWARD

This section is included to outline the distribution and use of the Acewell Electronics Ltd Quality Manual (AEQM) and supporting documents.

Controlled quality manuals

Where people need to receive regular updates of these manual, controlled copies will be issued. Any subsequent revisions will be issued to holders of controlled copies, unless they no longer have a need for it. Holders of controlled copies are responsible for the protection and security of their manual and for the control of superseded versions.

Uncontrolled quality manuals

Normally, only uncontrolled manuals are issued outside the company, e.g. to third parties. If issued, these are not routinely updated and users should contact Acewell Electronics Ltd on 01282 412340 if they wish to check on their validity.

Supporting documents

Acewell Electronics quality processes (Qps) are referred to in this manual. It is not our normal policy to issue Qps or other supporting documents (BAFE documents, British Standards, records, forms etc) outside the company, although these can be made available to view if appropriate.

Section References

The first sections in this manual (sections 1, 3 & 3) provide an introduction to Acewell Electronics Ltd and its quality management system. Sections 4 to 8 specifically define how Acewell Electronics Ltd meets all the needs of ISO9001:2000. The numbering of sections 4 to 8 and all their sub-sections is designed to provide a direct cross reference to the numbering of ISO9001:2000.

2. INTRODUCTION TO ACEWELL ELECTRONICS LTD

Acewell Electronics Ltd is a family owned business, incorporated in 1983 by Charles Trevor Hodson who is still a director of the company. The current Managing Director is Andrew Hodson. The company specifies, installs and maintains all types of portable fire extinguishing equipment to the British Standard 5306 Part 3 and manufacturer's instructions.

The company has approximately 120 customers in this field and carries out this work in the Lancashire area, specifically the towns of Burnley, Nelson, Blackburn, Accrington and surrounding villages. Currently the company employs 5 staff, of which 1 is engaged in the service of portable fire extinguishers with 1 other carrying out administrative work relating to the task, such as invoicing, quoting, maintaining records and customer related duties.

Employers and public/product liability insurance is provided by Acewell Electronics Ltd for the sums of £10,000,000 and £5,000,000 respectively.

In pursuit of continual improvement in its products and customer service, Acewell Electronics Ltd has implemented a Quality Management System (QMS) to meet the requirements of ISO9001:2000. This QMS will currently only cover the supply and maintenance of portable fire extinguishers and other areas of work are currently not included.

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DEFINITION LIST 3.

- Controlled document

must confirm

establishing

obligations or

maintenance of

For the purpose of Acewell Electronics Ltd Quality Management System, the following definitions and abbreviations apply. Many of the definitions are taken from ISO 9000 - 'Quality management systems - Fundamentals and vocabulary', which is defined within ISO 9001 as a 'Normative Reference' (meaning that ISO 9000 definitions should be read in conjunction with ISO 9001)

Accreditation The approval of the certification body by the United Kingdom Accreditation Service (UKAS)

Audit Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to

determine the extent to which audit criteria are fulfilled [ISO 9000]

Certification The approval of Acewell Electronics Ltd Quality Management System as meeting the requirements of ISO 9001-2000

by a certification body

Corrective action Action to correct the root cause of a non-conformity, in order to stop the non-conformity recurring

Organisation or person that receives a product (or service) [ISO 9000] Customer

Design & Development Set of processes that transform requirements into specified characteristics or into the specification of a product,

process or system [ISO 9000]

Document Information and its supporting medium, e.g. record, specification, process document, drawing, report, standard

Document copies that are registered to a specific holder. All holders will automatically receive updates

from the Quality Representative (QR) in the event of a revision

- Draft document A document which is not approved for use and which must not be worked to - Superseded document A document which has been revised and which must not be worked to

- Uncontrolled document Document copies which are not automatically updated in the event of a revision. The user

the document status with the QR before use

Infrastructure System of facilities, equipment and services needed for the operation of an organisation [ISO 9000] ISO 9000 'Quality management systems' - fundamentals and vocabulary. The standard gives guidance on the quality

management principles and concepts that provide the foundation for ISO 9001 and ISO 9004 as well as

the terminology and definitions applied in them

Group of people and facilities with an arrangement and responsibilities, authorities and relationships [ISO 9000] Organisation Non-Compliance A term used in relation to a quality audit to indicate a deviation from the specified quality system processes or from

ISO 9001:2000 requirements Non fulfilment of a requirement [ISO 9000] Nonconformity

Failure to meet the agreed customers requirements, National standards, statutory or regulatory

Acewell Electronics Ltd.

National Standard A documented method of working, defined by National (or international) bodies, such as the British Standards

Institute for example

Preventative action Action to prevent potential, future non-conformities occurring

Procedure Specified way of carrying out an activity or process. NOTE procedures can be documented or not [ISO 9000] Product

The result of a process [ISO 9000]

Acewell Electronics Ltd product within the scope of this QMS is the 'Specification, installation and

portable fire extinguishing equipment'

Quality The degree to which a set of inherent characteristics fulfils requirements [ISO 9000]

Meeting customers' expectations

Quality Assurance Part of quality management focussed on providing confidence that quality requirements will be fulfilled [ISO 9000]

Quality Control Part of quality management focussed on fulfilling quality requirements [ISO 9000] **Quality Management** Co-ordinated activities to direct and control an organisation with regard to quality [ISO 9000] **Quality Manual** A document specifying the quality management system of an organisation [ISO 9000]

Quality Objective Something sought, or aimed for, related to quality [ISO 9000]

Quality Plan Document specifying which processes and associated resources shall be applied by whom and when to

a specific project, product processes or contract

Quality Policy The overall intentions and direction of an organisation related to quality, as formally expressed by top management

[ISO 9000]

Management system to direct and control an organisation related to quality, as formally expressed by **Quality Management System**

top management [ISO 9000]

The results generated by activities at the interface between Acewell Electronics Ltd and our customer by Acewell's Service

internal activities to meet our customers' requirements

System Set of interrelated or interacting elements [ISO 9000]

Top Management Person or group of people who direct and control an organisation at the highest level [ISO 9000]

Verification Confirmation, through the provision of objective evidence that specified requirements have been fulfilled [ISO 9000]

Work environment Set of conditions under which work is performed [ISO 9000]

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4. QUALITY MANAGEMENT SYSTEMS

4.1 General Requirements

Acewell Electronics will maintain its quality management system to meet the requirements of the ISO 9001:2000 standard, thereby ensuring customer satisfaction and continual improvement in processes, products and service.

- 4.2 Documentation requirements
- 4.2.1 General requirements for Documentation

Supporting processes:

QP6 - Documented/record control

Acewell Electronics Ltd will maintain a documented quality system as a means of ensuring that its products and services described within the scope of this document, meet the customers' expectations, BS5306 requirements and ultimately the requirements of BAFE. In addition, the Company will continually review and improve the quality system. All quality system documentation is structured in four levels, with a brief explanation of each given below.

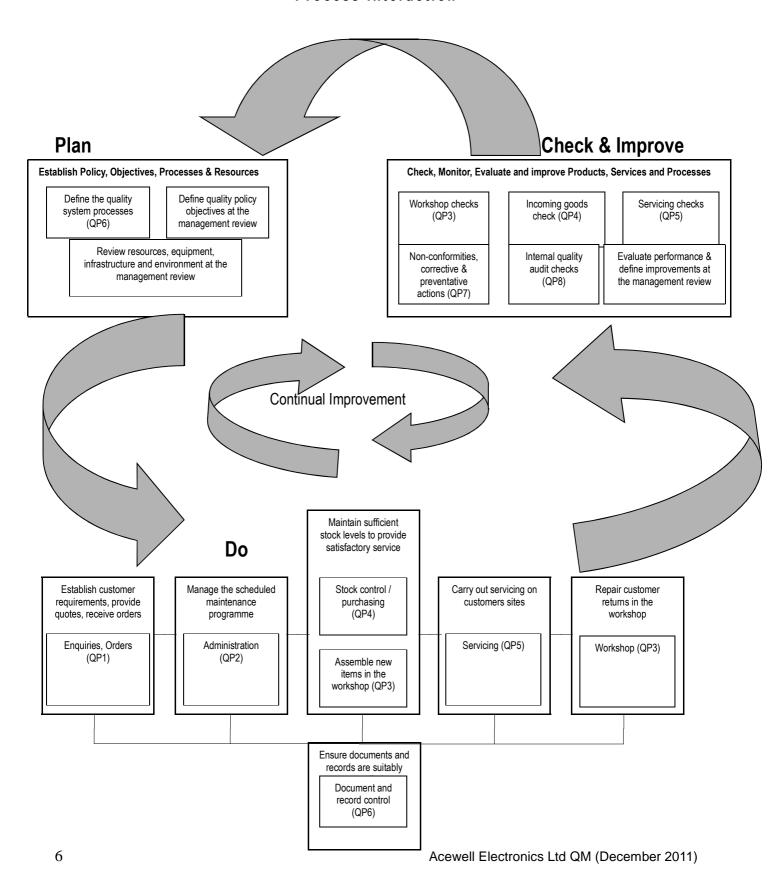
4.2.2 Quality Manual (level 1)

The Quality Manual defines Acewell Electronics Ltd's overall policy towards quality and towards the ISO 9001:2000 quality system elements and has been generated in order to:

- Summarise the responsibilities and organisational structures
- Define in broad terms what needs to be achieved when amending existing processes or introducing new processes to the company
- In some cases, define specific actions that need to be taken or processes that need to be implemented
- Explain in general terms to new recruits, customers or third parties how Acewell Electronics Ltd has addressed the requirements of ISO 9001:2000
- Show the interaction between Acewell Electronics Ltd's processes which is shown over page.

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Process Interaction



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Process Interaction

Level 2 documentation – Quality processes (QPs)

These are produced where necessary to define the detailed quality system processes within Acewell Electronics Ltd with particular emphasis on what has to be done, responsibilities for doing it and the records and forms to be completed. Qps have also been produced for each of the six mandatory procedural requirements in ISO 9001:2000 ie control of documents (4.2.3) and records (4.2.4) auditing (8.2.2) non conformity (8.3) corrective (8.5.2) and preventative actions (8.5.3).

Level 3 documentation – Operating procedures (Ops), training specifications (TSs) BAFE documentation, National standards etc.

Operating procedures are prepared where necessary to define detailed jobs and work requirements. Training specifications (previously the detailed quality assurance procedures from the ISO 9002:1994 quality system) have been temporarily retained within the ISO 9001:2000 quality system for reference and as an aid to training but are not used for audit purposes. BAFE and BS5306 standards define the requirements for servicing, documentation, products, labelling etc. A service engineers manual defines specific requirements for on site servicing.

Level 4 documentation - Records and forms (DOC:FQ)

These are produced where it is required to provide objective evidence of having completed an activity and for process control purposes. They are also maintained to enable the effectiveness of Acewell Electronics Ltd's quality system to be evaluated, thereby enabling continual improvement.

4.2.3 Control of documents

Supporting Processes:	QP6 – Document/record control	
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Acewell Electronics Ltd will ensure that all documentation (hard copy and electronic) that controls or defines fire extinguisher equipment servicing and the operation of Acewell's quality system is properly controlled, ie to ensure that the right documentation is in the right place at the right time. This documentation includes the 'level 2' and 'level 3' quality system documentation defined above. Acewell must ensure that the relevant documents are reviewed, updated and approved/re-approved before use. Documents must be clearly identified and the use of out-of-date documents must be prevented. The potential for loss or damage of documents should be minimised. Careful control must be exerted to ensure that when documents are changed, those people that need to have up-to-date copies, do so. Computerised documents are backed up on a regular basis and a copy stored remotely.

4.2.4 Control of quality needs

Acewell Electronics Ltd retains records of quality system activities for a specified period, with a minimum of any customer, BAFE or other regulatory requirements. The use of electronic storage (Trilambda) means that these records can be kept indefinitely. These records are clearly identified, filed and stored in such a manner that they are easily retrievable and so that loss and deterioration is prevented. Records can be made available to appropriate people for any justified use. When disposed, methods are used so as to protect customer confidentiality. As for computerised documents above, computerised records are also backed up on a regular basis and a copy stored remotely.

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5. MANAGEMENT RESPONSIBILITIES

5.1 Management Commitment

Supporting Processes: None

Top management must demonstrate their commitment to continual improvement and to the development of the quality system. To demonstrate commitment, they are involved in setting and reviewing quality policy and objectives, ensuring adequate resources exist and reviewing the performance of the quality management system through the management review meeting (see 5.6 below). They will also be involved in communicating relevant quality information to staff, eg through meetings and in general discussions.

5.2 Customer Focus

Supporting Processes:	None	
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Top management must keep aware of fire protection industry developments and best practice, through membership of trade bodies, attendance at relevant seminars, exhibitions, training events, periodicals, journals, monthly checks of national standards and horizon scanning. In addition, customer feedback is reviewed and action identified in order to ensure a customer focus is maintained and the standard of products and service is continually improved.

5.3 Quality Policy

Supporting Processes:	None	
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Acewell Electronics Ltd quality policy is defined below. This policy will be regularly reviewed at the management review meeting and will be communicated to staff through meetings, induction processes, etc. as appropriate.

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Acewell Electronics Ltd. Quality Policy

Acewell Electronics Ltd supplies and maintains portable fire extinguishing equipment with prime emphasis on quality of service, value for money, meeting customer and regulatory requirements and ensuring continual improvement. Measurable quality objectives for the products and services will be set and reviewed though Management Review meetings.

We pledge total commitment to our client base in all aspects of supply and customer support, using only the finest quality materials manufactured to the latest British and European Standards.

We intend to continue a long term policy of training, technology and resources. Our quality management systems comply with the International Standard BS EN ISO 9001:2000 – 'Quality Systems -Requirements'.

Every aspect of Acewell Electronics Ltd business, within the scope of this quality manual, together with our employees, are involved in adherence of this policy. Compliance with this policy and the supporting documents is mandatory.

The Company recognises the quality of its products and our reputation depends on the day-to-day actions of the people we employ. We look forward to a continuing relationships with new and existing clients, in the spirit of mutual satisfaction.

Signed Date: December 2011

(Managing Director)

5.4 Planning

5.4.1 Quality objectives

Supporting Processes:	None
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Top management must ensure that measurable quality objectives are set and regularly reviewed through the management review meeting to ensure that they are consistent with Acewell Electronics Ltd quality policy and the commitment to continual improvement.

5.4.2 Quality management system planning

Supporting Processes:	All quality processes and supporting documentation
Supporting 1 10003503.	7 iii quality processes and supporting accumentation

Acewell Electronics Ltd top management will ensure that the processes and resources needed to achieve the quality policy and objectives are identified and planned. Planning will cover sales, purchasing, servicing and workshop activities, checking methods and processes to ensure continual improvement, as appropriate. Any subsequent changes to the quality management system must be made in a way that ensures that its integrity is maintained during changes.

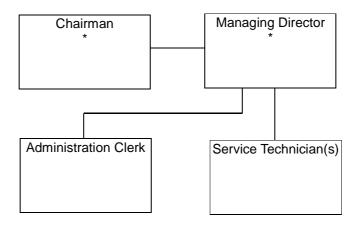
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5.5 Responsibility, authority and communication

5.5.1 Responsibility and authority

Supporting Processes:	All quality processes	
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The organisation and management structure is shown below.



Acewell Electronics Ltd is a Private Limited Company, consisting of two directors and a company secretary (not shown)

Specific authorities and responsibilities for quality management are detailed in the quality processes (QPs) and other quality system documentation buy key authorities and responsibilities are as follows:

^{*} denotes member of the senior management team.

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Chairman

The chairman has an overall responsibility for overseeing the strategy of the company, as defined by the Managing Director. Whilst not taking a day-to-day role in this, the Chairman still retains a vested interest in the success of the Quality Management System and its implementation. Having a vast experience in fire related standards and policies, the Chairman acts as a consultant.

Managing Director

The managing director has responsibility for enforcing the Quality Management System and making the final decision when questions arise relating to quality activities. Takes an overall responsibility for ensuring that personnel performing quality related activities are competent to carry out the job to the required standard. Responsible for taking an overview of all internal activity and for ensuring adequate supplies and equipment are available at all times. Also has overall responsibility for the following:

- Providing adequate human resources, infrastructure, plant and equipment
- Ensuring continual improvements
- Setting and reviewing quality policy and objectives and ensuring that the company remains focussed on satisfying customer needs
- Chairing the management review meeting
- Overseeing the operation of the quality system and ensuring that the system is suitable for the needs of the business and its customers
- Development of new markets, new products and services
- Development of new and existing customers
- Ensuring that all communications given to potential customers clearly define the company capabilities
- Sales and promotional planning and action
- Defining the price structure and any discounts given
- Assessment and approval of new suppliers and sub-contractors
- Approval of purchases over a given value
- Specifying equipment to meet customers needs

Administration Clerk

The administration clerk is responsible for the following:

- Maintaining customer records and administration systems
- Invoicing, entering purchase invoices into the system
- Taking and dealing with incoming telephone calls
- Providing support to the MD

Service Engineer(s)

Are responsible for carrying out the work specified on the worksheet, either on customers premises or HQ:

- Specifying equipment to meet customers needs
- Inspection and servicing of equipment
- Ensuring that stock shortages or requirements are reported to the MD
- Notifying HQ and customer in the event of a change in equipment or building alterations that could affect the level of service cover

Internal communication

Supporting Processes:	None	
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Top management will ensure that information about the quality management system is communicated to staff. As appropriate, this will be carried out through meetings, memos, notice boards, emails etc. As appropriate, the results of the management review, audits, process performance, complaints, non-conformities, performance against objectives, etc will be communicated.

5.6 MANAGEMENT REVIEW

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General requirements

A review of Acewell Electronics Ltd quality system and quality performance will be carried out at least annually against a clearly defined agenda as defined below. Each review will be attended by the Managing Director and relevant managers and is designed to identify where improvements can be made in order to improve the effectiveness, efficiency or scope of the quality management system, to prevent previous and potential nonconformities and to increase customer satisfaction. All reviews will be minuted. All actions will have defined time-scales and responsibilities and be followed up to ensure that they are implemented and are effective.

Agenda

- 1) The progress of actions placed at the last management review, ie have they been implemented and have they been effective
- 2) The evaluation of suppliers and sub-contractors (where applicable) taking into account their delivery performance, product quality etc (QP4 and QP7)
- 3) Customer complaints and status of actions taken to resolve and prevent them (QP7)
- 4) Customer feedback analysis
- 5) The findings from internal audits and the agreement of the internal audit schedule for the forthcoming 12 months (QP8)
- 6) Any other nonconformities not included in the above and the status of actions taken to resolve and prevent them, eg workshop and service nonconformities etc (QP3 and QP5)
- 7) The effectiveness of training provided to staff in the previous period
- 8) The competencies required to meet current and future needs see competency matrix (CM)
- 9) Future training needs (for all employees) and the objective for any training
- 10) Future business objective, industry changes, BAFE requirements, new services, new products, ISO/BS changes' legislative changes, items on the horizon etc which could impact the quality system
- 11) Performance against the previous periods quality objectives/targets
- 12) Current process performance, process measures and any improvements required to processes
- 13) The agreement of quality objectives/targets for the forthcoming period, eg level of nonconformities, customer satisfaction, service performance etc
- 14) Any improvements required to products and services*
- 15) The quality policy in terms of its currency, validity, effectiveness etc.*
- 16) The adequacy of the quality manual, quality processes and quality records/forms to cover the future needs of the company and any improvements necessary*
- 17) The adequacy of resources, ie trained and qualified personnel, workshop equipment, engineers equipment, computer software/systems and hardware, infrasctructure, work environment etc.*
- 18) Any other business

Items can be added or removed the agenda to suit the current scenario.

^{*} As a minimum the minutes must summarise these points, as required by ISO 9001:2000

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6.0 RESOURCE MANAGEMENT

6.1 Provision of resources

Supporting Processes: None

Though the management review process at 5.6 above and/or other appropriate methods, Acewell Electronics will determine and provide the resources needed to maintain and improve the quality management system processes and to ensure customer satisfaction. The following resources will be reviewed for example:

- Information and data (see 4.2.3 and 4.2.4)
- Financial resources (see Managing Directors responsibilities at 5.5.1)
- Trained/knowledgeable people (see 6.2)
- Infrastructure (see 6.3)
- Work environment (see 6.4)
- A reliable supplier base (see 7.4)

6.2 Human Resources

Supporting Processes:	None	
11 5		

Competencies for each job role affecting quality are defined on the competency matrix (CM). The need for new or revised competencies is reviewed at the management review meeting (see 5.6) as a minimum and when new products or processes are implemented. Specifically, engineers are required to become formally qualified by an approved theoretical and practical examination that is organised and invigilated by the independent third party, ie the FIA training offering BAFE qualifications.

Though the management review process and during routine planning and order processing, managers will identify appropriate education, training, skills or experience for their employees to meet these competencies and so that they are aware of the relevance of their job role and how they contribute to the achievement of Acewell Electronics Ltd objectives. The need for training and other forms of developmental action will also be identified when nonconformities arise – (see 8.2.2 and 8.3) below (and processes QP7 and QP8)

Personal training records (PTR) must be maintained to demonstrate competence and as a record of relevant training, development, qualifications, skills and experience.

The overall effectiveness of training and other development actions will be evaluated at the management review meeting (see 5.6)

6.3 Infrastructure

Supporting Processes: None

Acewell Electronics Ltd will review, provide and maintain the infrastructure needed to achieve its quality objectives. This infrastructure includes the following:

- Workshop equipment and storage facilities
- Company vehicles and engineers equipment
- Communications equipment e.g. phone system
- Computer hardware and software

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The above infrastructure must be checked periodically for correct and safe function and to ensure ongoing capability, either by Acewell Electronics Ltd or by sub-contract maintainers. Records are maintained of the maintenance and checking.

The adequacy of these resources will be verified through audit and a review of infrastructure requirements at the management review.

6.4 Work environment

Supporting Processes: None	
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Acewell Electronics Ltd will ensure a suitable working environment exists to ensure that the quality policy and objectives can be achieved. For example, the following factors are taken into account during risk assessments, audits and at the management review when considering the adequacy of the work environment:

- Workshop facilities in terms of cleanliness, tidiness, space requirements etc
- Health and safety requirements for lifting and handling, fire precautions.

For full details, consult the Acewell Electronics Health & safety policy.

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7.0 PRODUCT REALISATION

7.1 planning of product realisation

Supporting processes	QP1 – Enquiries, quotes or orders QP2 – Administration QP3 – Workshop
	QP4 – Stock control/purchasing QP5 - Servicing

Where new products or services are to be introduced, these are fully thought through and the following carefully planned, as appropriate, before the product is provided to customers:

- 1. The product/service objectives and requirements
- 2. The necessary processes, documents, resources and facilities
- 3. The standards for acceptance/rejection and the methods of checking, testing, monitoring etc.
- 4. The records required to provide evidence of effective processes and of the product/service

Planning will result in appropriate documentation being produced/obtained such as flow charts, service engineers manuals etc. which will define the product/service requirements. Planning will also ensure that sufficient resources exist (human, infrastructure and environment – see section 6)

7.2 Customer related processes

Supporting Processes:	QP1 – Enquiries, quotes, orders QP7 – Non conformity, corrective and preventative action
	QF7 - Non comornity, corrective and preventative action

Where necessary, site surveys are carried out to establish and advise on the level of fire extinguisher equipment required, quotaions are provided in writing (email being acceptable) and must be reviewed and approved before they are given to the customer. This is to ensure that the equipment is correctly and clearly specified and that Acewell Electronics Ltd has the capability to meet the customer's requirements and any regulatory requirements such as those in BS5306 and eventually BAFE SP101. When orders are received, they are checked against the quotation for clarity and capability to supply/service.

Once accepted by Acewell, a worksheet is prepared which details the order requirements for the stores and engineer(s). All amendments to quotations and orders must be documented and a revised quotation and/or worksheet produced. Acewell's computer system (Trilambda) is used to control the processing of service administration as well as maintaining a log of equipment at each customers premises. When a service visit is carried out, the service log is updated on Trilambda and a future service date entry is created.

7.3 Design and development

Supporting Processes:	None
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Acewell Electronics Ltd provides products and maintenance services in accordance with customer and regulatory requirements and therefore, does not carry out design or development activities. Therefore this element ISO 9001:2000 is not relevant and is excluded.

7.4 Purchasing

Supporting Processes:	None	
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Acewell Electronics Ltd must ensure that purchased products, services, equipment etc. will meet its own requirements and will be

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capable of meeting customers needs and regulatory requirements. Suppliers will be assessed and added to an approved list as required. Supplier performance will be monitored and re-evaluated through monitoring of nonconformities and through management review. A set of approved supplier datasheets is maintained (on quality record ASDS)

The requirement for purchased products and services must be clearly specified along with any checks to be carried out when they are delivered, eg in purchase orders, quality processes, etc. and any documentation required. All purchases must be recorded and must be reviewed prior to communication to the supplier, as must all amendments to purchases.

Purchased products and services must be checked on delivery to ensure conformance with the purchase requirements. These checks will be documented eg on the purchase order or delivery note.

7.5 Product and Service Provision

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7.5.1	(Control of i	nroduction and	service provision

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Supporting processes	QP2 – Administration QP3 – Workshop QP5 - Servicing	

Acewell Electronics Ltd process is the specilisation and servicing of fire extinguishers in accordance with the national standards BS5306, parts 3 & 8. Up-to-date national standards, equipment technical data sheets and a comprehensive Service Engineers Guidance Manual are maintained to specify how equipment is to be serviced. For unusual or uncommon equipment, servicing details are available direct from manufacturers.

Records of site surveys and recommendations for equipment specification are maintained. The company maintains a comprehensive database of customers (Trilambda) with service contracts along with service frequency. Maintenance workload levels are regularly monitored to ensure adequate engineering resources are available. Services are organised to meet contractual requirements and records of servicing work are maintained. Inspection certificates are issued to customers which detail the level of equipment on site and service work carried out.

During surveys or scheduled service visits, where the level of equipment is found to be inadequate, non conforming or missing, systems exist to notify the customer. The customer is also notified if access cannot be gained to service the equipment.

Where equipment cannot readily be serviced at the customer site, loan equipment will be provided as necessary to retain the level of fire cover. Details of the loan equipment will be notified to the customer along with any differences to the original equipment.

7.5.2 Validation of processes for production and service provision

Acewell Electronics Ltd do not carry out any work for which the outcome cannot be fully verified by subsequent checks or inspections. Therefore this clause of ISO 9001:2000 is not relevant to the Company.

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7.5.3 Identification and Traceability

QP5 - Servicing

All equipment is clearly labelled in accordance with national standards. Consumable items and spares are given an unambiguous description when in stock and stored in specific, clearly identified locations. The inspection and test status of extinguishers at customers premises, in the Acewell workshop and stores must be clearly identified using certificates of inspection, worksheets, service labels, storage location etc.

Traceability of equipment back to the supplier or to manufacturing batches is not a normal Acewell Electronics or customer requirement. Records of types and quantities of equipment held by customer are maintained but it is not necessary for each item of equipment to be serially numbered or uniquely identified.

7.5.4 Customer property

Supporting processes	QP3 – Workshop	
	QP5 – Servicing	

In some circumstances, customer equipment is brought back to Acewell for remedial action. In this case, it is clearly identified and segregated. A record of the work carried out on the equipment is maintained. Once the remedial action is taken the equipment is returned to the customer or, if the equipment is unserviceable, the customer is notified and a replacement provided. Where this replacement is not directly equivalent, this will be recorded and notified to the customer.

7.5.5 Preservation of product

Supporting processes	QP4 – Stock control/purchasing QP3 – Workshop
	QP5 - Servicing

Suitable racking and facilities are provided to ensure that all equipment and spares are not damaged or allowed to deteriorate during handling and storage. Where appropriate, new equipment and spares are stored in the original manufacturers packaging. Items in stock are clearly identified and segregated. Stock rotation is ensured by location and identifying marks on boxes containing new equipment. The quantities and condition of equipment and spares held must be assessed for damage and deterioration during regular stock checks. Processes exist for checking receipt into stock. Delivery is carried out by engineers in Acewell vehicles which are regularly serviced and maintained.

7.6 Control of monitoring and measuring devices

	Supporting Processes:	None	
- 1 '	Supporting i rocesses.	140110	

Calibrated scales / balances must be used for weighing filled extinguishers. These scales must be calibrated at regular intervals back to national standards eg using weights calibrated by a UKAS registered test house. Where scales / balances are found to be out of calibration, this is recorded and consideration is given to the implications for extinguishers weighed using this equipment. Unless specified by national standards, other measuring equipment is un-calibrated and used for information only purposes, not for checking. Records must be maintained of all calibrated equipment using the Engineers Calibration Record (ECR 1, ECR2) and the workshop calibration record (WCR)

Where equipment is found to be out of calibration, this must be recorded as a nonconformity and consideration must be given to the implications for measurements carried out.

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8.0 MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General

Supporting Processes: None

Acewell Electronics Ltd must plan, review and where appropriate, update its measurement, analysis and improvement processes. These processes should identify if the products and maintenance services are being delivered in accordance with customer and regulatory requirements and should facilitate continual improvement. Where appropriate, simple statistical methods and graphical presentations will be used to do this. The planning and review of these processes will be carried out as appropriate through the management review meetings.

8.2 Monitoring and measurement

8.2.1 Customer satisfaction

Supporting Processes: None

Acewell Electronics Ltd will monitor customer satisfaction / dissatisfaction as one measure of its performance. Customer satisfaction information will be collected either through telephone or written surveys, or through regular sales visits to customers, using the customer satisfaction record (CSR) or other appropriate record. If possible, customer satisfaction information will be collected from at least 1% of customers per annum. Once collected and recorded, this information will be analysed to establish performance trends and possible improvement actions and is presented to relevant meetings, including the management review meeting.

8.2.2 Internal audit

Supporting Processes: None

Acewell Electronics Ltd will implement and maintain a programme of internal audits in order to monitor the effectiveness of the quality management system. In addition, this programme will provide the mechanism for making changes to the quality system in order to better meet customer requirements and to facilitate continual improvement. All audits will be conducted by competent auditors, who are familiar with the system. Due to the size of the company, these audits will be carried out by the MD.

8.2.3 Monitoring and measurement of processes

Supporting Processes: None

Processes will be monitored through internal audit and relevant meetings. In addition, Directors will monitor and measure the effectiveness of the processes to ensure that it is effective. Performance against the agreed quality objectives will be measured. Where these performance measures show process problems, appropriate action will be taken. Process performance measures will be reported to relevant meetings, including management review.

8.2.4 Monitoring and measurement of product

Supporting Processes: None

Checks and inspections must be carried out to ensure that materials, products and serviced equipment are in accordance with relevant QPs, engineers manual, worksheets and regulatory requirements such as BAFE, BS5306 etc. These checks are defined in the quality processes and must be recorded on the relevant quality record.

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8.3 Control of nonconforming product

Supporting Processes:

QP7 – Non conformity, corrective and preventative action

When products and maintenance services are found to be incorrect, this must be recorded and the incorrect product prevented from further use until a decision is made on what to do with it. Customer complaints will also be recorded as nonconformities. Acewell Electronics Ltd will take appropriate action to remedy these nonconformities and where necessary, to reassure the customer. All actions taken must be recorded and followed up to ensure they are implemented and effective in resolving the nonconformity.

8.4 Analysis of data

Supporting Processes:

None

Acewell Electronics Ltd will analyse the various sources of data to determine the suitability and effectiveness of the quality management system and to identify where improvements can be made. For example, customer satisfaction/dissatisfaction data, process measures, performance against agreed objectives, service perofrmance, supplier performance, audit findings etc. will be analysed as appropriate and data reviewed at relevant meetings, including the management review meetings.

8.5 Improvement

8.5.1 Continual improvement

Supporting Processes:

None

Acewell Electronics Ltd will implement processes to ensure continual improvement such as the management review meeting. The following will be reviewed in order to ensure continual improvement – quality policy, quality objectives, audit results, analysis of data, nonconformities, customer feedback and complaints, corrective and preventative actions, etc. as appropriate. Improvement actions will be agreed and followed up to ensure they are implemented and effective.

8.5.2 Corrective action

Supporting Processes:

QP7 – Non conformity, corrective and preventative action

As described at clause 8.3, nonconformities result in actions being agreed to remedy the situation. The root cause of the nonconformity must also be established and action taken to correct the cause, thereby preventing recurrence of the nonconformity. Typically, this will mean reviewing:

- 1. The effectiveness of Acewell's processes, the Quality Processes (QPs) and working methods
- 2. Staff capabilities and human resources
- 3. Workshop facilities and equipment
- 4. Supplier capabilities
- 5. Supplied product capabilities
- 6. Hardware and software capabilities

All corrective actions are documented, progressed to completion and reviewed to ensure that they are implemented and effective.

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8.5.3 Preventative action

Supporting Processes: QP7 – Non conformity, corrective and preventative action

Preventative action is the action to prevent occurrence of potential nonconformities. Preventative actions will be considered at the management review meeting and through other processes as appropriate (such as the nonconformity process). Information considered when identifying preventative actions will include nonconformities, audit findings, supplier problems, complaints, trend data etc. Once identified, preventative actions must be recorded, progressed to completion and reviewed to ensure that they are implemented and effective.