QUALITY MANAGEMENT SYSTEM MANUAL

For

LEC MARINE (KLYNE) LTD

In Accordance with the Principles Contained in

BS EN ISO 9001:2008
## REVISION SHEET

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QUALITY MANAGEMENT POLICY STATEMENT

It is the policy of LEC Marine (Klyne) Ltd to provide Electrical, Electronic, Design and Project Management services to meet the needs of the Marine, Offshore and Land based Industries.

Top Management will, through periodic Management Review meetings, monitor customer satisfaction, review quality objectives and where necessary, establish new objectives. It will also review this policy for its continuing suitability to Company needs.

Top Management is committed to complying with the requirements of BS EN ISO 9001: 2008 and to continually improving the effectiveness of the Quality Management System.

Top Management will provide sufficient resources to ensure that staff are suitably selected and competent to carry out required duties, and where necessary trained to enable them to discharge their duties effectively, safely and to our clients complete satisfaction. A review of staff competency and training needs will be conducted at the Management Review meeting.

All staff will be given a copy of this statement as part of their induction into the company and this policy will be posted on the Company notice board.

W.M. Sawyer (Managing Director)
August 2012

Rev. 1. 24.08.13
## MANUAL STATUS

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When revisions are made, individual pages will indicate the revision status and the date incorporated. The manual will be reissued at the discretion of the Quality Manager and raised to the next issue number. The revision status of individual pages will then revert to zero.

The manual can be accessed as a ‘read only’ document on the public shared ‘P’ hard drive. A hard copy of the Quality Manual is available to view in the QA office.

Rev. No. 1.
25.05.12
INTRODUCTION

LEC Marine (Klyne) Ltd provides a service for the Electrical Installation Design, Manufacture, Installation and Repair of electrical and electronic equipment, as well as the design and manufacture of Switchboards, Consoles and Control Panels.

The Company also operates a repair centre and provides electrical and electronic test and commissioning services.

The above services are provided for shipbuilding and ship repair yards, on shore and offshore gas and oil installations, the water treatment industry, commercial and industrial organisations.

The Company has decided that the use of process flow charts is the best way of representing the Quality Management System (QMS).

Many of the activities or processes of departments have common themes and this has enabled the production of a single QMS Manual.

Where there are variances then individual department processes are given in appendices as are Work Instructions.
ACTIVITIES & SCOPE

The Company has achieved approval within the requirements of BS EN ISO 9001:2008 for the following activities:

- Design, manufacture & installation of switchgear and electrical control equipment for marine, offshore and industrial application.

- Repair, conversion and refurbishment of marine and industrial electrical installations and equipment.

- Supply & installation of electrical and electronic equipment (including marine navigational equipment) for marine and industrial applications.

NORMATIVE REFERENCES

This Quality Management Manual defines the policies and principles applied against each of the requirements of BS EN ISO 9001:2008 and relates to all activities carried out in the Company that determine the quality of the product or service. It also indicates how the Company operates.

The Quality Manual can be accessed as a ‘read only’ document on the public shared ‘P’ hard drive by all personnel. A hard copy of the manual is available to view in the QA office.

This document will be updated as the processes develop with the continual improvement of service to customers. Should an outside organization require a copy of this manual they will be sent one but it will an ‘uncontrolled copy.

TERMS AND DEFINITIONS

A SUPPLIER is any individual or company that on receipt of a Purchase Order supplies goods or services to the company as a contractual arrangement.

A CUSTOMER is any individual or company who requests goods or services from the organization. The request can be a verbal instruction in the case of our customers who are sole traders, or as a contractual arrangement as specified in their purchasing procedure.

The QA Manager is the Quality Assurance Manager.

The QAM is the Quality Assurance Manual.
ACTIVITIES REQUIRING A DOCUMENTED PROCEDURE

CONTROL OF DOCUMENTS (CLAUSE 4.2.3)

Each Department Manager will determine the documents necessary for product realisation and for ensuring customer satisfaction.

These documents will be clearly identifiable and assigned a unique reference number from the QM Document Registry.

The documents will be annotated with Issue Level, Date of Issue and the Approval of the Managing Director.

Master copies of the documents will be held in the QM Document Registry. All documents will be held in at least electronic format and distributed electronically where possible.

Where possible documents will be used and stored electronically in ‘folders’ created for specific job numbers. These numbers will be traceable to Customer Purchase Orders via Job Numbers.

Where a process requires ‘hard copies’ of documents these will be suitably protected so that their legibility and usefulness will not be impaired by usage.

There will be a register of all contracts (Jobs).

These documents will be made available for internal audit. The audit process will ensure that:

1. Documents are available and kept with the correct job pack.
2. Documents are adequately completed to ensure proper product realisation.
3. Old versions are not in use.
4. All documents are legible.
5. Electronic documents are traceable to the correct electronic folder.

CONTROL OF RECORDS (CLAUSE 4.2.4)

Department Managers will determine the period of time that documents need to be stored. This period will pay regard to product warrant requirements, legal obligations or any requirements of the QMS.

On the completion of a contract all associated documents will be held as an item and referenced to the contract. These will be readily available locally for a period of time determined by the department manager. They will subsequently go to an archive until the period of retention has expired.

An independent auditor will audit records on a regular basis to ensure that there are adequate documents available and are satisfactorily completed for all work undertaken.
MANAGEMENT REVIEW (CLAUSE 5.6)

This is dealt with in Process 1.1

INTERNAL AUDITS (CLAUSE 8.2.2)

This is dealt with in Process 10.1.

CONTROL OF NON-CONFORMANCES (CLAUSE 8.3)

This is dealt with in Process 2.4 and 2.5.

CORRECTIVE ACTION (CLAUSE 8.5.2)

This is dealt with in Processes 2.4, 2.5 and 4.3.

PREVENTIVE ACTION (CLAUSE 8.5.3)

Preventive Action may be identified as a potential risk at any time and during any operational processes. They may also be identified during Internal/external Audits and during Management Review meetings. These will be recorded and actioned as a Non-conformance. Refer to Process 2.5.

DOCUMENTATION OF PROCESSES

The processes involved in achieving or realising a product or service is described in ‘flow diagram’ form.

The diagrams contained in this manual describe the global processes of the Company. The reference number of documents used to control the process is given in the diagram. The five departments that make up the Company may require a local process to deal with a complex activity. In this case the Appendices of this manual will contain sufficient parts as to describe the department processes and will also be in ‘flow diagram’ form. As with the Global processes, the reference number of documents will be given in the diagram. In these specific cases documents that control a departmental activity will appear on the diagram below the box showing the activity.

Work Instructions may be created for specific technical processes in each department.

The Purchasing, Invoicing and part of the control of Goods Inward, and services are processed by commercial software packages known as Barnes and Sage.

The assessment of performance and training needs will be controlled by a ‘Training Matrix’ for each department.
PROCESS 1 : MANAGEMENT REVIEW

PROCESS 2 : CUSTOMER FOCUS (ENQUIRY, CONTRACT & WARRANTY)

PROCESS 3 : PRODUCT DESIGN

PROCESS 4 : PURCHASING, STOCK REPLENISHMENT & PRODUCT RECALL

PROCESS 5 : PRODUCT REALISATION

PROCESS 6 : CONTROL OF MEASURING AND MONITORING EQUIPMENT

PROCESS 7 : INFRASTRUCTURE, WORKING ENVIRONMENT & HR

PROCESS 8 : CONTROL OF DOCUMENTS

PROCESS 9 : CONTROL OF RECORDS

PROCESS 10 : MONITORING AND MEASURING

PROCESS 11 : ADMINISTRATION
PROCESS 1 MANAGEMENT REVIEW

Senior Management will review the Company’s QMS on a six monthly basis to ensure its continuing suitability, adequacy and effectiveness. Records of these meeting are held in the QA Office.

Meeting inputs:
1. Follow-up actions from previous management reviews
2. Results and actions arising from internal and external audits
3. Customer feedback
4. Process performance and product conformity
5. Supplier performance
6. Training status and requirements
7. Status of preventive and corrective actions
8. Changes that could affect the QMS
9. Opportunities/recommendations for improvement

Meeting outputs:
1. Improvement of the effectiveness of the QMS and its processes
2. Improvement of product or service related to customer requirements
3. Resource needs
4. Review of Quality Policy
5. Review previously set objectives
6. Setting new objectives for the forthcoming period
PROCESS 2.1  ENQUIRIES AND INVITATIONS TO TENDER.

As an integral part of the control of process it is recognised that there should be a standard and systematic approach to controlling contracts. The call out service does not use a quotation system.

**Process Diagram:**
- FROM CUSTOMER - ENQUIRY
- LOGGED & ESTIMATED
- OFFER TO CLIENT
- FINAL OFFER
- TO CLIENT
  - DISCUSSION WITH CLIENT & POSSIBLE REVISION
  - QM 48 QUOTE FILE

**Process 2.2**

**THE CALL OUT PROCESS**
- REQUEST FROM CUSTOMER - ENGINEER ASSIGNED
- WORK CARRIED OUT
- WORK REPORT QM 30
- INVOICING (PROCESS 11)
- BARNES SYSTEM

**This process addresses the following parts of the standard:**
- CUSTOMER FOCUS – MANAGEMENT & PRODUCT REALISATION: 5.2
- CONTROL OF DOCUMENTS: 4.2.3
- CUSTOMER REQUIREMENTS: 7.2.1
- REVIEW OF REQUIREMENTS: 7.2.2
- CUSTOMER COMMUNICATION: 7.2.3

**The following controls apply to this process:**
- CLASSIFICATION SOCIETY REGULATIONS
- STAFFING LEVELS
- INTERNAL AUDIT
- MARKET PRESSURE
- CLIENT RESPONSIVENESS
PROCESS 2.3

CONTRACT REVIEW

FROM CLIENT

CONTRACT ➔ LOGGED & REVIEWED AGAINST OFFER (QM48) ➔ FINAL ACCEPTANCE (QM46) ➔ PRODUCT DELIVERY & ACCEPTANCE

REVIEW WITH CUSTOMER

DESIGN & REVIEW (PROC. 3.1/2)

THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD

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<tr>
<td>INFRASTRUCTURE</td>
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PROCESS 2.4  CUSTOMER COMPLAINTS AND WARRANTY CLAIMS

An internal Non-conformance QM 05 may be raised by any department or during internal auditing; these will be processed by the Managing Director or the independent Quality Consultant. Details of the problem are recorded, and where appropriate Immediate Action taken. It is then investigated to identify the Root Cause so that Corrective Action may be taken to ensure that the problem does not recur. Once implemented, the issue will be revisited at a predetermined date to ensure that the action taken has been effective. All stages will be documented on QM 05 and will be closed out when completed. Each Non-conformance will be given a unique number and retained in a file in the QA office.

PROCESS 2.5  INTERNAL NONCONFORMANCE

FROM CLIENT

CUSTOMER COMPLAINT/WARRANTY CLAIM → LOGGED & REVIEWED (ON SPREADSHEET) → ROOT CAUSE ANALYSIS & CORRECTIVE ACTION → GOODS REPLACED/REWORKED → COMPLAINT WARRANTY CLAIM REVIEWED → DISCUSSED AT MANAGEMENT REVIEW MEETING

THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD

- CONTROL OF DOCUMENTS 4.2.3 CONTROL OF NON-CONFORMANCES 8.3
- CUSTOMER REQUIREMENTS 7.2.1
- REVIEW OF REQUIREMENTS 7.2.2
- CUSTOMER COMMUNICATION 7.2.3
- PRODUCT REALISATION 7
- CORRECTIVE ACTION 8.5.2

THE FOLLOWING CONTROLS APPLY TO THIS PROCESS

- CLASSIFICATION SOCIETY REGULATIONS
- CLASSIFICATION SOCIETY APPROVAL
- DESIGN HANDBOOK
- STAFFING LEVELS
- INTERNAL AUDIT
- CLIENT RESPONSIVENESS
PROCESS 3.1

PRODUCT DESIGN.

Contracts that require a design activity are for Switchboard contracts. The Switchboard Manager or his nominee oversees the design. The Design function is only carried out by suitably qualified, trained, experienced and assessed staff. All Design work is carried out in accordance with the Standard of Classification Society. Where the Design package is the Product or Service then the Process stops at ‘Submission to Client’. Findings from Design Reviews may recommend Preventive Action initiatives.

THE FOLLOWING CONTROLS APPLY TO THIS PROCESS

- CLIENT RESPONSIVENESS
- HEALTH & SAFETY REGULATIONS
- CLASS APPROVAL
- INTERNAL AUDIT
- INFRASTRUCTURE
- STAFF LEVELS
- GEOGRAPHICAL CONSTRAINT ON DELIVERY

THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD

- MANAGEMENT RESPONSIBILITY 5.5.1
- CUSTOMER FOCUS 7.2
- PRODUCT REALISATION 7
- DESIGN & DEVELOPMENT 7.3
- PRODUCTION & SERVICE PROVISION 7.5

OPTIONS TO CLIENT

ENQ/QUOTE PROCESS 2.1 & 2.3

CLIENT SPECIFICATION OR CONTRACT

QM 46

CONTRACT

VARIATIONS FROM CLIENT

DESIGN REVIEW

QM 46 MINUTES

SUBMISSION TO CLIENT & CLASS FOR APPROVAL

TEST PROCEDURE PROCESS 3.3

PRODUCT REALISATION (PROCESS 5.1)

TEST (PROCESS 3.3)
PROCESS 3.2  
DESIGN CALCULATIONS

The Design Process is only carried out by suitably qualified and assessed people. Pages of calculations will be numbered ‘Page x of y Pages’ and individually signed and dated by the designer.

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THE FOLLOWING CONTROLS APPLY TO THIS PROCESS

| CLASSIFICATION SOCIETY REGULATIONS |
| INFRASTRUCTURE |
| CLASSIFICATION SOCIETY APPROVAL |
| STAFFING LEVELS |
| INTERNAL AUDIT |
PROCESS 3.3  

TEST PROCEDURE

The Test Engineer (or nominee) will produce a Test Procedure for a job when deemed necessary. This will test the functionality of the equipment. Where appropriate it will be submitted to the Classification Society and to the Client for their approval.

---

**THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD**

- CONTROL OF DOCUMENTS 4.2.3
- CUSTOMER REQUIREMENTS 7.2
- CUSTOMER COMMUNICATION 7.2
- PRODUCT REALISATION 7

**THE FOLLOWING CONTROLS APPLY TO THIS PROCESS**

- CLASSIFICATION SOCIETY REGULATIONS
- CLASSIFICATION SOCIETY APPROVAL
- STAFFING LEVELS
- DESIGN HANDBOOK
- INFRASTRUCTURE
- INTERNAL AUDIT

Rev.1  24.08.12
In order to ensure that the highest standard of equipment and materials for our Customers, whenever possible, purchasing will be from Suppliers with a proven history of supplying goods and services to specification and at a competitive price. There are a limited number of occasions where work is outsourced and it occurs when there is no in-house capability; e.g. paintwork, machining, civil engineering, freighting and slinging and lifting of abnormal loads.
PROCESS 4.2  

STOCK CONTROL

The Managing Director will determine minimum stock levels.

PROCESS 4.3  

PRODUCT RECALL

Suppliers can issue product recall notices. These go directly to the QAS who advises the Design Function and Purchasing who in turn advise customers. Audits, Contract Reviews and Design Reviews may discover a non-conforming product or service issued by us. An investigation on the implications for the product or service will be carried out by the QAS and the managers involved. The client will be advised if necessary at the earliest opportunity. Top Management will instigate a review of procedures or an audit immediately.

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This process addresses the following parts of the standard:

- **Purchasing**: 7.4
- **Control of Documents**: 4.2.3
- **Control of Records**: 4.2.4
- **Control of Non-Conforming Items**: 8.3
- **Customer Focus**: 7.2

The following controls apply to this process:

- **Client Responsiveness**: HEALTH & SAFETY REGULATIONS
- **Infrastructure**: STAFF LEVELS
- **S.H.E. Regulations**: FINANCE
- **Supplier Liaison**: INTERNAL AUDIT

---
PROCESS 5.1  PRODUCTION/INSTALLATION/TESTING/COMMISSIONING

The most highly visible aspect of the Company’s work is the finished product to customers’ needs and expectations. A structured approach to achieving the Product is given here. In some cases the service offered is a fast response ‘on call’ service for repair work. The test certificate and inspection form used is determined by the product or service. Not all QM forms are used for every job.

THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD

PRODUCT REALISATION 7
CONTROL OF DOCUMENTS 4.2.3
CONTROL OF RECORDS 4.2.4

THE FOLLOWING CONTROLS APPLY TO THIS PROCESS

STAFF LEVELS  
BUDGETARY CONSTRAINTS  
S.H.E. REGULATIONS  
SHIPYARD FACILITIES  
GEOGRAPHIC LOCATION OF CONTRACT

CLIENT RESPONSIVENESS  
WEATHER  
INFRASTRUCTURE  
INTERNAL AUDIT

Rev. No 1. 24.05.13
PROCESS 05.2 REPAIR WORK/CALLOUT

The nature of the ‘Call-out’ service is such that a very flexible Quality Management system is necessary. Often the engineer is directed either from home or from a current job to the customer site. The engineer may not return to base for several days. The Barnes system is used as the collation point for the documents. These jobs are not quoted. The Customer requirements for documentation vary greatly. Reports and Test Certificates are sometimes required. On other occasions no documentation is raised. Not all QM forms are used for every job.

CUSTOMER REQUEST

EN ENGINEER ASSIGNED
JOB TICKET RAISED

QM 41
BARNES SYSTEM

REPAIR CARRIED OUT
WORK REPORT WRITTEN

QM41, 20, 22,23, 30, 31, 9,
10, 11.
BARNES SYSTEM
TIME SHEETS

TO ADMINISTRATION
BARNES SYSTEM
PROCESS 6.1 CONTROL OF MEASURING AND MONITORING DEVICES

The Administration department maintains a spreadsheet for all equipment held that requires formal testing/calibration.

A monthly check is carried out and when equipment is due in the following month an email is sent to the Operations Manager who collates them and then the Administrator arranges for them to be either sent to an approved calibration laboratory or tested in-house.

In-house calibration is carried out in accordance to the relevant procedure and results are then typed up on a Calibration Certificate QM 27.

All calibration certificates are initially passed to Operations Manager to assess to ensure equipment is still fit for purpose. They are then passed to Administration so that the database can be brought up to date and then filed.

If the Calibration Certificate indicates that adjustments had to be made then the department owning the instrument will be advised.

Any equipment out of calibration or damaged is removed immediately from use.

<table>
<thead>
<tr>
<th>THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD</th>
<th>THE FOLLOWING CONTROLS APPLY TO THIS PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL OF DOCUMENTS</td>
<td>GEOGRAPHIC LOCATION OF CONTRACT</td>
</tr>
<tr>
<td>CONTROL OF RECORDS</td>
<td>STAFFING LEVELS</td>
</tr>
<tr>
<td>PRODUCT REALISATION</td>
<td>INTERNAL AUDIT</td>
</tr>
<tr>
<td>CONTROL OF MEASURING AND MONITORING EQUIPMENT</td>
<td></td>
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<tr>
<td></td>
<td>7.6</td>
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</tbody>
</table>
PROCESS 7.1  INFRASTRUCTURE AND WORKING ENVIRONMENT

The organisation recognises that to continue to meet the client’s high expectations of service and product, investment has to be made in the work areas and their environment. The provision of up to date manufacturing, IT equipment as well as vehicles will be decide on by the Managing Director.

PROCESS 7.2  RECRUITMENT AND TRAINING

THE FOLLOWING CONTROLS APPLY TO THIS PROCESS

FINANCE  EQUAL OPPORTUNITY LAW
S.H.E. REGULATIONS  GEOGRAPHICAL REQUIREMENTS
INTERNAL AUDIT
STAFFING LEVELS
EMPLOYMENT LAW

REV.1  24.08.12
PROCESS 8.1  
CONTROL OF DOCUMENTS

Documents are the vehicles that carry essential information around the company. Upon this information important decisions are made. These documents will be controlled and developed from the Central Registry that is controlled by the QAS. Documents relating to Class requirements, Safety, Health and Environment and other regulatory duties are held in the Library. A register is maintained and is subject to audit. It is the responsibility of the end users of these documents to keep them up to date.

**THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD**

<table>
<thead>
<tr>
<th>Control of Documents</th>
<th>4.2.3</th>
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<tbody>
<tr>
<td>Continual Improvement</td>
<td>8.5.1</td>
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</table>

**THE FOLLOWING CONTROLS APPLY TO THIS PROCESS**

<table>
<thead>
<tr>
<th>Internal Audit</th>
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<tbody>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td>Resources</td>
</tr>
</tbody>
</table>
**PROCESS 9.1  CONTROL OF RECORDS**

The retention of documents is a necessary requirement in order to support our customers. The period of retention is determined by individual departments and observes legal and contractual needs. The Main server is backed up daily and weekly and tapes held in the fireproof safe. SAGE and Merlin programmes are additionally backed up daily in the main office and held off site. A weekly back up is also retained in the safe.

**PROCESS 10.1  INTERNAL AUDITING**

Internal Auditing is carried out in compliance with BS EN ISO 9001:2008 against the Quality Manual and its procedures. Audits will be planned and carried out by the QA manager (Or Nominee) at a frequency determined by the previous audits. TM can also direct an audit if it deems that there has been a serious failure in customer satisfaction or a serious non-conformance of product or service. During the audit evidence will be sought to demonstrate that satisfactory customer satisfaction levels have been achieved.
PROCESS 11.1  ADMINISTRATION

The Barnes Software allows some administrative and some financial control of contracts. The block below indicates the information flow in and out of the software package. It is anticipated that the Sage Financial software and the Purchasing Department Stock Control Spreadsheet will be merged with this package. This will allow pricing of contracts to be done more speedily and with less potential for error.

This system allows for documents to be attached to a main document. It is anticipated that as the training an experience of staff to use this system that all document control including drawings, parts lists and H&S will be through this system.

<table>
<thead>
<tr>
<th>THIS PROCESS ADDRESSES THE FOLLOWING PARTS OF THE STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of records.</td>
</tr>
<tr>
<td>Internal communication</td>
</tr>
<tr>
<td>Purchasing Process</td>
</tr>
<tr>
<td>Purchasing information</td>
</tr>
<tr>
<td>Verification of purchased product</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>THE FOLLOWING CONTROLS APPLY TO THIS PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY LAW</td>
</tr>
<tr>
<td>I.R. REGULATIONS</td>
</tr>
<tr>
<td>INFRASTRUCTURE</td>
</tr>
</tbody>
</table>
APPENDIX 1 PURCHASING & GOODS INWARD

POLICY: To buy from reputable and where appropriate Vendor List companies and to negotiate discounts based on volume of trade.

Where stock is maintained in the stores, the Managing Director will determine the appropriate levels to be held.

All supplied products and equipment will be subjected to goods inward inspection. The level of inspection will be determined by the nature of the product.

All Goods purchased are inspected against the Purchase Order and delivery/advice note for quantity, quality and description.

PURCHASING RESPONSIBILITIES:

Switchboard and repair component Purchase Orders are raised by the respective Managers. Stock items and capital equipment is authorised by the Managing Director. Stationery can be purchased by the Administration staff with the authorisation of the Managing Director.

QUALITY DOCUMENTS:

Only documents listed in the Central Document Registry are used.

QUALITY RECORDS:

These are kept for the following duration.

<table>
<thead>
<tr>
<th>TITLE</th>
<th>LOCATION</th>
<th>PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB RECORDS</td>
<td>BARNES PACKAGE</td>
<td>5 YEARS</td>
</tr>
<tr>
<td>INVOICE RECORDS</td>
<td>BARNES PACKAGE</td>
<td>5 YEARS</td>
</tr>
<tr>
<td>TEST CERTIFICATES</td>
<td>FILE</td>
<td>7 YEARS</td>
</tr>
<tr>
<td>DRUM HISTORY</td>
<td>BARNES / EXCEL</td>
<td>7 YEARS</td>
</tr>
</tbody>
</table>

PROCESSES:

These are as described in Process 5 Flow Chart. A detailed description of the implementation of the Process is given in the Work Instruction which is a stand-alone document.

GOODS INWARD:

Purchased goods are inspected by the Storeman and if satisfactory they are booked in on the SAGE Purchasing system. He will raise a Defective Goods Note QM 15 for defective or incorrect goods and pass it to the originator to action. A copy of the note is left with goods until it is processed accordingly. When resolved the note is filed in the Quality department.
APPENDIX 2 REPAIRS DEPARTMENT

POLICY: To provide an electrical repairs and refurbishment service to the marine and onshore industries. To provide a round the clock ‘callout service’.

STRUCTURE:

MANAGERS RESPONSIBILITIES:

To manage the company’s workforce and resources in an efficient manner in order to meet the requirements of the contracts awarded to us by our customers.

Prepare quotations for customer enquiries.

To assess electrical staff on a six monthly basis and recommend training where required.

To discharge responsibilities as given in the SMS with regard to H&S.

Follow up completed contracts to ascertain level of customer satisfaction.

Follow up unsuccessful quotations.

Co-ordinate the ‘call-out’ service.
QUALITY DOCUMENTS:

Only documents listed in the QM Document Registry are to be used.

QUALITY RECORDS:

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<table>
<thead>
<tr>
<th>TITLE</th>
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</thead>
<tbody>
<tr>
<td>ENQUIRY RECORDS</td>
<td>QUOTE FILE</td>
<td>1 YEAR</td>
</tr>
<tr>
<td>JOB RECORDS</td>
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<tr>
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</tr>
<tr>
<td>WARRANTY CERTIFICATES</td>
<td>FILE</td>
<td>7 YEARS</td>
</tr>
</tbody>
</table>

DESIGN:

In order to provide a refurbishment service to our customers the problem of obsolescence has to be addressed. There are occasions where devices in a customer’s plant can no longer be obtained. In these situations an equivalent will be offered to the customer along with the detail of any reworking required to their equipment to accommodate the replacement. Appendix 7 shows a list of authorised staff for design work.

A contract can be for the replacement of the electrical wiring and Distribution Boards in a vessel or factory. In order to provide the installation electricians with sufficient instructions, drawings are prepared and issued for the refurbishment.

PROCESSES Applicable to this department are 2, 3, 4, 6 & 10.

Detailed information about the implementation of these Processes is given in the Work Instruction which is a stand-alone document.
APPENDIX 3: SWITCHBOARDS (Including Test Bay)

**POLICY:** To provide a design & manufacturing facility for switchboards and other control equipment.

**STRUCTURE:**

```
MANAGING DIRECTOR

TECHNICAL MANAGER

AUTOCAD OPERATOR

WORKFORCE

SENIOR TEST ENGINEER
```

**MANAGERS RESPONSIBILITIES:**

- Manage the workforce.
- Produce quotations based on customer’s specifications.
- Carry out design calculations.
- Produce assembly drawings and wiring schedules for manufacturing.
- Assess competency of staff and recommend training where required.
- Discharge responsibilities as detailed in the SMS with regard to H&S.
- Follow up completed contracts to ascertain levels of Customer satisfaction.
- Follow up on unsuccessful quotations.
TEST ENGINEERS RESPONSIBILITIES:

Control the Test Area
Produce Test Procedures
Carry out tests
Record test results
Produce Test / Warranty certificates.

QUALITY DOCUMENTS:

Only documents listed in the QM Document registry are to be used.

QUALITY RECORDS:

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<td>TEST CERTIFICATES</td>
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</table>

DESIGN:

All Design Drawings for Marine use will meet the relevant Classification Societies’ requirements.

All Design Drawings for non-marine use will meet the requirements as specified by the client and by legislation.

A copy of all standards or Classification Society Rules are available.

A test procedure will be available for all manufactured equipment.

On completion of manufacture and tests drawings will be published as ‘As Fitted’.

PROCESSES:

Processes applicable to this department are 2, 3, 4, 6 & 10.
Detailed information on the implementation of these Processes is given in the Work Instructions which is a stand-alone document.
APPENDIX 4 : ADMINISTRATION

POLICY:  To provide a service to

1  Control the generation & dispatch of Invoices to clients.
2  Process Supplier invoices ensuring their validity.
3  Process Time Sheets.
4  Raise Purchase Orders.  *
5  Generate Job Tickets.  *
6  Maintain the Supplier database.
7  Collate financial information for incorporation into the Sage package
8  Provide reception and switchboard facility.

*  This activity can be done by other members of staff with access to Barnes / Merlin software.

STRUCTURE:

MANAGING DIRECTOR

ADMINISTRATION

OFFICE ADMINISTRATOR  FINANCE & PAYROLL ADMINISTRATOR

QUALITY DOCUMENTS:

All documents are generated by the software package Barnes / Merlin. Two of these are given
QM numbers in order to reference them to other processes. QM39 – Purchase Order and
QM40 – Job Ticket.

QUALITY RECORDS

<table>
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</tr>
<tr>
<td>FINANCIAL RECORDS</td>
<td>LOCALLY</td>
<td>7 YEARS</td>
</tr>
</tbody>
</table>
The Process Map for the processing of Customer Orders and for Purchase Invoices is given below.

**PROCESSING A CUSTOMER ORDER ON MERLIN AND SAGE:**

- Raise P.O. (A4) → Raise Stores Req. (A5) → Time Sheets (A7) → 3 Copies (A10) → Raise Sales Invoice (A9)
- Input Onto Sage (A12) → 1. Our Records (A11) → 2. Filed with Statements → 3. Filed with Job
END OF MONTH:

Print Customer Statements (A13) -> Copy to Customer

Copy Filed (A14) -> Print Customer Receipt Summary + File (A15)
PROCESSING A PURCHASE INVOICE ON MERLIN AND SAGE:

Process applicable to this Department is process 10.

The detailed implementation of this Process is given in the Work Instruction which is a stand-alone document.
APPENDIX 5 : QUALITY DEPARTMENT

POLICY: To provide an internal Auditing service and a review service to the Quality Management System

STRUCTURE:

MANAGING DIRECTOR

HEALTH & SAFETY AND QUALITY CONSULTANTS

MANAGERS RESPONSIBILITIES:

Ensure Internal Audits are carried out in accordance with Process 10.1
Review the QMS periodically and recommend changes
Arrange the periodic external audit for the maintenance of the certificate.
Provide training to staff on matters regarding quality management.
Maintain the Training Matrix

QUALITY DOCUMENTS:

Only documents listed in the QM Document registry are to be used.

QUALITY RECORDS:

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</thead>
<tbody>
<tr>
<td>INTERNAL AUDITS</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
<tr>
<td>EXTERNAL AUDITS</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
<tr>
<td>QMS</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
<tr>
<td>TRAINING MATRIX</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
<tr>
<td>VENDORS LISTS</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
<tr>
<td>QM DOCUMENT REGISTRY</td>
<td>QA OFFICE</td>
<td>ROLLING 3 YEARS</td>
</tr>
</tbody>
</table>

PROCESSES:

The Processes applicable to this Department are 5, 3, 7, 9, 10 &11 of the manual.

More detail of how these Processes are implemented is given in the Work Instruction, which is a stand-alone document.
APPENDIX 6 AUTHORITIES

RAISE PURCHASE ORDERS ON BARNES SYSTEM

Managers, supervisors & admin staff.

APPROVE PURCHASE ORDERS

Managers, supervisors & admin staff up to a limit of £2,500

RAISE JOB TICKETS

Managers, supervisors & admin staff.

APPROVE INSTALLATION DRAWINGS

Department managers and Test Engineers

CARRY OUT DESIGN CALCULATIONS

Department Managers and Test Engineers

SIGN TEST CERTIFICATES

Department Managers, supervisors & Test Engineers

SIGN WARRANTY DECLARATIONS

Department Managers.