

## I.S.O. 9001/2008

# Quality Manual



Global Manufacturing Group.

## **Quality Manual**

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This document is approved for use

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Holders of Controlled Copies: Steve Evans and Lee Edwards



Part of the

ENCODER PRODUCTS COMPANY

Global Manufacturing Group.

**Quality System Management Representative** 

### I.M.S.M.

Uncontrolled

This Quality Manual Covers the activities and functions performed by operating areas included in the service scope definition:

Stockists, Assembly, Repair and Distribution of Encoders.

The Quality Management System is designed to meet the requirements of

ISO 9001: 2008

As the organization Completes' no original design and development work Clause **7.3** is an authorised exclusion.

As the products offered do not require British Encoder Products to complete any "special processes"

Clause 7.5.2 is an authorized exclusion.



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Certificate Number: 13951

## **Distribution**

Of this

## **Quality Manual**

## Copy Number 1 - British Encoder Products

Copy Number 2 – (Uncontrolled) I.M.S.M.



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Relationship between company procedure numbers and the clauses of the standard ISO 9001/2008					
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## **Amendments**

All copies of this Quality Manual are kept under strict control to prevent the System from becoming unreliable. The following Procedures ensure that the system remains current and valid.

- 1) All copies of the manual are clearly numbered and the Holder recorded.
  - 2) Each page in the manual carries its own unique identification number issue number and effective date.
- 3) The Quality Representatives are responsible for all revisions and additions being approved, controlled and recorded.
- 4) Changes may be suggested by any Employee but must receive signed approval by a management representative before being entered into the Manual.
- 5) All changes are recorded on the Amendments List and appropriate pages in each controlled copy of the Manual are changed.
- 6) All proposed changes that suggest or reflect a possible change to the Organization
  - quality policy or objects must be approved at a management review meeting
- 7) All superseded pages are removed from this manual and are marked obsolete. The last issue number that is replaced is stored until another amendment to that page is completed.
- IE. When an issue 2 page becomes effective issue 1 is removed and store. Should an issue 3 of that page be authorised then issue 1 is destroyed and issue 2 is identified as obsolete and stored.
  - 8) The manual is not distributed in its controlled form to any other locations than those recorded on page 2 of this Manual but may be issued in uncontrolled form to any location. Such copies are clearly identified as:

"UNCONTROLLED VALID ONLY ON DAY OF ISSUE".



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No records are maintained of the issue of uncontrolled copies of the manual.

Table of Amendment – Quality Manual							
Doc No.	Page No.	Issue	Date	Description of Change	Authorization		
QM05	7	1	14 <sup>th</sup> Feb 2012	Incorrect company profile – Amended to correct profile	Stephen Evans		
QM06	8	1	14 <sup>th</sup> Feb 2012	The quality policy has been changed to reflect the companies goals and commitments	Stephen Evans		
	9	1	14 <sup>th</sup> Feb 2012	The A.G.M position is missing from the structure – The chart has been amended to include the position.	Stephen Evans		



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## BRITISH ENCODER PRODUCTS Company Profile

British Encoder Products Co. is the European Branch of the Encoder Products Group which is a world-wide manufacturer of motion sensing and control devices serving the diverse needs of our global customers. We are a customer driven company that is responsive in the areas of customer service and technical support. For over 30 years the employees of the Encoder Products Group have responded to each customer's unique needs and concerns, we always have been and always will be dedicated to meeting or exceeding our customer's expectations.

By combining performance, delivery and competitive pricing, we provide quality products and services to our customers to give them the best overall value for their money. An important goal of the Encoder Products Group is to establish long lasting relationships with our customers. The Encoder Products Group strives to develop and maintain highly motivated employees who desire innovation excellence and challenging work. Our self-directed teams are trusted to serve the customer to the best of their ability. The purpose of the company is to meet or exceed our customer's expectations, listen to and respect their needs, and to negotiate the best technical option and pricing for the customer's application.

Encoder Products Company Inc. (EPC), a leading designer and world-wide manufacturer of motion sensing devices, was founded in 1969, beginning operations with a small line of custom encoders (the original Cube series!). Today, more than 35 years later, EPC manufactures the most complete line of incremental and absolute shaft encoders in the industry, meeting the diverse needs of a wide range of global customers. EPC's core philosophy is that each and every customer deserves quality products, superior customer service, and expert support. Adherence to these principles has enabled EPC to achieve its goal of maintaining long lasting customer relationships. Inventors of the original Cube encoder, EPC has also been responsible for a large number of "firsts" in the encoder industry, including the first use of Opto-ASIC technology and the first use of flex mounting for hollow shaft encoders, to mention just a few. These innovations have not only been widely imitated, they have often become industry standards. The Cube Series is just the beginning of EPC's full line of high-precision, rugged, reliable encoders available in all popular formats. The Round Series includes industry standard sizes 15, 20, 25 and 58.



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## **Quality Policy Statement**

British Encoder Products Company is committed to continuously improving the quality of our products, services and operations.

To achieve our policy we:

- > Identify and deliver that best value solutions that satisfy the requirements of our customers;
- > Uphold a business minded, innovative and collaborate culture based on our core values;
- Acquire, develop, and retain a diverse workforce of superior performers;
- Provide a positive work environment that offers rewarding opportunities to employees;
- Provide value added systems and processes that help our employees be more productive;
- Communicate its Quality objectives and its performance against these objectives throughout the company and to interested parties;
- > Take due care to ensure that activities are safe for employees, associates, suppliers and other parties who come into contact with our work;
- Work closely with our customers and suppliers to establish the highest Quality standards;
- > Adopt a forward looking view on future business decisions that may have Quality impacts;
- > Train our staff in the needs and responsibilities of Quality Management

It is British Encoder Products goal through the implementation of our Quality Management System, and ISO 9001:2008 certification, to meet not only our own expectations but to exceed the expectations of our customers.

Signed:

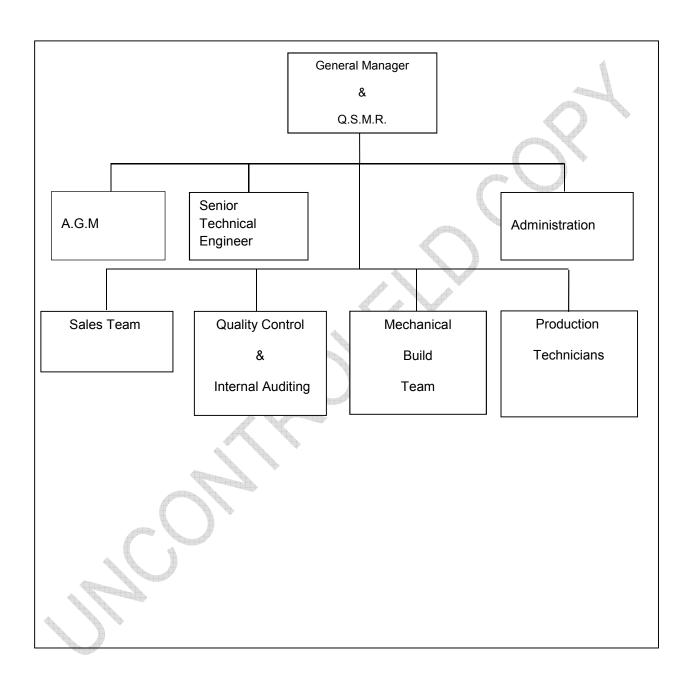
Stephen A. Evans Company General Manager

Dated: 14<sup>th</sup> February 2012

British Encoder Products Co.



## **Organization Chart and Responsibilities**





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## Q.M.S. Requirements

### 4 Quality Management System (Q.M.S.)

#### 4.1 General

British Encoder Products through the offices of the General Manager is committed to maintaining an effective Quality Management System.

This manual has been prepared to satisfy the requirements of ISO 9001:2008 for Quality Management Systems for all activities carried out by British Encoder Products...

Wherever possible, Quality controls have been integrated into existing British Encoder Products systems and cross-referenced for ease of interpretation.

The effective implementation of the Quality Management System is verified by regular inspections, reviews and audits that compare management practice against the requirements of the written procedures on Quality Management System standards. Corrective actions are taken where necessary and are subsequently reviewed for effectiveness.

#### 4.2 Documentation

#### **4.2.1 GENERAL**

British Encoder Products has established and maintains documented procedures to control all documents and data that relate to the requirements of pertinent legislation or regulatory work standard, including documents of external origin such as ISO 9001/200 standards.

Customers records etc. Documents and Records, confirm implementation of this policy. Procedure 02

#### 4..2.2 DOCUMENT AND DATA APPROVAL AND ISSUE

Documents and data are reviewed and approved for adequacy by the appropriate personnel prior to issue. Controls are in place for the issue, approval, review, modification, and distribution of documents. The specifics of these controls are contained in the Quality Procedures.

#### 4.2.2 DOCUMENT AND DATA APPROVAL AND ISSUE Cont.

- The availability of documents at the appropriate operational locations involving the functioning of the Quality System.
- The assurance that obsolete documents are promptly removed from all points of issue or use or otherwise assured against unintended use.



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 Any obsolete documents retained for legal and /or knowledge-preservation purposes are suitably identified.

#### 4.2.2.1 QUALITY MANUAL

Revisions to the Quality Manual may occur after each management review process and must have the approval of the General Manager.

Uncontrolled copies of the Manual may be distributed to organizations or persons at the discretion of the General Manager. These will be current at the date of issue and will not reflect subsequent changes to the manual.

### 4.2.3 DOCUMENT AND DATA CHANGES

Changes to documentation are reviewed and approved by the same functions (employees) that performed the original review and approval. These functions have access and familiarity with the related background information necessary to perform the review and approval. A record of the changes is maintained.

Relevant documentation originating from outside the organization are given the same level of care and protection as the organization own documents.

## 4.2.4 Quality Record retention

All records that that have legal storage requirements and all internal quality records have unique identification and are stored in a manner to:-

- Ensure they remain legible.
- Ensure they are readily available.
- Ensure they are protected against loss.



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## Q.M.S. Requirements

### 5 Management Responsibility

#### 5.1 Commitment

Top management of British Encoder Products ensures that all employees are aware of the need to meet customer and regulatory requirements and that the necessary resources are available. The currency of Quality policy and objectives are maintained by regular management reviews.

Specific responsibilities for key managers area as follows

## **General Manager:**

- Coordinate the quality planning effort as part of the business planning Process.
- Provide adequate personnel resources to ensure that all quality and test functions can be properly maintained. This includes adequate training at all levels of the organization.
- Champion and implement change to improve Organization performance and competitiveness.
- Review data related to quality performance to assess how results of performance can be improved or strengthened.
- Determine that a basic reporting and an organizational structure exist to enable British Encoder Products to meet its quality goals.
   Establish procedures and integrated program for achieving and maintaining the required level of product quality and reliability.



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### **Quality System Representative/General Manager**

- Support Organization-wide ISO9000 based activities as the management representative
- Establish a coordinated system to evaluate and improve quality and reliability to meet customers' expectations.
- Champion and implement changes to improve Organization performance and competitiveness.
- Establish and enforce a corrective action system that ensures the timely resolution of quality or reliability issues.
- Promote the continual improvement of quality.
- Maintain quality records as evidence of the adequacy of quality.

### **Senior Management Team**

- Review data related to quality performance to assess how results of performance can be improved or strengthened.
- Coordinate the quality planning effort as part of the manufacturing planning effort.
- Identify employees who may require additional training as a result of quality issues.
- Promote continuous improvement of the quality system.
- Ensure all test and manufacturing equipment are calibrated and maintained on continuous basis.
- Ensure ISO-9001 elements and procedures related to manufacturing are within requirements.



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### 5.2 Customer Focus

Customer needs and expectations are determined through extensive communication with the customers, site visits as necessary and showing prospective customer's examples of available products.

### 5.3 Policy

The quality policy, established by the General Manager of British Encoder Products, has been posted throughout the Organization, and a copy has been made available to all employees.

#### 5.3.1 **Guiding Principles:**

British Encoder Products is an Organization that is recognized by:

- 5.3.1.1 Its customers as a responsive, flexible, expert in the provision of training and training aids that are always improving.
- 5.3.1.2 Its suppliers as an honest, ethical customer that rewards performance improvement with increased opportunity.
- 5.3.1.3 The community as a responsible, caring good citizen.
- 5.3.1.4 Its owners as an operation that funds the investment required to achieve its objectives through retained earnings and provide an adequate return.
- 5.3.1.5 Its employees as a safe, clean, fair, fun organization that rewards, commitment, consistent effort, talent, teamwork, and creativity with increased responsibility and freedom.

### 5.4 Planning

British Encoder Products has through their quality policy ensured that employees at all levels within the organisation have clear, measurable Quality objectives that are consistent with Quality policy and product requirements. That adequate resources are available and output is planned in a controlled manner, as is required by its Quality Management System, being mindful of the process and the need for continual improvement.



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#### 5.5 Administration

- 5.5.1 Details of British Encoder Products Quality Management System are documented.
  - Elements of the Quality Management System have been defined and communicated wherever Quality is affected.
- 5.5.2 A Management Representative has been appointed from within the organization who has the authority and responsibility to ensure that the Quality Management System is established and maintained and that reports on the performance of the system and any needs for improvement are made available to the Senior Management team and the production workers directly involved.
- 5.5.3 The significance of meeting customer requirements is clearly understood by every employee and this message is reinforced by regular communication between the senior management team and the rest of the work force.
- 5.5.4 Communication between all levels and functions are set to ensure the effectiveness of the processes of the Quality Management Systems.

### 5.6 Management Review

- 5.6.1 The complete Quality Management System is reviewed at planned intervals to ensure its continuing suitability, adequacy and effectiveness to evaluate the need for change.
- 5.6.2 The review includes the evaluation of current performance and improvement opportunities related to audits, customer feedback, process and product performance, follow up from previous meetings, and any changes that could affect product or service Quality.
- 5.6.3 The results of activity arising from review meetings are recorded.

### 6 Resource Management

### 6.1 Provision of Resources

British Encoder Products has ensured that the necessary resources needed to implement and improve the Quality Management System and to address customer satisfaction are available or can be made available with an acceptable time period.

### 6.2 Human Resources

6.2.1 Where personnel are assigned responsibilities affecting product conformity, British Encoder Products has ensured that they are competent on the basis of applicable education, training, skills and experience.



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6.2.2 British Encoder Products has identified the training needs for Quality related activities and provides training to satisfy these needs. Performance is evaluated and appropriate training records are maintained.

#### 6.3 Facilities

Suitable equipped workplaces with appropriate Equipment, Tools, plus Hardware and Software with supporting services are provided.

#### 6.4 Work environment

A significant proportion of the work is completed at the customers premise. Every effort is made to ensure that such work sites are not detrimental to any aspects of human and physical factors.

No specific condition controls such as temperature or humidity are required. House-keeping is recognized to be of paramount importance and all work sites are maintained to the highest possible standard.

### 7.1 Planning of realization process

The production process for British Encoder Products' services is planned and documented as defined in the Quality Management System. Quality objectives, resources, processes and documentation needs are defined as are acceptable criteria for verification and validation. Records (Traceability) appropriate to the level of confidence required for the process and the products or service are maintained

### 7.2 Customer related processes

- 7.2.1 The needs of the customer in respect of availability, delivery and support are considered against the products intended use and regulatory and legal requirements are determined and implemented.
- 7.2.2 British Encoder Products reviews its customer's requirements and determines any additional requirements for each contract or order. Any changes to contracts or quotations are resolved before proceeding and British Encoder Products ability to meet the defined requirements is confirmed.
- 7.2.3 The customer is kept informed of product information, enquiries, order changes or amendments and progress on customer complaints.

### 7.3 Design and / Development This an authorized exclusion



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## Q.M.S. Requirements

#### 7.4 PURCHASING

#### 7.4.1 GENERAL

British Encoder Products is committed to work with our Suppliers and sub-contractors to ensure that purchased products conform to all specified requirements.

#### 7.4.2 SELECTION AND EVALUATION OF SUBCONTRACTORS

Subcontractors (when employed) are selected on the basis of meeting the products and / or customer's specification. A list of approved subcontractors is maintained.

#### 7.4.3 PURCHASING DATA

Purchasing documents clearly and completely describes ordered products. They include precise identification of the products, reference applicable standards, and state quality requirements when required. Rules applicable to preparation, review, and approval of purchasing documents are provided in Procedure 08 Purchasing. British Encoder Products representatives review and approve purchasing documents for adequacy of specified requirements prior to release, where applicable. All purchasing data is controlled by a commercially available software package.

#### 7.4.4 VERIFICATION OF PURCHASED PRODUCT

### 7.4.4.1 SUPPLIER VERIFICATION AT SUBCONTRACTOR'S PREMISES

Should it ever be necessary source inspection may be performed at the subcontractor's premises.

### 7.5 Production and Service provisions.

- 7.5.1 Production and services are controlled through product specifications and work instructions. Suitable equipment is used and properly maintained with the use of specified measuring and monitoring devices and activities. Release and post-delivery and delivery processes are defined.
- 7.5.2 British Encoder Products identifies the product throughout the production and service activities and identifies its status with respect to measuring and monitoring activity. Traceability is always maintained and the unique identification of the product is controlled and recorded.
- 7.5.3 Where customer property comes within British Encoder Products control, it is identified, verified, maintained and protected with details of adverse condition reported to the customer.



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7.5.4 Process Control, accomplishes implementation of this policy.

Process controls include:

- Documented procedures, charts, or diagrams where their absence could adversely affect quality
- Work orders
- The use of the appropriate equipment, tools, and suitable working environment
- Compliance with reference standards and/or documented procedures
- Monitoring and control of appropriate process parameters and product characteristics during production
- The approval of processes and equipment, as needed
- · Workmanship guidelines and/or samples

### 7.6 Control of measuring and monitoring devices.

The organisation has recognised and recorded all Measuring and Monitoring devices that require calibration to internationally recognised standards. The services of an approved supplier are purchased and this sub-contractor manages the control and calibration of all such devices.

## 8 Measurement, analysis and improvement

### 8.1 Planning

The methods for planning of measurement, monitoring and analysis for the Quality System have been determined.

### 8.1.1 Measurement and monitoring

- 8.1.1 Clear methods have been established to determine customer satisfaction and any failures to meet Organization standards are recorded and the corrective/preventive actions are used to drive continuous improvement
- 8.1.2 Suitably trained personnel conduct periodic independent internal audits on a planned basis. All aspects of internal audits are recorded and reviewed and corrective action taken where necessary.
- 8.1.2 Processes effecting customer requirements are periodically reviewed to ensure that the intended purpose is being met.
- 8.1.3 Measuring and monitoring of the product throughout the process is designed to ensure the finished work meets the original specification.



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## Q.M.S. Requirements

#### 8.2 INTERNAL QUALITY AUDITS

#### **8.2.1 POLICY**

Internal Quality audits are conducted according to documented procedures to verify the effectiveness of the Quality System. They determine if the Quality System activities produce desired results, which in turn determine whether the system is effective. Internal auditing is performed.

#### 8.2.2. PLANNING AND SCHEDULING

Internal audit plans and schedules are prepared for all activities in the Quality System. Each main activity comprising the quality system is audited at least once a year, but more frequent audits may be scheduled if required. Audits are scheduled on the basis of the status and importance of the activity and are completed by trained impartial personnel.

All internal audits are reviewed and if required timely corrective actions are taken.

### 8.2.3 AUDITING

- Only personnel independent of the audited activities are assigned to conduct an audit. Auditors are selected from departments other than the department being audited. The audit team consists of employees trained in internal quality auditing.
- Audits are prepared by a review of applicable standards and procedures, a review of quality records, and by establishing questionnaires and checklists to determine that the audited activities comply with the requirements of the documented quality system.
- Results of the audits are documented and brought to the attention of the personnel having responsibility in the area audited.

### 8.2.4 CORRECTIVE ACTION AND FOLLOW UP

When non-conforming conditions are identified, the process owner responsible for the affected area or activity is requested to propose and implement a corrective action. Implementation and effectiveness of the action is verified.

## 8.3 Control of nonconformity

#### **8.3.1 GENERAL**

Documented procedures are in place to prevent the inadvertent use or shipment of nonconforming product. Control of nonconforming product provides for identification, evaluation, segregation, and disposition of nonconforming product and for notification to the customer and other functions concerned.



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#### 8.3.2 REVIEW AND DISPOSITION OF NONCONFORMING PRODUCT

Non-conforming product is

- Recognised
- Identified
- Isolated
- Its disposition is reviewed.

Records are maintained of any actions dealing with nonconforming material.

### 8.4 Analysis of data

Data referring to Product Quality is collected and analysed.

This is achieved by maintaining records during product production and looking back at completed orders in a structured meeting to determine what lessons can be learned and used to improve future similar orders/products.

Where changes to the Quality Management System offer improvements these changes are introduced.

Areas for attention are customer complaints, meeting the customer's needs, product characteristics and supplier performance.

### 8.5 Improvements

- 8.5.1 The Quality Management System is managed in a manner to offer continual improvement having regard to statements in its Quality policy, objectives, audit results, data analysis, corrective and preventive action and management review.
- 8.5.2 Appropriate action is taken to rectify faults and prevent their reoccurrence and the procedure is documented. Requirements for identifying faults
  and determining their cause with appropriate corrective action is covered and
  recorded and the results reviewed for effectiveness.
- 8.5.3 British Encoder Products identifies actions designed to prevent the recurrence of non-conformities and the results of such actions are recorded and reviewed for effectiveness



## Flow Chart of Interaction between the Processes of the Quality Management System

