

# **Quality Manual**

### 1. Scope

This Quality Manual defines the Quality Management System (QMS) applicable to the activities performed by Engineering Horizons, in accordance with the requirements of ISO 9001:2015.

#### 2. Normative References

- 2.1 This document references the following:
- 2.1.1 Procedures
- 2.1.2 Processes
- 2.1.3 Forms and records

#### 3. Terms and Definitions

3.1 - Follow the terms and conditions detailed in the standard ISO9001: 2015.

# 4. Context of the Organization

- 4.1 Understanding the organization and its context.
- 4.1.1 This Manual presents policy and procedural requirements for the quality management system of Engineering Horizons. In understanding the external context, consideration shall be given to issues arising from legal, technological, competitive, market, cultural, social, and economic environments, whether international, national, regional, or local. In understanding the internal context, consideration is given to issues related to values, culture, knowledge, and performance of the organization.



4.1.2 - Engineering Horizons is an established company defining advanced technical solutions for clients globally, the company was originally formed in 2006 as a UK registered, more recently in 2019 and 2021, the company has established its Iraq and UAE registered entities that allows us direct access to the lucrative Iragi and GCC markets. The company has access to a number of extremely talented and industry recognized individuals that allows Engineering Horizons to provide a truly world class service. While we do not own our own products, our strengths are in harnessing the best of the technologies available on the market and apply these in the best way to obtain the most optimal of solutions for our clients. Engineering Horizons is an international upstream oil and gas services company providing technical expertise and cost-effective technology solutions to clients globally. We have internationally experienced culturally diverse and highly skilled team of professionals who are determined to provide innovative and efficient solutions to our clients and help them to achieve their objectives. Our core business has been consultancy and training which have proved to be extremely important and valuable to obtain our recognized status, trust in clients and recognition for our capabilities. Our move into the middle east through the opening of our UAE and Iraq offices has been a key step forward to further open new avenues for the business including Digital and Technology deployments as well as sale of Quality Products, but with the core business remaining to be consultancy and training in the fields of Petroleum/Reservoir Engineering with an extra focus on Artificial Lift. Our strategy is to have key partnerships and relations with world class suppliers that can provide us with the products that are unique within the industry to allow us to provide the most appropriate technology solutions for our clients. Our goal is to achieve technical excellence for our clients and customers, this can only be achieved through our people. Pushing the technological boundaries is achieved through having motivated and skilled staff. Our industry is moving more and more into the digital space, with digital oilfield technology, automation, big data and data science taking over, we want to ensure that our clients stay ahead of the competition. Engineering Horizons is an international upstream oil and gas services company providing technical expertise and cost-effective technology solutions to clients globally.



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- 4.2 Understanding the needs and expectations of interested parties.
- 4.2.1 See Quality Policy.
- 4.2.2 Engineering Horizons consider interested parties to include customers, legal obligations, employees and contractors, suppliers and company neighbours. Those affected by GDPR are also considered an interested party. Their needs and expectations can be further documented.
- 4.3 Determining the scope of the quality management system.
- 4.3.1 The scope of the quality system defined by this manual addresses all activities required by ISO 9001:2015, based on the scope detailed in 4.1.2, with the exceptions of aspects listed in paragraph 4.3.3. The entire company site, all employees and contractors, and activities are considered within the boundaries of this management system.
- 4.3.2 The scope for Engineering Horizons is: "Upstream Oil & Gas Services Solutions, Consultancy and Training in the fields of Petroleum/Reservoir & Engineering."
- 4.3.3 Reduction in Scope
- 4.3.3.1 Quality system items that are not applicable: ISO 9001 Section 8.3, Design and development of products and services.



- 4.3.3.2 These exclusions are applicable because of their non-relevance to the activities of Engineering Horizons or to their desired scope of registration. Not doing this element does not impact on the product or service provided to the customers.
- 4.4 Quality management system and its processes.
- 4.4.1 The following key processes are used and defined by Engineering Horizons.
- 4.4.1.1 OP1 Sales Process
- 4.4.1.2 QP2 Purchasing Process
- 4.4.1.3 QP3 Servicing of a Contract
- 4.4.1.4 QP4 Competency Process

# 5. Leadership

- 5.1 Leadership and Commitment
- 5.1.1 General
- 5.1.1.1 The Management of Engineering Horizons are committed to a policy of continuous improvement in all aspects of its business operations, together with the effective implementation and continuous improvement of our QMS in order to provide enhanced Customer satisfaction and added value to the business. Management will ensure that the importance of meeting Customer, regulatory and legal requirements is effectively communicated within the organisation.
- 5.1.2 Customer focus
- 5.1.2.1 Accordingly, it is recognised that the Customer's needs and expectations are paramount and will be fully determined in order to ensure that we aim not only to meet them, but also to enhance the levels of quality, service and value provided to our Customers. Top management through Customer feedback following the completion of product delivery achieves this.



- 5.2 Quality Policy.
- 5.2.1 The Management of Engineering Horizons are committed to providing products and services that consistently exceed our Customer's needs and expectations for Quality and Value.
- 5.2.2 The Quality Policy will be detailed in QM102 Quality Policy.
- 5.3 Organizational roles, responsibilities and authorities.
- 5.3.1 The organizational structure and reporting relationships are defined within the Management Organization Chart.
- 5.3.2 In addition, specific responsibilities and authorities and reporting relationships are defined within documented Job Descriptions, and further referenced within documented procedures, instructions, etc. as required.
- 5.3.3 The Management Representative is responsible for ensuring that the QMS processes are established, implemented and maintained, reporting on the effectiveness of the Quality System, and promoting awareness of Customer requirements throughout the organization.

## 6. Planning

- 6.1 Actions to address risks and opportunities.
- 6.1.1 Various forms of quality planning are implemented, including:
- 6.1.1.1 The identification and acquisition of required personnel.
- 6.1.1.2 The identification of required skills and consequential training.
- 6.1.1.3 The identification of required testing, checking and/or verification activities.
- 6.1.1.4 The identification of required records.
- 6.1.1.5 The ability to meet the expectation of the customer in terms of quality, delivery and cost shall be assessed at contract review.



Where a process is planned which may affect the operation, the change is considered so as to ensure that the integrity of the process is not compromised in any way. The effect of a major change where known in advance, is reviewed during the Quality Management Review Meetings.

- 6.1.2 As part of our policy of continual improvement, Engineering Horizons has established documented procedures to provide for the review and analysis of information derived from the QMS processes.
- 6.1.3 Such information will be used to identify potential sources of non-conformance, and where necessary, the need for action will be determined, and effectively implemented. All actions taken will be recorded and will form part of the Management Review agenda in accordance with P3.
- 6.2 Quality objectives and planning to achieve them.
- 6.2.1 Measurable quality objectives have been established for all relevant functions within the organization.
- 6.2.2 Objective shall be set during the Managment Review meeting as defined in P3.
- 6.2.3 To achieve those objectives established during the Management Review process P3, the Managing Director is responsible for achieving the objectives set out in the Management Review meeting. The target and the date for achievement for each objective shall be set at the Management Review meeting. By default, the target date for meeting the objective shall be by the following Management Review meeting.
- 6.3 Planning of changes.
- 6.3.1 Various forms of quality planning are implemented, including:
- 6.3.1.1 The identification and acquisition of required personnel.
- 6.3.1.2 The identification of required skills and consequential training.
- 6.3.1.3 The identification of required testing, checking and/or verification activities.
- 6.3.1.4 The identification of required records.



# 7. Support

- 7.1 Resources.
- 7.1.1 The Management of Engineering Horizons will ensure that resources required are determined and available, in order to ensure the effective operation of the QMS and achievement and enhancement of Customer satisfaction.
- 7.1.2 All personnel will be suitably qualified to perform their assigned tasks and have their objectives reviewed annually, including training reviews. Through the appraisal and objective process, ensure that staff continue to embrace the values namely:
- 7.1.2.1 Maximize staff marketability and fulfilment.
- 7.1.2.2 Grow Profitably.
- 7.1.2.3 Strive passionately for Customer success.
- 7.1.2.4 Deliver renowned efficiency.
- 7.1.2.5 Reference is given to section 7.2 and 7.3.
- 7.1.3 Infrastructure.
- 7.1.3.1 Engineering Horizons is committed to ensuring that suitable infrastructure in terms of buildings; facilities and equipment are identified, acquired, and adequately maintained.
- 7.1.4 Environment for the operation of processes.
- 7.1.4.1 The Management of Engineering Horizons will ensure that all aspects of the work environment having an effect on product conformance are identified, and effectively managed at all times.
- 7.1.5 Monitoring and measuring resources.



7.1.5.1 - Engineering Horizons shall ensure that an annual calibration of the weighing device utilized is carried out; details of the calibration will be recorded accordingly, should the weighing device fail its calibration, this will be recorded on the calibration test documentation and brought to the attention of the Operations Manager, a decision will then be made by Management as to whether the device is to be used or not and what action if any is to be taken.

### 7.1.6 - Organizational knowledge

7.1.6.1 - Training shall be considered a vital part of the growth and continued success of Engineering Horizons. The organization has determined what employees are required to maintain a satisfactory business outlook. The organization has employees in key areas of production, maintenance and management that are able to professionally liaise with clients and suppliers. Management shall be capable of producing a satisfactory standard of work as acceptable to the customer base.

#### 7.2 - Competence.

- 7.2.1 The skills, qualifications, experience or other competency criteria required for personnel performing work-affecting quality will be identified and, where required, training provided to ensure these needs are met.
- 7.2.2 The effectiveness of the training provided would be evaluated in order to ensure the training objectives are met as referenced in 7.1.2.

#### 7.3 - Awareness.

- 7.3.1 In addition, all Company Management will ensure that all personnel are aware of the importance and relevance of their activities and their effect on quality and Customer satisfaction by the use of method statements.
- 7.3.2 Records of skills, qualifications, experience and training provided will be maintained, together with a record of staff turnover.



#### 7.4 - Communication.

- 7.4.1 Engineering Horizons will employ appropriate methods of communication to ensure that all information relating to the performance of the QMS is communicated to concerned personnel and external interested parties; these include as required review meetings.
- 7.5 Documented information
- 7.5.1 General Documented information is controlled by P1.
- 7.5.1.1 Engineering Horizons operates a QMS based upon the requirements of ISO 9001:2015, structured as detailed below:
- 7.5.1.1.1 Quality Policy. Quality Policy.
- 7.5.1.1.2 Quality objectives Management Review
- 7.5.1.1.3 Quality Manual
- 7.5.1.1.4 Quality system operating procedures
- 7.5.1.1.5 Process planning, operation and control documents/flowcharts (including those of external origin)
- 7.5.1.1.6 Quality forms and records
- 7.5.2 Creating and updating
- 7.5.2.1 All documents forming part of the QMS will be subject to documented procedures to ensure that:
- 7.5.2.1.1 Documents are approved by the appropriate authority prior to issue
- 7.5.2.1.2 Only uncontrolled issues of documents are available at designated locations
- 7.5.2.1.3 Obsolete documents are removed from all points of use
- 7.5.2.1.4 Obsolete documents required for historical purposes are suitably identified



- 7.5.2.1.5 Each document is uniquely identified.
- 7.5.2.1.6 Quality Representative retains master registers of documents outside this system.
- 7.5.2.1.7 Documents are subject to review, update, and re-approval, as necessary
- 7.5.2.1.8 Essential documents of an external nature shall be controlled and be of the latest issue
- 7.5.3 Control of documented Information
- 7.5.3.1 Quality Records will be maintained, providing objective evidence of conformance to specified requirements.
- 7.5.3.2 Documented procedures define the method and responsibilities for the retention and storage of Quality records generated within the Quality System in order to ensure such records are legible, filed for ease of retrieval, and stored in a suitable environment, in order to prevent loss or damage (including records stored on electronic media). The retention period for Quality records will be as defined within applicable quality documents.
- 7.5.3.3 Where contractually specified, Quality Records will be available for review by the Customer's representative, and retained for an agreed period in accordance with P1.

# 8. Operation

- 8.1 Operational planning and control
- 8.1.1 All processes involved in the provision of our products will be developed and planned. Such plans will include, as appropriate: -
- 8.1.1.1 The determination of product objectives and requirements
- 8.1.1.2 The provision of processes, documents and resources required 8.1.1.3 Required verification, validation, inspection and test activities, including acceptance criteria



- 8.1.1.4 Records required to demonstrate conformance to specified requirements
- 8.1.1.5 Where contractually required, for a particular product, Product Realization plans may be referred to as Quality Plans, and submitted in a format agreed with the Customer concerned.
- 8.2 Requirements for products and services
- 8.2.1 Customer communication
- 8.2.1.1 All points of contact and communication with our Customers relating to sales enquiries, orders, and Customer feedback, are clearly defined within our website.
- 8.2.2 Determination of requirements related to products and services
- 8.2.2.1 Following a Sales Order or enquiry, Customer requirements are identified including, as applicable:-
- 8.2.2.1.1 Requirements specified by the Customer including delivery activities.
- 8.2.2.1.2 Requirements not specified by the Customer, but required for known or intended use.
- 8.2.2.1.3 Any statutory or regulatory requirements related to the product.
- 8.2.2.1.4 Additional requirements determined by Engineering Horizons.
- 8.2.3 Review of requirements related to the products and services.
- 8.2.3.1 All Customer enquiries and orders will be reviewed to ensure that Engineering Horizons has the capability to meet Customer's specified requirements for quality, delivery and cost.
- 8.2.3.2 The review will be conducted dependent upon the product required, and similarity to previously utilized products, and will ensure that: -
- 8.2.3.2.1 Product requirements are adequately defined.
- 8.2.3.2.2 Engineering Horizons has the ability to meet these requirements.



- 8.2.3.2.3 Any differences or ambiguities arising are resolved with the Customer.
- 8.2.3.2.4 All relevant information is communicated to those personnel responsible for implementation.
- 8.2.3.2.5 Verbal requirements are confirmed prior to acceptance.
- 8.2.3.2.6 All variations to contracted requirements are identified, documented, and communicated to concerned personnel for implementation.
- 8.3 Design and development of products and services
- 8.3.1 This section is excluded.
- 8.4 Control of externally provided products and services
- 8.4.1 General
- 8.4.1.1 It is the policy of Engineering Horizons to ensure that all products procured from suppliers are of proven capability to meet specified requirements. Accordingly, the qualification of suppliers will be in accordance with defined criteria, the nature and extent of qualification undertaken being dependent on the criticality of the product to be provided. Records of "Approved "suppliers shall be maintained. QP2 refers
- 8.4.2 Type and extent of control of external provision
- 8.4.2.1 Verification of purchased products will be undertaken on receipt, in accordance with planned arrangements. The level and nature of inspection will be dependent on the criticality of the product concerned, and proven supplier capability, including Quality System arrangements, previous performance, and documented evidence of compliance. Verification of materials and products at the Supplier's premises undertaken by Engineering Horizons shall be clearly documented within associated Purchase documentation and agreed with the Supplier concerned.



- 8.4.3 Information for external providers
- 8.4.3.1 Supplier performance shall be periodically reviewed and recorded, in accordance with documented procedures. The results of such reviews shall be used to update the records of "Approved" suppliers.
- 8.4.3.2 All purchase requirements (and any subsequent amendments) shall be clearly identified and documented, and subject to review and approval, prior to release.
- 8.4.3.3 Purchasing requirements will include all relevant information related to the product and will include, as appropriate: -
- 8.4.3.4 Criteria for approval of products/procedures/processes and equipment
- 8.4.3.5 Qualification and approval of personnel
- 8.4.3.6 QMS requirements
- 8.5 Production and service provision
- 8.5.1 Control of production and service provision
- 8.5.1.1 All processes involved in the provision of our products will be planned and operated under controlled conditions via the site file system and method statements, including: -
- 8.5.1.1.1 The availability of relevant information describing the required product's characteristics
- 8.5.1.1.2 Availability and use of monitoring and measuring devices
- 8.5.1.1.3 Implementation of measurement and monitoring, including during delivery activities
- 8.5.2 Identification and traceability
- 8.5.2.1 All products will be suitably identified throughout its lifecycle within Engineering Horizons and during delivery to the Customer.
- 8.5.2.2 Where traceability is a specified requirement, a unique identification number will be assigned and used to identify each product. This identification will be recorded on all affected process documentation.



- 8.5.3 Property belonging to customers or external providers
- 8.5.3.1 Engineering Horizons will exercise due care and diligence with regard to Customer-supplied property including materials, products, hardware, software, or "intellectual property", and will provide for the proper care and maintenance, and the prevention of loss, misuse, or unauthorized dissemination.
- 8.5.3.2 In the remote and unlikely event that such Customer property suffers loss, damage or degradation, such will be immediately identified and formally reported to the Customer or Customer's representative.
- 8.5.4 Preservation
- 8.5.4.1 Engineering Horizons shall ensure all products delivered to site are suitably identified, handled, protected from damage and environmentally controlled when required.
- 8.5.5 Post-delivery activities
- 8.5.5.1 All post delivery processes involved in the provision of our products will be planned and operated under controlled conditions taking into account statutory and regulatory requirements; the potential undesired consequences associated with its products and services; the nature, use and intended lifetime of the products and services; including: -
- 8.5.5.2 The availability of relevant information describing the required product's characteristics meeting customer and contractual requirements.
- 8.5.5.3 Availability and use of calibrated monitoring and measuring devices used for post-delivery activities.
- 8.5.5.4 Implementation of requested warranty claims identified during post-delivery activities and assessment of any customer feedback.



### 8.5.6 - Control of changes

- 8.5.6.1 The organisation shall review and control changes for production or service provision, to the extent necessary to ensure continuing conformity with requirements. The organisation shall retain documented information describing the results of the review of changes, the person authorising the change, and any necessary actions arising from the review. Any changes required shall be documented in the management review.
- 8.6 Release of products and services
- 8.6.1 Controls will be applied to provide for the monitoring and measurement of product characteristics, at defined stages of the realization process, and evidence of conformity to specified requirements will be maintained.
- 8.6.2 Where, and if, the need to release a product prior to completion of specified monitoring and measurement activities is required, such release will be approved by authorized personnel, including the Customer, where applicable, and recorded.
- 8.6.3 Verification of purchased products will be undertaken on receipt, in accordance with planned arrangements. The level and nature of inspection will be dependent on the criticality of the product concerned, and proven supplier capability, including Quality System arrangements, previous performance, and documented evidence of compliance.
- 8.6.4 Verification of materials and products at the Supplier's premises undertaken by Engineering Horizons shall be clearly documented within associated Purchase documentation and agreed with the Supplier concerned.
- 8.7 Control of nonconforming process outputs, products and services
- 8.7.1 Any instances of non-conforming product encountered will be identified and quarantined to prevent inadvertent use or delivery.
- 8.7.2 In addition, the review and disposal of any non-conforming product will be undertaken by authorized personnel, in accordance with documented procedures, and may include, as appropriate: -



- 8.7.2.1 Action taken to eliminate the non-conformance. Authorization of the use, release or acceptance by authorized personnel, and the Customer (where applicable). Action taken to prevent its original intended use or application.
- 8.7.2.2 Where the non-conformance is deemed to affect products already delivered or in use, appropriate measures will be taken in order to determine the effects of the non-conformity and implement any corrective actions required.
- 8.7.2.3 Records of non-conformities and disposal action taken will be maintained in accordance with P2.

#### 9. Performance evaluation

- 9.1 Monitoring, measurement, analysis and evaluation
- 9.1.1 General
- 9.1.1.1 Engineering Horizons has planned and implemented monitoring and measurement of key indicators related to process, product and Quality System performance, together with the analysis of data using appropriate statistical methodology, to identify opportunities for continuous improvement and enhanced Customer satisfaction.
- 9.1.2 Customer satisfaction
- 9.1.2.1 Engineering Horizons has established a Customer Satisfaction Survey Form to collect and analyses data from our Customers in order to determine whether their needs and expectations related to our products have been satisfied, and to identify opportunities for improvement.
- 9.1.3 Analysis and evaluation
- 9.1.3.1 All data collected from the QMS, and the monitoring and measurement processes implemented within Engineering Horizons will be subject to review and analysis, and used as the basis for determining the effectiveness



of the quality system, and to provide the basis for our continuous improvement programmed. QP104 refers.

#### 9.2 - Internal audit

- 9.2.1 The Management of Engineering Horizons recognize that Internal Audits play a fundamental role in the control and improvement of the OMS.
- 9.2.2 Internal Quality Audits will be conducted in accordance with Audits, to ensure that each aspect of the documented Quality System is audited, at no more than 12 monthly intervals.
- 9.2.3 Audits will be scheduled on the basis of the importance of the area or activity audited, and the results of previous Audits obtained.
- 9.2.4 Auditors will be suitably trained and will not audit their own work.
- 9.2.5 Internal audit procedures will define the method and responsibilities for the planning, and conduct of Internal Quality Audits, together with the reporting of audit results, action implementation and verification of the effectiveness of action taken.
- 9.2.6 The Management will review the results of Internal Audits, at each Management Review meeting.
- 9.3 Management review
- 9.3.1 Management Reviews will be held annually and at the discretion of management, to ensure the continuing effectiveness, suitability and adequacy of the QMS.
- 9.3.2 Management Review inputs will be identified and include information regarding the performance and effectiveness of the QMS, products and processes together with opportunities for improvement.
- 9.3.3 Management Review outputs will clearly identify improvement actions and any resource needs arising from Management Reviews.



## 10. Improvement

#### 10.1 - General

- 10.1.1 Engineering Horizons is committed to a policy of continual improvement in all aspects of our business. The QMS effectively contributes towards the achievement of our Quality Policies and Objectives.
- 10.2 Nonconformity and corrective action
- 10.2.1 Non-conformance related to the Quality System, processes and Customer complaints would be subject to documented procedures, which define the methods and responsibilities for recording, analysis and investigation, together with the implementation, and verification of the effectiveness of corrective actions taken. P2 refers.
- 10.3 Continual Improvement
- 10.4 Reference is given to section 10.1