



Vision of the future

(How we will look 10 years in the future)

An independent provider of innovative technical solutions that can change the world

Our *Mission* at HydraForce is to create world wide customer delight by providing the highest quality product valves and the most responsive customer support in the world at a globally competitive cost

Approved C Kloser Managing Director

Approved P Macdonald Manufacturing Director

Approved M Wilson Sales Director

Approved G S Phull Quality Manager

Four handwritten signatures in black ink are shown, each on a horizontal dashed line. From top to bottom, they correspond to the names listed in the adjacent text: C Kloser, P Macdonald, M Wilson, and G S Phull.

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Q Pulse System  
Manufacturing Area

## QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

Revision	Date	Nature of change
8	01/12/08	All Updated to reflect ISO 9001:2008 Added Vision of the future Updated Mission statement and vision of the future
7	15/01/08	5.5.1 Added Managing Director to matrix Added Office of the President ,Managing Director Added Human Resources Manager ,Technical Support Changed Assembly Supervisors to Manufacturing Manager Changed Stores Supervisor to Stores& Despatch Manager Updated Organisation chart as above changes Changed heading ISO9000 to ISO9001 7.4 Updated section numbering 7.4 inline with ISO9001 7.5 Updated section numbering 7.5 inline with ISO9001 H&S Removed H & S Policy from Manual
6	01/03/06	Updated Quality Environmental System (ISO9001:2000 + ISO14001:2004 )
5	05/01/03	Quality Manual approval by Management Team at Ltd 3.1.0 Updated Organisation Chart 3.2.5 Changed Managing Director to Chairman 5.1.4 Changed Managing Director to Sales Director 5.3.1 Deleted 6 monthly frequency XXX Changed to Sales Director 3.2.4,5.13,5.1.4,5.2.4 XXX Changed to Manufacturing Director 3.2.2,3.2.5,1 1.1.5, 12.1.1,12.3.4,15.3 XXX Changed to Engineering Manager 3.2.6,6.1.2,6.5.2 6.5.4,9.1.5
4	23/07/02	3.2.2 Updated Manufacturing Director 3.2.3 Updated Buyer responsibilities 3.2.6 Added Engineering Manager responsibilities 3.2.9 Added Training Co-ordinator responsibilities
3	26/05/02	Added section 1.1.6 referring to EC regulations Updated section 3.2.5 for EC responsibilities for EC regulations ,Clarified section 5.2.3 Added Content and amendment page Changed Page layout format
2	26/06/00	All sections updated to comply with QS9000
1	01/12/96	Comply to ISO 9001

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 1.0 Scope**

**ISO 14001 4.1 General Requirements**

The Quality Environmental System covers the Design and Manufacture of Hydraulic Cartridge valves and Manifold systems.

The system is based on the requirements of BS EN ISO 9001: 2000, ISO 14001:2004 and PED directive (PED 97/23/EC) which is designed to insure all requirements are recognised and controlled including customer specifics and legal requirements

**ISO9001 1.1 Background**

**ISO 14001 4.1 General Requirements**

HydraForce Hydraulics Ltd Design and Manufacture of Hydraulic Cartridge valves and Manifold systems.

Since our founding in 1985, we have grown to become a world-leading supplier of these products.

Our success is due to our commitment to innovation and quality in this challenging marketplace. Our products consistently achieve the optimum combination of quality, efficiency and economy.



**ISO9001 2.0 Quality Systems Policy**

**ISO 14001 4.2 Environmental Policy**

HydraForce Hydraulics Ltd Quality Environmental Policy defines our commitment to growth, continuous improvement, Management System, long-term reinvestment, legal compliance, impacts and aspects, elimination of waste and prevent /reduce pollution waste minimisation

**QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)**  
**Detailed are described in Quality Environmental Policy**

**ISO9001    1.3 QUALITY ENVIRONMENTAL    ISO 14001    4.1 General Requirements**  
**SYSTEMPROCESSES**

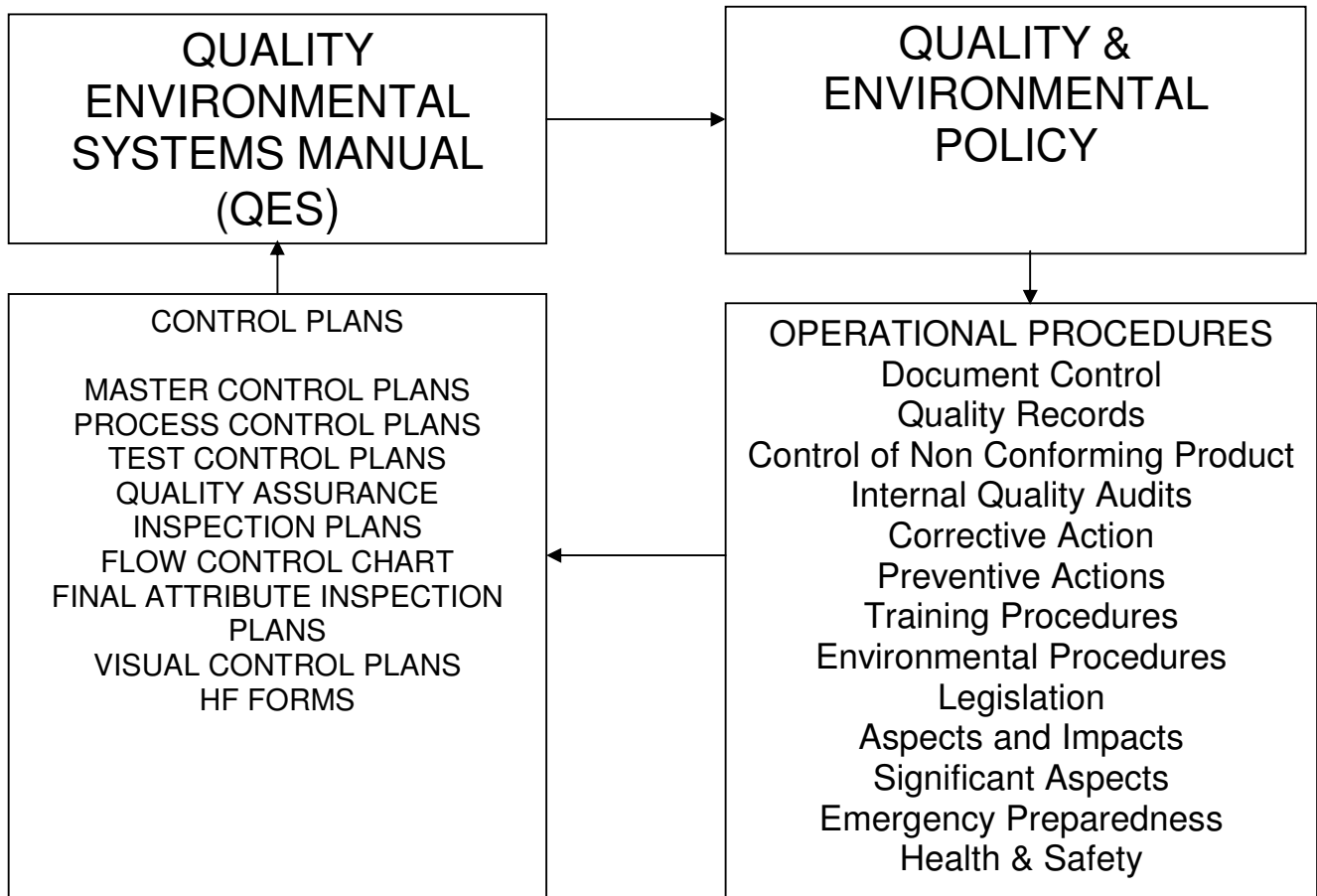
Title	Core Process Procedures
Management Review	Op-01-00
Quality Planning	Op-02-00
Organisation and Responsibility	Op-03-00
Internal Auditing	Op-04-00
Sales	Op-05-00
Design	Op-06-00
Document and Data Control	Op-07-00
Purchasing	Op-08-00
Manufacturing Control	Op-09-00
Quality Support	Op-10-00
Non Conforming Product	Op-11-00
Corrective / Preventive Actions	
Stores	Op-12-00
Control of Quality Records	Op-13-00
Training	Op-14-00
Statistical Techniques	Op-15-00
Customer Returns/ Servicing	Op-16-00
Health & Safety	Op-17-00
Finance ( Not subject to 3 <sup>rd</sup> assessment)	Op-18-00
Business Support	Op-19-00
Environmental	Op-20-00

**Detailed are described in Procedure Op-01-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001 3.0 System Documentation Structure ISO 14001 4.4.4 Documentation

- 3.1 The Quality Environmental System consists of a Manual and a range of Operating Procedures supported by control plans and associated forms.
- 3.2 The Quality Environmental System includes, but is not limited to, written Procedures covering the following Activities



# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 4.0 Quality Management System ISO 14001 4.0 Environmental Management System**

**ISO9001 4.1 General Requirements ISO 14001 4.1 General Requirements**

- 4.1 HydraForce Hydraulics Ltd has established, documented, implemented and maintains a Quality Environmental System that identifies the processes needed for the system. The Quality Environment System determines the sequences, interaction, criteria and methods to ensure the processes are effective. The Quality Environmental System ensures required resources and information is available for monitoring, measuring and improvement of internal & external processes. The Quality Environmental System focus's on pollution prevention, continuous improvement and the individual responsibilities of HydraForce Hydraulics Ltd employees.

**ISO9001 4.2 Documentation Requirements ISO 14001 Title Only**

**ISO9001 4.2.1 General ISO 14001 4.4.4 Documentation**

- 4.2.1 The Quality Environment System includes statement of a Quality and Environmental policy, a Quality Environmental System Manual required by BE EN ISO 9000:2000 and BS EN ISO 14001: 2004. Documents are reviewed periodically to ensure effective planning, operations and control of its processes and records required by the international records where required revised as necessary

**ISO9001 4.2.2 Quality Manual ISO 14001**

- 4.2.2 The Quality Environmental System Manual includes the scope of the system, justification for any exclusion, reference to documented procedures and a description of the interaction between the processes of the system.

**ISO9001 4.2.3 Control of Documents ISO 14001 4.4.5 Control of Documents**

- 4.2.3 Documentation subject to control is that which is essential to establish contract requirements, defined external documents, technical definition, purchase, inspection test and operation. Controlled documents are reviewed and approved prior to issue by the Departmental Manager and the Quality Manager. Changes to documents are agreed, approved, the nature of the change is communicated to those who are affected by the change. Obsolete copies are removed and destroyed. A master list identifies the revision status of all controlled documents and data.

**Detailed are described in Procedure Op-07-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001 4.2.4 Control of Records

ISO 14001

4.5.4 Control of Records

- 4.2.4 Records are maintained that demonstrates conformance of the company's products to contract or sales requirements and achievement of the required operation of the Quality Environmental System.  
Records are legible and identifiable.  
Records are stored, maintained, and protected against deterioration, damage or loss for a defined period and readily retrievable  
Records are collected, retained and maintained in accordance with Operational Procedures and any legal obligations and shall have appropriate retention times.  
Records of performance summaries shall be made available employees via the mechanism established for communication

**Detailed are described in Procedure Op-13-00**

ISO9001 5.0 Management Responsibility

ISO 14001

Title Only

ISO9001 5.1 Management Commitment

ISO 14001

4.2 Environmental policy  
4.4.1 Resources, Roles, Resp & Authority

- 5.1 The Management provides evidence of its commitment to the Quality Environmental System by ensuring employees are aware of customers requirements.  
Further commitment is demonstrated by Review of Quality and Environmental policy, monitoring objectives, availability of resources and conducting management reviews.

Responsibility and authority is clearly defined for the day-to-day implementation and operation of the Quality Environmental System.

All personnel on HydraForce Hydraulic Ltd site are responsible for compliance to the documented procedures.

Where required the employee has the authority to halt activities contravening the Quality Environmental System.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001 5.2 Customer Focus

ISO 14001

4.3.1 Environmental Aspects  
4.3.2 Legal and other requirements  
4.6 Management Review

- 5.2 The Quality Environmental System ensures that customer requirements are evaluated and met to enhance customer satisfaction, environmental aspects and Legal compliance

Environmental Assessments which provides the basis for environmental impacts and aspects, from where an analysis is conducted to determine significant environmental aspects and prioritise action

The analysis technique ranks the frequency of occurrence, the severity of likely impact and HydraForce Hydraulics Ltd ability to detect the failure.

This Significant Environmental Assessment supports the commitment for continual improvement, and underpins the selection of objectives and targets.

Legal and other requirements are identified for applicable environmental legislation, and other applicable requirements to which HydraForce Hydraulics Ltd subscribes.

HydraForce Hydraulics Ltd shall maintain the Legislative Register by using publications that are able to demonstrate authority and expertise in environmental legislation and regulation affecting the manufacturing industry.

Authorised publications shall be reviewed regularly for enacted, amended or repealed legislation.

Information received from sources to which HydraForce Hydraulics Ltd subscribes may also be considered for inclusion.

**Detailed are described in Procedure Op-20-00 and OP-05-00**

ISO9001 5.3 Quality Policy

ISO 14001

4.2 Environmental Policy

- 5.3 The Quality & Environmental Policy details commitment to comply with Customer, statutory /regulatory requirement and to improve the effectiveness of the Quality Environmental System, the use of business Quality and environmental objectives.

The policy is reviewed at the Management Review for continued stability.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 5.4 Planning**

**ISO 14001 4.3 Planning**

**ISO9001 5.4.1 Quality Objectives**

**ISO 14001 4.3.3 Objectives, Targets and Programs**

- 5.4.1 Measurable Quality and Environmental Objectives and targets are set, which use performance indicators, to quantify the level of improvement for review during Management Reviews  
Performance targets shall be specific, measurable, achievable, realistic and time-limited. Basis of objectives and targets shall have legal compliance, operation control as their primary focus, pollution reduction, waste elimination and improving efficiency. Objectives and targets shall address schedules, responsibilities, time-frames and prioritised actions where identified extended to cover new developments or modified activities

**ISO9001 5.4.2 Quality Management System Planning**

**ISO 14001 4.3.3 Objectives, Targets and Programs**

- 5.4.2 The Purpose of the Quality Environmental System is to assist HydraForce Hydraulics Ltd in meeting customer requirements by the consistent operation of its processes

Changes are planned and implemented to the operating process which impacts the customer and environmental requirement so that the correct process output is achieved and monitored ensuring requirements are met.

**ISO9001 5.5 Responsibility and authority and communications**

**ISO 14001 Title Only**

**ISO9001 5.5.1 Responsibility and authority**

**ISO 14001 4.4.1 Resources, Roles, Resp & Authority**

- 5.5.1 The responsibility for quality and environmental activities lies with the person performing the task as defined in the relevant procedures.

All personnel on HydraForce Hydraulic Ltd site are responsible for compliance to the documented procedures. Where required the employee has the authority to halt activities contravening the Quality and environmental requirements.

Employees are encouraged to recommend, through the appropriate supervision, improvements to documentation or work practises particularly those relating to Quality and Environmental activities

All employees are responsible for maintaining a high degree cleanliness and housekeeping of the premises required by the nature of the product / service and environmental aspects and impacts

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

A= Awareness S=Support R= Responsible * = Authority	*President/Managing Director	*Manufacturing Director	*Manufacturing Managers	Manufacturing Engineers / Services	Manufacturing Support Staff	Manufacturing Team members	Purchasing	Accounts	*Sales Director	Sales Supervisor	*Quality Manager	Auditors	*Supplier Quality Assurance	IT Support	Design	Technical Sales	Sales Staff	Visitors	Suppliers / Contractors
	HydraForce Strategy	R	R	S	S	A	A	A	R	S	R	S	A	A	A	A	A	A	A
	Quality Environmental Policy	S	R	S	S	A	A	A	R	S	R	A	A	A	A	A	A	A	A
	QES Manual	S	S	S	S	A	A	A	S	S	R	A	A	A	A	A	A	A	A
	Operating Procedures	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Assessment & Audits	S	S	S	R	A	A	A	S	S	R	R	A	A	A	A	A	A	A
	Training	S	S	R	R	A	A	A	S	R	R	A	A	A	A	A	A	A	A
	Reporting Concerns	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Investigations Reporting	S	R	R	R	S	S	S	S	S	R	R	R	S	S	S	S	S	S
	Health & Safety	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

## Office of the President

To define and support long term strategic plan to develop the business needs to support the continued growth to meet or exceed objectives and targets with in Hydraforce .

## Chairman / Managing Director

The Chairman/ Managing Director responsibility and is the final authority for the company's Quality Environmental System operated to meet that policy.

This responsibility is implemented through a continuing and regular review of the company's operating and documented systems.

The company's objectives are reviewed at the Management Review and formally documented in form of Performance measures set by HydraForce Hydraulics Ltd .

Objectives shall detail the company's Growth Plan, Plant & facilities, Human Resource Development (training) Projected Sales figures, Quality Objectives, Health & Safety and Environmental issue on legal compliance, waste reduction and pollution prevention.

To work with the directors /senior management to plan, develop and oversee the companies' strategy to support the business in IT, Accounts and Human Resources functions ensuring the business growth is maintained

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

## **Manufacturing Director**

The Manufacturing Director is responsible for the Manufacturing activities at HydraForce Hydraulic Ltd UK plant

The Manufacturing Director who has authority and responsibility for control of production output programmes to meet Customer requirement

The co- ordination of the requirements from the Design, Purchasing, Manufacturing, Sales and Quality Departments to control internal manufacture, assembly stores inventory and non- conformance's arising within the manufacturing processes.

Environmental activities affecting legal compliance, waste reduction, pollution prevention aspects and impacts

In the absence of the Quality Manager the Manufacturing Director / Nominee will take responsibility for the Quality and Environmental activities

## **Purchasing Manager**

The Purchasing Manager is responsible for the procurement of all material, bought - out parts, accessories and subcontract services to the requirements as specified by production and design from sources that have proven quality, Environmental and performance capability

The Purchasing Manager/Buyer is responsible for approving Purchase Order

## **Sales Director**

The Sales Director is the prime interface between the company and its Distributors and major customers of HydraForce Hydraulic Valves and Manifolds.

The Sales Director holds the ultimate responsibility for ensuring that customers requirements at all stages of an enquiry or contract are understood and acted upon; together with fostering a close working relationship at all levels between HydraForce Hydraulics Ltd Customers.

The Sales Director represents the needs of the Customer for quality and environmental activities

## **Customer Services Manager**

To provide a quality, responsive service and full support to HydraForce customer base

To anticipate and meet all customer requirements, providing added value

To make the customer's experience of dealing with HydraForce one to remember, for the right reasons

To be able to identify and implement continuous improvements which will enhance service delivery and complement business growth

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

## **Marketing Assistant**

To provide a quality, responsive service and full support to HydraForce customer base  
To support HydraForce Sales Team on Marketing strategy and providing added value by Marketing administration support  
To be able to identify and implement continuous improvements which will enhance service delivery and complement business growth

## **Quality Manager**

The Quality Manager is the management representative responsible for the implementation and maintenance of the Quality Environmental System as defined by this manual, in particular the control of Quality and Environmental activities  
The Quality Manager is also responsible for Corrective and Preventive Actions recommending solutions to resolve them until deficient conditions have been corrected, initiate Quality Plans, Master Control Plans and ultimately verify their implementation .

To control further processing, delivery or installation of non - conforming product, the appraisal of suppliers, calibration control and liaison with customers on quality matters.

The Quality Manager is responsible for internal and external Quality and Environmental requirements with the support from the relevant function for corrective and preventive action.

For EC regulations ( PED) the Quality Manager / Managing Director / Manufacturing Director (or nominee ) is responsible for approval and confirming the details of the declaration of conformity are correct and endorsing them.

## **Supplier Quality Assurance Manager**

The SQA manager is responsible for the quality and environmental issues related to purchase parts, materials and services from Suppliers.

The SQA Manager is responsible for Goods Inwards Inspection activities, Supplier monitoring, auditing, approval improvement activities, APQP readiness and Supplier related Corrective & preventive actions.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

## **Engineering Manager**

The Engineering Manager is responsible for monitoring the progress of product design and development projects and ensuring that projects are conducted according to established procedures and standards. A representative may be authorised by the Engineering Manager to assist in meeting these responsibilities.

The Engineering Manager shall co-ordinate the Design function and ensures that tasks are efficiently and competently completed. Advice for the purposes of 'fault finding' and instruction as necessary and the administration and clarification of technical content of orders received. It is the responsibility of all individuals involved in the product design and development process to assure the confidentiality of any specific customer product information and to protect Hydra force's intellectual property.

## **Manufacturing Manager**

The Manufacturing Manager, is responsible for ensuring effective procedures are followed where required updated for improvement to reflect current methods. Staffs is trained for the jobs they perform with access to them, first - off in process and final inspection operations relating to their respective activities, additionally to identify and record any quality and environmental concerns problems recommending improvements.

## **Stores and Despatch Manager**

The Stores and Despatch Manager, is responsible for Goods Inwards, Stores, Finished Goods, Packing and dispatch activities

Documented procedures are followed where required updated for improvement to reflect current methods. Stores personnel have the ability and are trained for the jobs they perform additionally to identify and record any quality and environmental concerns problems and recommending improvements.

## **Team Leaders/ Team members**

The Team Leader / Team members are responsible for working to the documented procedures; any Quality and Environmental discrepancies shall be reported to their Assembly Supervisor.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001

5.5.1 Responsibility and authority

ISO 14001

4.4.1 Resources, Roles, Resp & Authority

## **Human Resource Manager**

To work with senior management to plan, develop and implement strategy for HR management and development, including recruitment, reward, and performance management and identifying and implementing policies and practices to support the business growth, ensuring that activities are integrated with the business plan and its needs so that we can maintain a high quality environment within which the staff can develop.

## **Technical Support**

To provide Technical Support & advice to both HydraForce customers and HydraForce Internal Departments

## **IT Support**

The IT support engineer report to the Director of IT.

The IT support engineer is responsible for supporting and maintenance of the IT activities Additionally to identify and record any quality and environmental concerns problems and recommending improvements

## **Non HydraForce Hydraulics Ltd Personnel**

Non HydraForce Hydraulics Ltd Personnel (such as Visitors, Sub-contractors, Customers, Suppliers) are responsible for following rules and regulation during their activities at the premises. Whilst on site Environmental activities (Aspect and impact), Quality related, Health and safety, Fire safety shall be observed as instructed by the contact person being seen.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

<b>ISO9001</b>	<b>5.5.2 Management Representative</b>	<b>ISO 14001</b>	<b>4.4.1 Resources, Roles, Resp &amp; Authority</b>
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5.5.2 The Quality manager is the Management representative who is responsible for Quality Environmental System ,reporting performance to the Management Team and promoting awareness of the customer, quality and environment throughout the organisation where required liaison with external parties.

<b>ISO9001</b>	<b>5.5.3 Internal Communications</b>	<b>ISO 14001</b>	<b>4.4.3 Communication</b>
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5.5.3 The Management Team ensures that communication channels are established throughout HydraForce Hydraulics Ltd, including the communication of the effectiveness of the Quality Environmental Management System.

HydraForce Hydraulics Ltd shall encourage dialogue on environmental issues, internally and externally.

Managers and Team-leader shall have periodic meetings with employee representatives to promote effective communication throughout HydraForce Hydraulics Ltd.

Communications may be in written or verbal form.

Where required written communications can be displayed on notice boards

HydraForce Hydraulics Ltd shall co-operate with like-minded institutions discussing environmental issues and their solutions though confidential information shall not be disclosed.

Details of relevant outcomes shall be recorded.

**Detailed are described in Procedure Op-20-03**

<b>ISO9001</b>	<b>5.5 Management Review</b>	<b>ISO 14001</b>	<b>Title Only</b>
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<b>ISO9001</b>	<b>5.5.1 Management Review</b>	<b>ISO 14001</b>	<b>4.6 Management Review</b>
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5.5 The Management Team ensures continued suitability and effectiveness of the Quality Environmental System for adequacy by assessing Improvements, Management Policy and objectives.

Management Reviews are recorded in form of minutes and timely actions.

**Detailed are described in Procedure Op-01-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001      5.6.2 Review input                      ISO 14001      4.6 Management Review**

5.6.2 The review considers as a minimum

Actions from last Quality Environmental System review  
Process conformity (audit program results)  
Management Policy (for Quality and Environmental)  
Objectives and Target status  
Product Conformity  
Corrective and Preventive status  
Supplier Performance  
Customer concerns  
Changes to the organisation since the last review  
Changes to regulatory and statutory requirement  
Recommendation / Continuous Improvement status  
Legal compliance  
Lessons learnt from accidents and incidents

**ISO9001      5.6.3 Review Out put                      ISO 14001      4.6 Management Review**

5.6.3 The review minutes are prepared by the Quality Manager detailing decision and actions with time scales of the Quality Environmental System effectiveness, process status, improvement activities, resource need, environmental legalisation, impacts and aspect as per agenda items.

**Detailed are described in Procedure Op-01-00**

**ISO9001      6.0 Resource Management                      ISO 14001      Title Only**

**ISO9001      6.1 Provision of resources      ISO 14001      4.4.1 Resources, Roles, Resp & Authority**

6.1 The management provides necessary resources to maintain the Quality Environmental System to continually improve it and enhance the environmental, Quality and customer satisfaction.

**ISO9001      6.2 Human resources                      ISO 14001      Title Only**

**ISO9001      6.2.1 Human resources                      ISO 14001      4.4.2 Competence , training and awareness**

6.2.1 The Management ensures that staff has the appropriate experience, education, training and skills to fulfil HydraForce Hydraulics Ltd objectives for Quality and Environmental and meet customer requirements.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 6.2.2 Human resources ISO 14001 4.4.1 Resources, Roles, Resp & Authority**

- 6.2.2 Staff is made aware of their contribution to achieve customer satisfaction, Quality and Environmental deliverables. Competency needs are identified; training is provided and evaluated to confirm effectiveness. Records are maintained

**Detailed are described in Procedure Op-14-00**

**ISO9001 6.3 Infrastructure ISO 14001 4.4.1 Resources, Roles, Resp & Authority**

- 6.3 The Management ensures that the infrastructure of buildings, workspace, utilities, and environment is maintained. The maintenance and upgrade of process equipment, tooling, software, hardware and documentation is continually reviewed to achieve product, process support and environmental conformity.

**ISO9001 6.4 Work Environment ISO 14001 N/A**

- 6.4 The Management ensures the physical working conditions and environmental factors is managed to achieve the required product and process output.

**ISO9001 7.0 Product Realisation ISO 14001 4.4 Implementation and Operation**

**ISO9001 7.1 Planning of Product Realisation ISO 14001 4.4.6 Operational Control**

- 7.1 HydraForce Hydraulics Ltd has developed and established controls for processes needed to achieve Final Product Quality and Environmental requirement in conjunction with the Quality Environmental System.  
Operational control shall focus on pollution prevention, conformance with internal and external operations

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001	7.2 Customer related Processes	ISO 14001	Title Only
ISO9001	7.2.1 Determination of product requirements.	ISO 14001	4.3.1 Environmental Aspects 4.3.2 Legal and other requirements 4.4.6 Operational Control

7.2.1 Prior to preparing a quotation or accepting an order Sales Director /Nominee ensures that the following are determined  
Customer requirement by means of a specification and time-scales for completion of requirement necessary for the intended use and any Customer specifics,  
Statuary and regulatory requirement also any additional requirements to complete the product and achieve maximum customer satisfaction  
Specific Environmental, Health and Safety requirements are identified on the Combination Valve Pricing Worksheet and Product Proposal Development Form

ISO9001	7.2.2 Review product requirements	ISO 14001	4.3.1 Environmental Aspects 4.4.6 Operational Control
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7.2.2 Enquiries and orders are verified before acceptance  
The enquiry or order requirement is clearly defined in terms of product requirement, quantity, price, delivery, documentation.  
The enquiry or order requirements can be met and any discrepancy /amendments are resolved before acceptance of a order.  
Where verbal order are instructed (no formal document requirement) are confirmed with the customer

**Detailed are described in Procedure Op-05-00**

ISO9001	7.2.3 Customer communication	ISO 14001	4.4.3 Communication
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7.2.3 Customer communication is a key to providing products and services, which meets the customer's requirements.  
Communication takes place at the quotation, enquiry, stages, order confirmation and amendments.  
Customer feedback on product, services and environmental provided whether negative or positive is important for to ensuring customer satisfactions.

**Detailed are described in Procedure Op-16-00 and OP-05-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001      7.3 Design and Development      ISO 14001      Title only

**Detailed are described in Procedure Op-06-00 and EDS procedure**

ISO9001      7.3.1 Design and Development      ISO 14001      4.4.6 Operational Control  
Planning

- 7.3.1 The Engineering Manager is responsible for monitoring the progress of product design and development projects and ensuring that projects are reviewed, verified and validated according to established procedures and standards. A representative may be authorized by the Engineering Manager to assist in meeting these responsibilities and this authority will be documented in the Engineering Department Standards (EDS).  
It is the responsibility of all individuals involved in the product design and development process to assure the confidentiality of any specific customer product information and to protect Hydra Force's intellectual property.

All design and development projects shall be conducted according to the HydraForce Hydraulics Ltd APQP, CVPW and PPD procedure requirements.

Projects require a plan to describe required activities and assigned responsibilities for those activities.

Project plans can be accomplished in various formats depending on the type of project and/or the degree of complexity.

Engineering management shall ensure that all activities are assigned to qualified personnel with adequate resources based on complexity of the project vs demonstrated experience of the individual, the individual's education and previous experience per HR records and internal training records. Appropriate plan revisions will be made as a project changes.

All organisational interfaces shall be defined within the project plan and/or other documented procedures, including EDS.

ISO9001      7.3.2 Design and Development      ISO 14001      4.4.6 Operational Control  
Inputs

- 7.3.2 All customer and/or market specifications for function and performance requirements, plus applicable industry and/or government standards and legal regulations shall be identified, documented, and reviewed for adequacy.  
These requirements shall include any item clarification of ambiguous inputs ensuring no conflict with other design, which may be identified during an applicable contract review and consideration to similar design.  
Design input shall be documented, reviewed, and approved per Engineering Department Procedure's requirements.  
All design activities shall be completed utilizing applicable CAD/CAE tools, including any subcontracted design work. When required, a method for two-way electronic interface with customers shall be made available.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001    7.3.3 Design and Development    ISO 14001    4.4.6 Operational Control**  
**Outputs**

- 7.3.3 Design and Development output required for each project shall meet the documented design input requirements.  
Design and Development output shall contain or make reference to acceptance criteria. Where applicable, characteristics that are crucial to the safe and proper operation of the equipment, environmental or systems shall be identified.  
Project Engineers shall conduct appropriate efforts to optimize the design and reduce waste, and to analyze the design's cost/performance/risk ensuring information for purchasing, production, preservation and serviceability.  
For cartridge products, the Project Engineers shall recommend and plan Design FMEA's and uses applicable feedback from testing, production, and the field. Engineering management or designated representative prior to a product's release for production shall approve project design output.  
For manifold products, the primary design and Development output is the resulting drawings which is reviewed and approved by the Group Supervisor or his designate.

**ISO9001    7.3.4 Design and Development    ISO 14001    4.4.6 Operational Control**  
**Review**

- 7.3.4 Design and Development Review should be conducted to ensure that the final design and supporting data meet the design-input requirements. Specifically, individual design reviews may include discussion of project development strategies, discussions of problems with proposed changes to development strategies or tasks, or the verification of development results.  
Design reviews of new design and design modification projects shall be conducted at the intervals determined, during the planning stage of each project.  
Engineering management or the Project Leader reviewing project requirements vs. results, with knowledgeable or affected functional personnel may conduct Design and Development Review. Depending on the project type and complexity, design reviews and review approvals may be signified by the approval of an ECN. Review records shall be maintained within the project plan, project folder, or ECN.  
All design review records are retained for the length of time the product is active for production plus at least one (1) calendar year.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 7.3.5 Design and Development Verification**

**ISO 14001 4.4.6 Operational Control**

7.3.5 Design and Development Verification is conducted to ensure that the design stage output meets the design stage input requirements. Verification of design input criteria should be conducted as documented in the approved project plan or procedure.

For manifold products, verification requires comparing design input to resulting manifold design models and drawings.

Relative to cartridge products, applicable verification activities for product life, reliability, and durability shall be documented in the project plan. All performance testing activities are tracked against the project plan requirements in order to assure timely completion.

All design verification records are retained for the length of time the product is active for production plus at least one (1) full calendar year.

**ISO9001 7.3.6 Design and Development Validation**

**ISO 14001**

**4.4.6 Operational Control**

7.3.6 Design and Development Validation for new HydraForce Hydraulics Ltd products and modifications to existing designs shall be conducted as determined and approved during the planning stages of the project or as documented in the applicable general procedure.

Design and Development Validation is conducted to ensure that the final product conforms to the user needs and requirements defined in the design input. All validation testing for products within a specific customer program shall be conducted according to the customer's timing requirements and shall be identified in the project plan. All design failures identified during validation testing shall be recorded in the test records.

Validation test failures shall be evaluated in a Design Review per Section 7.3.4 in which any required corrective and preventative action will be determined. The AT15 TOPS process will be used for failures involving Released-For-Production products.

**ISO9001 7.3.7 Control of Design and Development Changes**

**ISO 14001**

**4.4.6 Operational Control**

7.3.7 Changes to design specifications for projects-in-progress resulting from the design and development effort, shall be reviewed during design reviews with Engineering management and, if changes are accepted, documented, and approved as design input revisions. Changes to market or customer specifications shall be translated into revisions to the design input specifications. Any changes to design input must adhere to the requirements of Section 7.3.2 of this document and may result in project plan modifications.

Changes to released products must be evaluated for necessary design activities considering applicable requirements per Sections 7.3.1 through 7.3.7 and effect of Stock in process & delivered. Design change/release control records (ECNs) will be maintained for at least 10 years from original release date.



# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 7.4.3 Verification of Purchased Product ISO 14001 4.4.6 Operational Control**

7.4.3 Verification level at receipt of inspection is dependent upon the control exercised at source by the supplier, the supplier's previous performance, the degree of complexity of product supplied and the potential problem of an unidentified non-conformance at final assembly or test.

Wherever possible, a suppliers assurance statement of product conformance is obtained (SPC data, test data, PPAP, analysis by an independent certified body) to reduce unnecessary receipt inspection.

Goods or services accepted at receipt inspection are transferred to Stores or allocated retaining identifying documentation of acceptance.

Goods or services not accepted are labelled and quarantined in the hold area awaiting investigation and return.

Where product is released for urgent production purposes it is approved by the management, identified and recorded for trace-ability

**ISO9001 7.5 Production and Service provision ISO 14001 Title only**

**ISO9001 7.5.1 Control of production and service provision ISO 14001 4.4.6 Operational Control**

7.5.1 Production operations are carried out by under controlled conditions by suitability qualified operators

Requirements are specified on the Engineering drawing and Internal Manufacturing Order (which details the product, Quantity and Bill of Material)

Control plan and works instruction describing the operations, sequence and where required appropriate identification.

Process equipment for assembly and test will be assessed on a schedule basis to determine condition, capability or suitability for purpose

Monitoring and review of suitability of assembly test equipment, preventive / predictive maintenance, tooling and documentation is used to ensure specifications are achieved for environmental and quality requirements.

Control plans and Support procedures detail the monitoring and verification required to achieve the required specification.

In the event the customer service cannot be maintained (due to unforeseen circumstances) its main US plant can provide and support back up for the product range.

## QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 7.5.2 Validation of processes for production and service provisions ISO 14001 4.4.6 Operational Control**

7.5.2 At HydraForce Hydraulics Ltd, products are functional or performance tested at sometime during the production cycle as outlined in the Master Control Plan and Test Control plans Validation during Goods inwards, In-process, final test, packing and Despatch process are undertaken as instructed by documented procedures, control plan, inspection plan which detail the criteria to demonstrate product conformance to specified requirements. Authorised and qualified personnel performing the operation as detailed in the specific control plan carry out validation and revalidation.

**ISO9001 7.5.3 Identification and traceability ISO 14001 N/A**

7.5.3 The unique identity of parts, sub-assemblies and final assembled units maintained internally, throughout manufacturing identity and progress can be monitored at all stages.

Whilst the identity of individual batches is maintained and recorded throughout manufacture, traceability back to material source or parts source in assemblies is not maintained unless contractually agreed.

Product identification is of a visual nature by the use of Manufacturing Order, Move tickets, Hold tickets, Inspection labels/ tickets. Where required, customer labels are utilised and detailed on the control plan

**ISO9001 7.5.4 Customer Property ISO 14001 N/A**

7.5.4 Customer supplied materials, tooling, software or parts for the incorporation into the product is treated in the same way as purchased material and appropriate methods of handling and storage used.  
Any items supplied which are unsuitable for use or defective is reported to the customer as in section 8.3 non-conforming

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001    7.5.5 Preservation of product    ISO 14001    4.4.6 Operational Control

7.5.5 Product/parts are stored in designated areas to ensure the product is protected from possible damage or deterioration from receipt to delivery to the customer.

Designated storage area provides suitable conditions to prevent damage or deterioration of product.

Product is protected and identified in a manner, which ensures segregation and identification from receipt to despatch.

Conditions for safe delivery, including preservation during transit, is specified and advised where necessary to suit the nature of the material being despatched.

Unless specified by the customer method of despatch, packing is determined by HydraForce Hydraulics Ltd taking due regard to the nature of the product, size, weight packing, preservation and environmental impact and designation

**Detailed are described in Procedure Op-12-00**

ISO9001    7.6 Measuring and monitoring    ISO 14001    4.5.1 Monitoring and Measurement  
Equipment

7.6 All measuring and test equipment including software, computing devices used in inspection and test is company owned and controlled and calibrated in accordance with documented procedures.

The use of employee owned inspection equipment is strictly forbidden.

HydraForce Hydraulics Ltd provides production all inspection equipment required.

The equipment is calibrated at designated intervals against certified standards, which are traceable back to National standards. The certified standards are serialised and records maintained in the register. The frequency of re-calibration of equipment is dependent upon use.

The user of the equipment is responsible for ensuring that it is serviceable and, for electronic equipment that it is in calibration during use. Equipment found to be out of calibration or damaged is required to be reported to the Quality Manager in order that previous inspections or test data can be assessed for the necessity to recall or re-inspect product.

Competent trained personnel who are familiar with the calibration practises perform in-house calibration.

**Detailed are described in Procedure Op-10-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001	8.0 Monitoring Audits and Internal Audits	ISO 14001	4.5 Checking
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ISO9001	8.1 General	ISO 14001	4.5.1 Monitoring and Measurement
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8.1 HydraForce Hydraulics Ltd ensures the continuous monitoring of processes needed to demonstrate the conformity of the product and the Quality Environmental System (Quality and Environmental) to improve its effectiveness

ISO9001	8.2 Monitoring and Measurement	ISO 14001	Title Only
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ISO9001	8.2.1 Customer Satisfaction	ISO 14001	N/A
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8.2.1 Customer satisfaction determines the customer's perception as to whether HydraForce Hydraulics Ltd has achieved the customer's requirements on Quality, Communication, environmental and delivery through surveys and customer feedback.

**Detailed are described in Procedure Op-05-00**

ISO9001	8.2.2 Internal Audit	ISO 14001	4.5.5 Internal Audit
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8.2.2 An internal audit program monitors the performance and suitability of the Management System. The Internal audits ensure that each element of the system is audited over a 15-month period

The Quality Manager is responsible for audit program, for ensuring that timely, effective actions are taken where required additional audits are conducted as a result of previous audit, trends or areas of greater importance.

Corrective action, Observation and Opportunity for improvements identified and instigated shall have follow up to verify actions are effective and implemented.

The results of areas are reviewed and reported at the Management Review

**Detailed are described in Procedure Op-04-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001      8.2.3 Monitoring and Measuring of the process      ISO 14001      4.5.1 Monitoring and Measurement  
4.5.2 Evaluation of Compliance

8.2.3 The Quality Environmental System monitors the processes to ensure they achieve planned results and where not achieved the impact is investigated and corrective action taken.

The monitoring of process is ongoing and on an informal basis, review, internal audits, first time failure, non- conformances, customer concern and statistical data.

Evaluation of compliance to legal and other defined requirement to which it subscribes are reviewed and reported at the management review.

ISO9001      8.3 Control of Non – conforming Product      ISO 14001      4.5.7 Emergency Preparedness/Response  
4.5.3 Non Conformity , Corrective and Preventive Action

8.3 Non-conforming product is defined as material, sub-contracted or in-process parts, sub-contract services, customer returns or repairs that are not in accordance with the specified requirements.

When so identified it is immediately segregated (if practical) identified as non conforming material awaiting disposition

Disposition can be repair, rework, (Repaired/ reworked material is inspected and authorised for use) accept on a Temporary deviation report or scrap

If suspect material has already been despatched to a customer then a notice of possible non-conformance is communicated together with advised action

Where there is a potential for an event to exert an adverse environmental effect, assessment of risk is carried out to ensure response to abnormal conditions or emergency.

Where risk posed has potential to cause serious environment harm and beyond the means of HydraForce Hydraulics Ltd to deal with, the appropriate emergency services shall be advised

All such incidents are reported and investigated.

**Detailed are described in Procedure Op-20-00 and Op-11-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001 8.4 Analysis of Data ISO 14001 4.5.1 Monitoring and Measurement**

8.4 Data is collected and analysed to demonstrate the effectiveness of the Quality Environmental System with a view to identify possible improvements in particular relating to Customer Satisfaction, Environmental, Product conformity requirements, process conformity and Supplier / sub-contractor performances.

**ISO9001 8.5 Improvement ISO 14001 Title Only**

**ISO9001 8.5.1 Continual Improvement ISO 14001 4.2 Environmental Policy  
4.3.3 Objectives ,Targets and Programs  
4.6 Management Review**

8.5.1 The Quality Environmental System ensures the effectiveness continual improvement by establishing a Management Policy and monitoring measurable objectives as well as using audit results, pollution prevention, legal compliance ,analysis of data, corrective and preventive actions

**ISO9001 8.5.2 Corrective action ISO 14001 4.5.3 Non Conformity , Corrective and Preventive Action**

8.5.2 As a result of Non compliance from audit results, Customer complaints, Public complaints, Non Conformance reports an initial investigation is undertaken to asses the magnitude of incident and the level of corrective action necessary to prevent a further occurrence.

Non-compliance's of a serious nature involving significant costs or influencing order/contract specification, environment, Health and Safety are promptly analysed to determine using problem solving methods (Brainstorming, PDSA, fish bone, process FMEA) to determine whether improved procedures, methods or a design review is required.

The non-compliance, disposition and the corrective action proposed with time scale are recorded on the Non-compliance and monitored to ensure satisfactory implementation.

**Detailed are described in Procedure Op-11-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

ISO9001 8.5.3 Preventive Action

ISO 14001

4.5.3 Non Conformity , Corrective and Preventive Action

8.5.3 Customer complaints, Public complaints, Non Conformance reports and discrepancies are evaluated and reviewed at the Management Review to establish whether trends or weakness exist, so as to identify any area that may result further non-compliance in the future.

Preventive action is recorded and implemented to address any identified causes of the non-compliance

**Detailed are described in Procedure Op-11-00**

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

## **ISO9001    HEALTH AND SAFETY    ISO 14001    HEALTH AND SAFETY**

HydraForce Hydraulics Ltd recognises its responsibility for the health and safety of its employees and those who may be affected by its operations.

HydraForce Hydraulic Ltd recognises its duty to ensure, so far as is reasonably practicable, the health and safety of the Company's personnel and others who may be affected by its operations.

HydraForce Hydraulic Ltd requires employees/ contractors/visitors at all levels to exercise a duty of care and to co-operate in establishing and maintaining safe and healthy working conditions and to avoid any action which may be detrimental to the health and safety of themselves and others.

It is the HydraForce Hydraulic Ltd Company's policy to comply with legal Health and Safety requirements as a minimum standard and with relevant codes of practice, where appropriate.

Each individual manager and Supervisor is expected to take care of the Health and Safety of employees and will be held accountable for accidents or dangerous events within his area of responsibility.

Policy statements will be brought to the notice of all personnel. All policy statements will be regularly reviewed, revised as necessary and any revisions brought to the notice of employees.

The Health and Safety policy is supported by the Quality & Environmental Policy incorporating Continuous improvement, Prevention, Elimination, Reinvestment, Objectives and Targets relating to Health and Safety.

The responsibility of the company and its employees is outlined in the Company's Health & Safety Policy supported by Op-17-XX.

# QUALITY ENVIRONMENTAL SYSTEMS MANUAL (QES)

**ISO9001      FINANCE**

**ISO 14001   FINANCE**

HydraForce Hydraulic Limited recognises finance transaction between its customers and suppliers as a one of the vital parts of its business.

Financial internal controls are the checks and balances built into the administration systems and are designed to ensure efficiency, accuracy and integrity,

To meet those objectives and for control to be fully effective, both the Financial Controller and senior managers need to be vigorously involved in the business. They should discharge their responsibility in reviewing and satisfying them selves that the recorded information is broadly correct in the same way they would verify any other incoming information.

The Financial Controllers prime responsibility is to ensure the figures of the business do not at any time show more favourable profits or trends than those which should be established from a realistic of the facts. This element of natural should not be overridden and the Financial Controller is responsible for reviewing and clarifying the uncertainties in the accounting process.