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Manufacturer of Dual Laminate, FRP process equipments and pressure vessels at the above location to appropriate certification of authorization holders, with responsibility for code symbol stamping and certification retained by the above location.

Quality Manual

Edition : 3.0

Reference standard / Norme de référence : ISO 9001:2000

Eric Lamontagne, General Manager

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Revisions Table /Tableau des révisions

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2.0	Second issue according to ISO9001 :2000 /	2003-06-13
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Quality Assurance Manual

ISO 9001:2000

 Revision: 3.0
 2007-04-27

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Quality Assurance Manual**ISO 9001:2000**Revision: 3.0
2007-04-27**1 SCOPE****1.1 General**

The Purpose of this quality manual is to document AC Plastiques Inc. (ACP) Quality Management system (QMS), which is registered to the ISO 9001:2003 criteria.

ACP is a custom manufacturer of thermoplastic, fiberglass reinforced plastic (FRP) and Dual Laminate industrial products. All products manufactured at our Les Cèdres, Quebec Plant are included in the QMS.

This Quality Assurance Manual specifies the requirements of the quality system in use at ACP to ensure customer satisfaction by promoting quality at each step of the process and preventing non-conformities, from contract review through delivery of the final product.

ACP is committed to offer reliable, superior quality products and services, on time, to its customers.

This manual is our primary key reference document for all quality-related activities and is used to communicate our commitment to quality and the effectiveness of our QMS. It also provides the framework for our QMS to be audited.

The description of the QMS follows the elements of ISO 9001 and references other key documents used. Details, where required, are provided by way of procedures, which may, in some instances, be supported by work instructions.

Our QMS representative is our Quality Assurance Director, who is responsible for insuring that processes are established, implemented, and maintained according to ISO 9001:2000 and that corporate objectives are met. The Quality Assurance Director reports to top management on the performance and continuous improvement of our QMS.

1.2 Application

All of the manufacturing activities at ACP are considered within the scope of the QMS to ISO 9001.

Our QMS includes all elements of the ISO 9001: 2000 Standard, **except for** the following:

7.5.2 Validation of Processes and for Production and Service Provision

ACP does not carry out processes where the resulting output cannot be verified by subsequent monitoring or measurement. This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered.

It is from these limitations that the standard is interpreted and that the policies and the other corresponding documents were elaborated.

Background history

ACP was founded in the early seventies and has grown to achieve its objectives of becoming a leader in the production of complex plastic industrial equipments. ACP uses the latest technology to manufacture fiberglass and plastic equipments, such as tanks, silos, ducting systems, towers, scrubbers, non-

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conductive scaffolding, reactors, chimneys, Dual Laminate and FRP (Fiber Reinforced Plastic) piping, truck liners and other custom designed products and systems.

ACP has developed a worldwide reputation for its expertise in FRP and Dual Laminate structures. We are one of the largest manufacturer of FRP products in Canada, and our products are widely used by companies in the chemical, metallurgical, electronic, mining, pulp and paper, steel plating, food processing, transportation, sewage treatment and air pollution control industries. Our client base is international and includes satisfied customers in France, Germany, China, United States, and of course throughout Canada.

ACP's team includes engineers and technicians with experience in anti-corrosive FRP structures. ACP uses the most sophisticated technology in the business of manufacturing FRP (filament winding, contact molding) or Dual-Laminate structures. ACP manufactures products that comply with established company standards and adhere to specific requirements of internationally recognized standards and specific customer requirements.

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2 NORMATIVE REFERENCE

Standard/Guideline	Purpose
ISO 9001:2000 Quality Management Systems – Requirements	Standard used to implement this quality system
AWS G1.10M:2001 – American Welding Society	Standard for thermoplastics welding
<p>"ASME RTP-1-2000 – Reinforced thermoset plastic corrosion resistant equipment".</p> <p>2004 ASME X – Boiler & Pressure vessel code – Fiber reinforced plastic pressure vessels.</p> <p>"DVS 2205 Calculation of thermoplastic tanks and apparatus"</p> <p>"DVS 2207-3 Hot gas welding of thermoplastic polymers; panels and pipes"</p> <p>"DVS 2207-1, 2, 11, 15 Heated tool welding of pipes"</p> <p>"DVS 2207-4 Welding of thermoplastics; Extrusion welding for panels and pipes"</p> <p>"ASTM D3299 Standard specification for glass fiber reinforced thermoset resin chemical resistant tanks"</p> <p>"ASTM D4163 Standard specification for Reinforced thermosetting resin pressure pipe"</p> <p>"ASTM D2996 Standard specification for filament wound reinforced thermosetting pipe"</p> <p>"ASTM D2310 Classification system for reinforced thermosetting resin pipe"</p> <p>"ASTM D4097 Standard specification for contact molded glass fiber reinforced thermoset resin chemical resistant tanks"</p> <p>"DIN 16867 – Glass fiber reinforced polyester resin pipes, fittings and joints"</p> <p>"DIN 16965, part 1 to 5 – Wound glass fiber reinforced polyester resin pipes"</p> <p>"DIN 16966, part 1 to 6 – Glass fiber reinforced polyester resin pipes and joints"</p>	<p>Standard used to design and fabricate FRP and Dual Laminate Vessels</p>
<p>"ASTM D790 Test method for flexural properties of reinforced and non-reinforced plastics"</p> <p>"ASTM D638 Test method for tensile properties of plastics"</p>	<p>Standards used to determine physical properties of thermoplastics and resins</p>

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<p>"ASTM D695 Test method for compressive properties of rigid plastics"</p> <p>"ASTM D648 Test method for deflection temperature of plastic under flexural load"</p> <p>ASTM D256 Test method for impact resistance of plastic materials</p> <p>"ASTM D2583 Test method for indentation of hardness of rigid plastics by means of barcol impressor"</p> <p>"ASTM D2584 Test method for ignition loss of cured reinforced resins"</p> <p>"ASTM E84 Test method for surface burning characteristics of building materials"</p> <p>"ASTM D696 Test method for coefficient of linear thermal expansion of plastics"</p>	
<p>"PVC & CPVC : ASTM-D1784"</p> <p>"PE : ASTM-D1248"</p> <p>"PP : ASTM-D4101"</p> <p>"PVDF : ASTM-D3222"</p> <p>"ECTFE : ASTM-D3275"</p> <p>"ETFE : ASTM-D3159"</p> <p>"MFA : ASTM-D6314"</p> <p>"FEP : ASTM-D3368"</p> <p>"PFA : ASTM-D3307"</p>	<p>Standards used to classify thermoplastic components</p>
<p>"ASTM D2563, level 1 to 4"</p> <p>"ASME RTP-1, level 1 & 2"</p> <p>"CAN/CGSB-41.22-93"</p> <p>"DVS 2201-1 Imperfection in thermoplastic welding joints"</p> <p>"Examination of plastic welders Extrusion welding"</p> <p>"CIL 4200 & 4201"</p> <p>"ASTM C1147 - Short term tensile weld strength of chemical resistant thermoplastics"</p>	<p>Quality Industry Standards</p>

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3 TERMS AND DEFINITIONS

The following are key terms from the ISO 9000:2000 Standard.

Quality: Degree to which a set of inherent characteristics fulfils requirement.

Organization: Group of people and facilities with an arrangement of responsibilities with an arrangement of responsibilities, authorities and relationships.

Customer: organization or person that receives a product.

Customer satisfaction: Customer's perception of the degree to which the customer's requirements have been filled. A customer can be internal or external to the organization.

Requirement: Need or expectation that is stated, generally implied or obligatory.

Supplier: Organization or person that provides a product.

Process: Set of interrelated or interacting activities which transforms inputs into outputs. Inputs to a process are generally outputs of other processes.

Product: Equipment (piping, vessels, parts and others) or service produced by ACP for sale to our customers.

Quality Plan: Document specifying which procedures and associated resources shall be applied, by whom and when to a specific project, product, process or contract.

Document: Information and its supporting medium.

Record: Document stating results achieved or providing evidence of activities performed.

Contract review: Set of activities carried out to ensure that the customer orders and contracts specify all the requirements to be met, and to establish that the organization can actually meet these requirements.

Nonconformity: Deviation from specified requirements. Can be a product, process, procedure or system nonconformity.

Preventive action: Action used proactively to eliminate or prevent potential nonconformities.

Corrective action: Action raised in response to an existing nonconformity, to deal with the nonconforming product or process and to prevent its recurrence.

Management review: At planned intervals, meeting allowing top management to assess the suitability, adequacy, and effectiveness of the quality management system.

Resources: Resources include people, money, information, knowledge, skill, energy, facilities, machines, tools, equipment, technologies and techniques.

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Procedure: a traditional or established way of doing things to control a logically distinct process or activity, including its associated inputs and outputs.

Work instruction: series of steps detailing how to transform inputs into outputs. Work instructions are often embedded in procedures and provide a higher level of technical detail. Example: how to fill a form, how to take a measurement, etc.

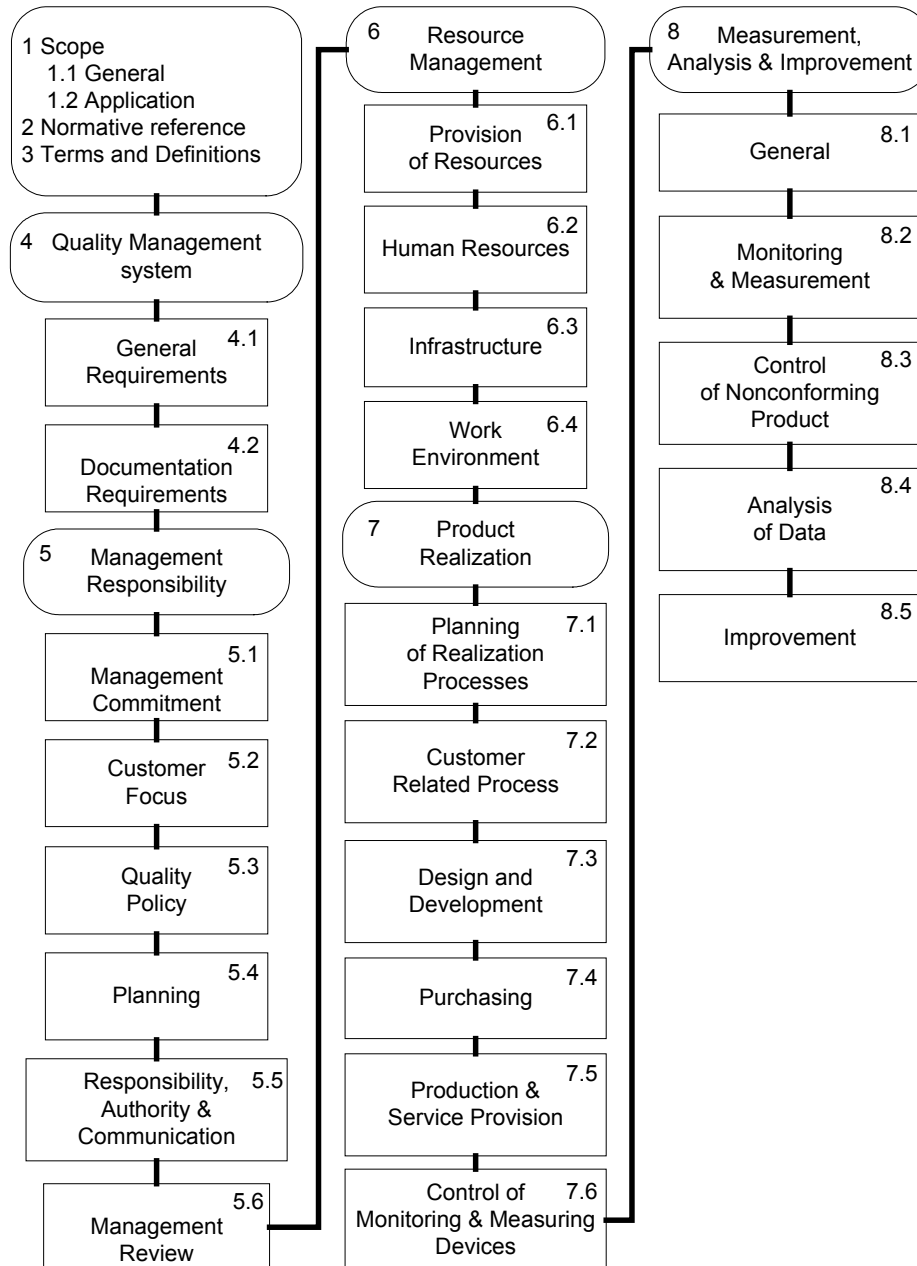
List of Acronyms used in this manual

ACP : AC Plastiques Canada
CAPA : Corrective And Preventive Action
CAPAR : Corrective And Preventive Action Report
MRM: Management Review Meeting
NCR: Nonconformity Report
QA : Quality Assurance
QC: Quality Controller
QMS: Quality Management System

4 QUALITY MANAGEMENT SYSTEM

This section of our manual provides an overview of how ACP implemented the QMS requirements for insuring an effective documented system in accordance to ISO 9001:2000.

ISO 9001:2000 Element Model



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a) The processes that need to be established, documented, implemented and maintained within our quality management system include

- human resources
- planning of product realization
- customer-related processes
- purchasing
- production and service provision
- measurement, analysis and improvement

b) The sequence and interaction of these processes are simple yet effective. As soon as a project is awarded, a step-wise process is followed to take the customer's purchase order from the sales department right through to a quality finished product.

The purchase order is reviewed and validated by the sales department. The project is then transferred to the engineering department for customer requirements verification and preparation of documents for carrying out purchasing and production activities. Once fabrication drawings have been approved by the customer, and that materials have been purchased and received, production starts. Identification and traceability is maintained throughout product realization using a barcode system.

c) To ensure the quality of the final product, the quality controller monitors the production process with predefined inspection stop points at various fabrication stages. A final visual inspection before shipping is completed for every project.

If a project is awarded to a subcontractor, the final product undergoes a visual and dimensional inspection to ensure customer requirements are met.

d) All departments need to be in constant communication to ensure proper flow of information from the production floor to the quality control and/or engineering and purchasing departments. A weekly production meeting with representatives from each production department, purchasing, quality control and engineering is instrumental in maintaining open communication channels.

e) The processes and product are monitored and measured, and adjustments are made whenever necessary. Nonconformity reports allow identification of areas requiring improvement and preventive/corrective action.

f) ACP strives for continual improvement in all areas affecting product quality. Tools used for this purpose include CAPAs, internal quality audits and management reviews.

4.2 Documentation requirements**4.2.1 General**

The following QMS documentation is documented and maintained to insure that our company products and services conform to ISO 9001:2000 and specified requirements (customer, product, norms/standards, corporate).

The four tiers of documentation that we have established and maintained to insure sufficient control of our management system are described below.

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The QA Director is responsible for identifying and insuring all quality documentation is reviewed, approved and updated.

Tier 1: Manual and Key Documents

- a) Quality Assurance Manual (QAM) - describes the quality system as a whole and defines the organizational structure, including management responsibility and authority with respect to the quality policy of ACP.
- b) Key Documents
 - Quality Policy Statement – states ACP’s commitment to a quality product/service and commitment to continual improvement and customer satisfaction. Top management maintains the quality policy statement.
 - Organizational Chart - describes the hierarchy and communication structure of the organization’s management personnel.
 - QMS plan – The quality plan includes our corporate objectives as well as our quality objectives.
 - Product realization – includes all documentation required to achieve product quality (quality control plan and test results (maintained by the Quality Controller), fabrication drawings, tests requirements, product specifications (maintained by the Engineering department), purchase orders and supplier lists (maintained by the Purchasing department).

Tier 2 : QMS Procedures Manual

QMS procedures are maintained in our QAM. The QA Director maintain a list of the procedures, including the procedure name and number, revision number, expiry date and distribution list. The procedure will make reference to the applicable element’s requirements and then describe:

- purpose
- scope
- definitions
- responsibility
- procedure (method)
- reference
- records/forms used

The following six procedures are required by the standard and are contained in our procedures manual:

- 4.2.3 Control of Documents
- 4.2.4 Control of Records
- 8.2.2 Internal Audits
- 8.3 Control of Nonconforming Product
- 8.5.2 Corrective Action
- 8.5.3 Preventive Action

Tier 3: Work Instructions

Work instructions are used to provide specific information describing various activities in the operation of the quality system and guide personnel in performing specific tasks, where the deficiency of such instructions may lead to adverse effects on the quality of our product and/or service.

There are two types of work instructions:

- a) System-related instructions: These instructions work in conjunction with our procedures and may be related to specified controls, inspections, or tests, or how to process materials (including final product) or documents.

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- b) Product-related instructions: These include more technical instructions that are used by the production personnel in the fabrication process.

Work instruction can be issued in many formats, from samples and examples of acceptable work, to posted operating instruction sheets at a workstation.

Tier 4: Records and Forms

Records provide evidence that the product or service quality has been attained, and the QMS has been implemented properly.

Forms are used to identify the status of materials, product, equipment, and include stickers and labels that are affixed on sub-items during the fabrication process.

4.2.2 Quality Assurance Manual

The QAM is an overview of our quality management system and is managed by the QA Director. The manual describes the scope of our QMS (including any exclusions). It follows the ISO Standard's numbering system for simple cross-referencing.

We insure that relevant current versions of our QMS manual and procedures are available by maintaining these controlled documents in electronic format. All printed versions are classified as "uncontrolled" and copy owners need to verify current issue with the computer.

- a) Documented procedures are not included in our QAM manual. These are located in our QMS procedures manual. We have identified the documented procedures that are required by referencing them in this manual under the appropriate elements. Our electronic manual has built-in hyperlinks to the appropriate procedures.
- b) All ACP employees have a "read only" access to the electronic form (ie no one can change the manual on the computer), and hard copies are provided upon request.
- c) A PDF of this QAM is maintained on the server in a special folder for the purpose of sending

4.2.3 Control of documents

Documents required by the QMS will be controlled. Records are a special type of document and will be controlled according to the requirements given in 4.2.4.

- a) Following the document control procedure, the QA Director is responsible for developing and maintaining the procedure and systems for document control related to the operations and activities as required by the QMS and ISO Standard.
- b) Our document control insures that all related documents are identified, controlled, reviewed, revised, and approved prior to use. All documents and data shall be legible, dated, traceable to the product (where applicable), and maintained in an orderly and accessible manner.
- c) All quality manual documentation and QAM procedures are maintained on our electronic system and are classified as "controlled". All hard copies are considered "uncontrolled". We have a computer back-up system to insure all documents are protected.
- d) Document changes may be requested by employees, customers, or suppliers, but must be reviewed and re-approved by the QA Director. The nature of the changes will be identified on the document cover sheet, revision status changed, and notification given to members on the distribution listing.
- e) Obsolete documents are promptly removed from all points of use (where applicable) or otherwise assured against unintended use.
- f) Documents shall be reviewed yearly, and revised and approved as required.

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- g) An internal document control log is maintained to control our identified documents. This log states the following:
- document name and control number
 - who is responsible for the document
 - to whom the documents are issued
 - the location of the document
 - when to review and/or revise the document
 - document copy number
 - retention time

4.2.4 Control of records

- a) Records are important to ACP because they provide the evidence that our QMS has been implemented and to what degree of success. These records provide a basis for monitoring and improvement. Records will be dated and signed by authorized personnel
- b) Following the record procedure, the QA Director is responsible for the design and implementation of an effective records management system that includes the identification of records, retention time, storage location, and record management responsibility as related to the system.
- c) Records will be maintained in an organized manner, filed and indexed, and protected against loss. Training will be provided for personnel who are involved in the collection of data insuring the records generated are produced correctly.
- d) Our records will be open to our customers for review, when specified in the contract.

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This section provides an overview of our commitment to the planning, implementation and improvement of the management system, the quality of the products and services, as well as to the focus on customer satisfaction and meeting their requirements.

This section describes the means by which we acknowledge our responsibility to quality, by documenting our policy statement, establishing objectives, and insuring responsibilities and authorities are defined and communicated. We insure internal communication and management review of our system.

5.1 Management Commitment

Our top management's commitment to the development, implementation, and improvement of the QMS is indicated in our quality policy statement and in our objectives.

- a) We are committed to meeting our customer and all relevant statutory and regulatory requirements.
- b) Our quality policy is posted in the workplace for all employees and interested parties to see. This information is communicated to our employees as part of our quality training, and is part of the hiring orientation process.
- c) Quality objectives will be established and are referenced in 5.4.1. We work continually to improve our effectiveness and efficiency.
- d) Top management will insure that responsibilities and authorities are defined (see 5.5.1) and that we communicate to our organization the importance of meeting customer requirements, as well as legal and regulatory requirements. This will be accomplished through our training and regular meetings with employees.
- e) We are committed to design, manufacture, and deliver our products consistently by using approved drawings, fabrication methods, specification requirements, and applicable industry norms and standards, with cost effective measures and on-time delivery for customer satisfaction.
- f) Management reviews are conducted at assigned intervals (see 5.6).
- g) Resources required will be available (see 5.4) and provided according to Section 6 – Resource Management.

5.2 Customer focus

- a) Our top management will insure that customers' requirements and expectations are identified and met. Customer satisfaction is key in maintaining our business. We have described our identification of customer-related processes under Section 7.2 – Customer-related Processes, and the monitoring and measurement of customer satisfaction under 8.2.1 - Customer Satisfaction.
- b) Our focus on customer satisfaction is shown throughout our quality system. It is communicated to our employees and insured through Section 8 – Measurement, Analysis and Improvement Process.

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5.3 Quality Policy

AC Plastiques Canada (1992) is committed to offering reliable, superior quality products and services, on time, to its customers.

ACP is committed to total customer satisfaction and continuous improvement. We strive to provide superior quality and premium value in every product that we manufacture. Our goal is to meet or exceed our customer's expectations with innovative products and services that contribute to their overall success, while enhancing ACP's reputation in the highly corrosive applications niche. The entire team at ACP is committed to and involved in the development and execution of our quality process.

- a) Our company's policy is set by top management and is displayed throughout our facility, demonstrating our commitment to quality.
- b) Top management will insure that the policy remains appropriate to our organization and provides a framework for our objectives. The policy statement will be reviewed in our management review process to insure it is still relevant and applicable to our organization.

5.4 Planning

5.4.1 Quality Objectives

- a) Top management is responsible for insuring that quality objectives are established at each relevant function and level, and that they are consistent with our quality policy.
- b) We will establish objectives for effective, efficient, and continual improvement of our quality management system (5.1c) and product-related objectives (7.1a). Our quality objectives will be measurable, and consistent with our quality policy. By measuring our quality objectives, we provide the basis for monitoring and analysis for continual improvement. We have set objectives for two areas:
 - 1. Customer Requirements-related Objectives:
Objectives directed to identifying, monitoring, measuring, or improving our customer relations and customer satisfaction, meeting their requirements.
 - 2. Product-related Objectives:
Specific quality objectives related to: product realization (7.1); methods, tools, records (7.1d), and monitor, measure and analyze processes (7.1a). These objectives are developed during the quality plan process.

5.4.2 Quality Management System Planning

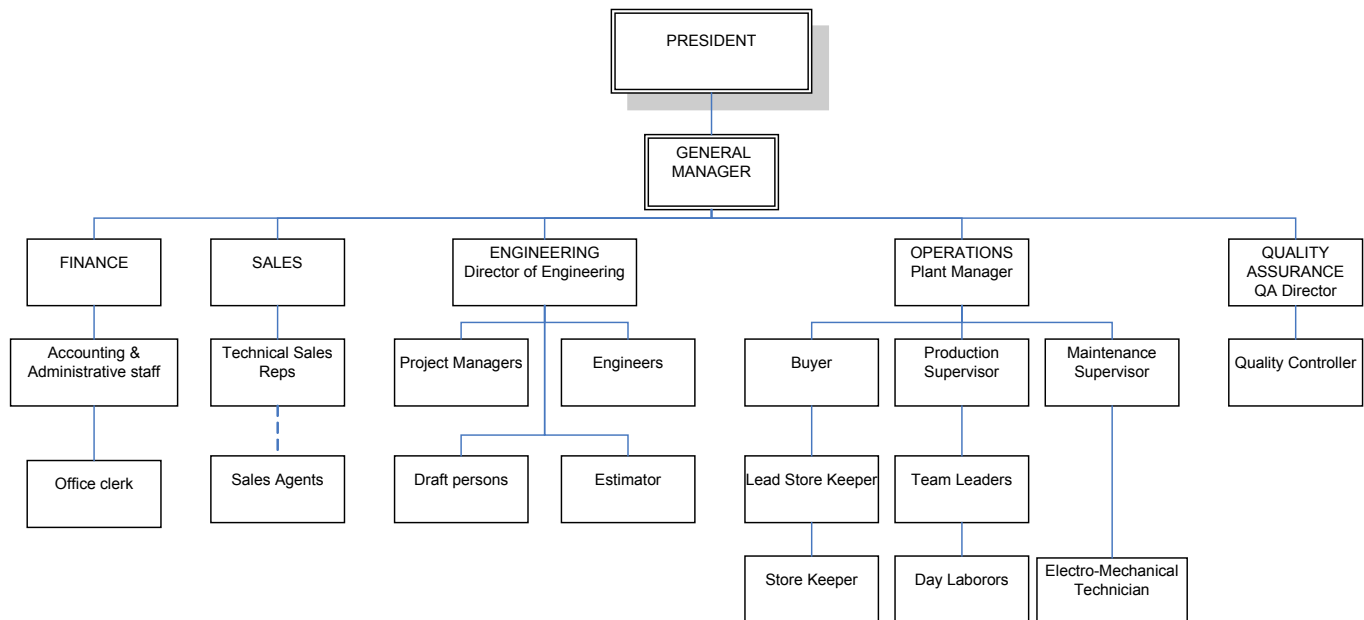
- a) The QA Director is responsible for insuring that QMS planning is implemented at our company, meeting the requirements in Section 4.1 within our manual.
- b) Top management insures that the integrity of the QMS is maintained when changes to the system are planned and implemented. This is managed through our measurement, analysis, and improvement section (Section 8) in our QAM manual.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

The following organizational chart illustrates the chain of command and reporting structure at ACP with a brief description of key roles and responsibilities of the personnel involved with our QMS.

ORGANIZATIONAL CHART



The President has input in developing ACP's strategic business plans and in establishing marketing strategies.

The General Manager has executive responsibility and authority over all organizational units.

The General Manager's main responsibilities are defined under Finance. In addition to these responsibilities, the General Manager is responsible for ensuring that the required resources are provided for the proper implementation and continuous monitoring of the quality system.

Finance

Administration performs activities such as accounting; preparation and issue of salaries; payables and receivables; purchasing; human resources; customer support and related secretarial assistance.

The General Manager is responsible for supervising and conducting the company's financial operations, maintaining the company's financial books supervising the payables and receivables, and contract review activities.

The General Manager has authority to:

- Manage the company's personnel
- Manage the allocations and reporting of company funds to the President
- Establish, implement and maintain standard financial and accounting systems in accordance with generally accepted principles

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- Approve purchase orders
- Review and approve quotations and contracts
- Supervise the invoicing of customers
- Approve purchases of capital equipment

Sales

The Sales organizational unit performs inside and outside sales activities, contracts reviews and approvals, maintains customer relations, executes strategic business plans.

The Technical Sales Reps are responsible for performing their sales duties in their respective sales territories. This includes maintaining the excellence of the relations with the customers and providing professional consultation in terms of product specifications.

The Technical Sales Reps have the authority to:

- Market the company's products and services in accordance with in-house policies;
- Submit quotations to customers;
- Price negotiation with the customer;

Engineering

The Engineering organizational unit performs activities such as the preparation of the production information; designing the product to meet customer requirements; preparing fabrication work instructions; disposing of nonconforming products; control of production processes; drafting and control of drawings; adjust estimation templates.

The Engineering Director has the authority to:

- Manage the engineering personnel
- Review and approval of contracts
- Dispose of nonconformities
- Approve Inspection Reports
- Approve Quality Plans
- Service customers in accordance with ACP's policies
- Establish and implement employee training requirements for the Engineering organizational unit

The Draftsperson is responsible for preparing drawings with the aid of AutoCAD software; controlling the revision of drawings; implementing design changes as requested by the Engineer or customer; report problems to the Engineer; distribution of drawings to the Production Manager.

Operations

The Operations organizational unit performs many different types of processes for the production of FRP (Fiber Reinforced Plastic) and Dual Laminate products. The main operations performed by the Production organizational unit are the following:

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Resin preparation; FRP filament winding; FRP contact molding; construction of Dual Laminate structures; assembly; pipes construction; fittings; various types of laminations; installation of thermoplastic liners; shop maintenance; field services.

The Plant Manager has executive responsibility for the operation of the Operations organizational unit. The Plant Manager is responsible for supervising the production operations; planning jobs; ensuring jobs are performed on time; ensuring the proper disposition of non-conformities; following production schedule; supervising the packing slip preparation before the products delivery; preventive maintenance; being involved in salary increases for production personnel.

The Plant Manager has the authority to:

- Manage the production personnel;
- Provide necessary resources to ensure that jobs are finished on time;
- Approve purchases of raw materials;
- Ensure that the appropriate (required accuracy) measuring and test equipments are utilized by the production personnel;
- Provide the necessary field service personnel for installations;
Disposition of non-conforming product

The production personnel has the authority to process and perform their duties under the guidance of the Plant Manager and in accordance with the applicable Quality System Procedure and Work Instructions (if applicable).

Quality Assurance

Quality Assurance includes quality management and administration. The main activities of this unit include preparation, revision, and issue of the Quality-System documentation and implementation of the Quality-System.

In addition, Quality Assurance is involved in verification activities; control of non-conformities; preparation and issue of corrective actions; approval of preventive actions; and reporting quality issues directly to management.

The QA Director is responsible to ensure that the Quality System is implemented and maintained in accordance with the Quality Assurance Manual, Quality System Procedures and Work Instructions. In addition, the QA Director is responsible for controlling all the quality documentation, controlling non-conformities, ensuring CAPA preparation and implementation, approving preventive actions, and conducting verification activities.

The QA Director supervises the Quality Controller (QC).

The QC has the authority to:

- Conduct and supervise production personnel training
- Dispose of nonconformities
- Ensure measuring, controlling and testing equipment calibration used by the production personnel
- Approve inspection reports.

The QC is responsible for conducting in-process and final inspection activities.

The QC is responsible for performing all the inspections necessary to ensure that the fabricated products are in conformance with the work order specifications, details provided on the drawings and the User Basic Requirements Specifications (if applicable).

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The QC is responsible for performing quality control tests and inspections in accordance with the requirements of the work order and requirements of the Quality System Procedures and Work Instructions (if applicable).

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Top management will appoint a member of management who, irrespective of other responsibilities, will have the responsibility and authority to :

- insure that the QMS is established, implemented and maintained in accordance with ISO 9001;
- report to top management on the performance of the system including needs for improvement;
- insure promotion of awareness of customer requirements throughout the organization;
- provide information on the effectiveness of our system.

The QA Director is responsible for planning and monitoring the internal audit process. She insures that corrective actions resulting from quality audits are taken, reports to top management on the performance of the system, audit results, and improvement requirements. She chairs the management review meetings.

The responsibility of the QA Director may include liaison with external parties on matter relating to the quality management system.

5.5.3 Internal communication

- a) Top management will insure that the communication processes within our company are in place to inform employees of our commitment to the development of a QMS to the ISO 9001:2000 Standard.
- b) Quality is the responsibility of all employees, and therefore they are involved in identifying, insuring, and improving the system by communicating any issues related to the process to the QA Director.
- c) Communication of our QMS' effectiveness is facilitated by email, memos and the lunch room bulletin board.
- d) The QA Director will inform employees on the effectiveness of the QMS after the management review meetings and as required.

5.6 Management Review**5.6.1 General**

- a) The General Manager and management will meet at least once a year to review the quality policy and quality-system to insure their continuing suitability and effectiveness in meeting the stated objectives (see section 5.4.1).
- b) This documented review (ie minutes of meeting) focuses on our QMS's effectiveness, and identifies opportunities for improvement. The QA Director will ensure that the minutes of the management review meetings are documented.
- c) The review may include the following:
 - results of the internal audit;
 - continuing suitability and effectiveness of QMS – meeting the requirements of ISO 9001:2000;
 - adequacy and effectiveness of QMS meeting customer satisfaction;
 - changes to QMS – ie policy or objectives;
 - review of inputs and outputs;
 - what resources will be required, and
 - continual improvement – efficiency and effectiveness: performance, productivity and profits

5.6.2 Review Input

Inputs that the management reviews will include, but are not limited to the following:

- follow-up actions from previous management reviews;
- review of QMS internal audit findings
- status of CAPAs

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- customer feedback
- process conformance and product conformity;
- changes that could affect the QMS, and
- recommendations for improvement, including identification of training needs.

5.6.3 Review Output

- a) The management reviews will cover the following, indicating its decisions and actions:
 - 1) What actions need to be taken to continually improve the effectiveness of our quality system and related processes?
 - 2) What new quality objectives need to be set?
 - 3) What actions are needed to continually improve our products and our fabrication process, meeting our customer requirements, and improving customer satisfaction? What corrective actions are required?
 - 4) What resources are essential for effective operations, including human resources, infrastructure and work environment needs?
- b) As a result of the management review, the company will determine the resources, including financial, for the following year, based on its objectives for quality.
- c) Copies of the management review meetings and reports are maintained in the QA files.

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2007-04-27**6 RESOURCE MANAGEMENT****6.1 Provision of resources**

- a) We have defined our resource requirements in our procedures, work instructions, and the following sections of our QAM:
- Planning – Section 5.4
 - Management Review – Section 5.6.3
 - Human Resources – Section 6.2
 - Infrastructure – Section 6.3
 - Work Environment – Section 6.4
 - Planning of Product Realization – Section 7.1
- b) We have addressed customer satisfaction throughout our QMS and specifically address areas in the following elements:
- Customer Focus – Section 5.2
 - Customer Related Processes – Section 7.2
 - Customer Communication – Section 7.2.3
 - Customer Property – Section 7.5.4
 - Customer Satisfaction – Section 8.2.1

6.2 Human Resources**6.2.1 General**

All employees that affect product quality are to be competent. This competency is based on education, training, skills and/or experience. This is the responsibility of management, in cooperation of production team leaders.

6.2.2 Competence, Awareness and Training

The QA Director shall establish and maintain procedures for identifying training needs and provide for the training of personnel performing activities affecting quality.

Training of personnel is an integral part of the quality system at ACP. The executive management identifies training needs during one of the Management Review Meetings.

New personnel shall be provided immediate training and indoctrination to the quality-system, management policies, safety procedures, and shall be assigned the necessary tools required to perform the assigned tasks.

The QA Director shall ensure records maintenance of all personnel ISO training, including the employee's training history prior to starting at ACP (if available).

The Training procedure describes the procedures for establishing, implementing and recording personnel training.

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- a) We will provide the infrastructure required to conform to product requirements, including the following areas:
- building, workspace and associated utilities, and equipment;
 - supporting services (communications, maintenance, etc) ;
 - process equipment requirements (software, hardware), and
 - infrastructure improvements.
- b) We will insure that our buildings and workspaces are clean, safe to work in, and that all equipment that is critical to quality of the product we produce is identified, monitored, maintained and stored according to our documented work instructions. Calibration of the equipment is required according to 7.6 – Control of monitoring and measuring devices.
- c) The maintenance manager will schedule preventive maintenance on key infrastructure and facilities that affect product quality. The maintenance cycle is based on manufacturer's requirements, intended use of the equipment, and company experience and data.

6.4 Work Environment

We determine and manage the work environment needed to achieve conformity to product requirements.

Elements we consider include the following:

- hazardous conditions;
- ergonomics;
- confined spaces;
- light;
- cleanliness.

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The product realization section provides an overview of our commitment to insuring that each product realization process is planned, insuring customer requirements are met prior to the production and delivery of product to customers.

7.1 Planning of Product Realization

The organization will plan and develop the processes needed for product realization. Planning of product realization will be consistent with the requirements of the other processes of the QMS (Section 4.1).

- a) Quality objectives and requirements are determined on a project basis by the Quality Controller and/or the Project Manager.
- b) The Project Manager, along with the Engineering and the Production Departments will identify and provide the documents, processes, resources, infrastructure and work environment necessary to generate a conforming product.
- c) The identification of the appropriate verification, monitoring, inspection and test activities, as well as the criteria for the determination of product acceptability falls under the Quality Controller. The Project Manager remains available at all times during the project to assist in this process.
- d) The identification of the records required to provide evidence that the processes and resulting product meet our customer requirements is done by the Quality Controller, again with assistance from the Project Manager if required.

7.2 Customer-Related Processes**7.2.1 Determination of Requirements Related to the Product**

- a) Customers are the reason we are in business and it is imperative that we understand the requirements specified by the customer, including the requirement for delivery and post-delivery activities.
- b) Requirements not stated by the customer but necessary for specified or intended use must be determined using the standards and norms relating to our products.

7.2.2 Review of Requirements Related to the Product

- a) The Sales Department is responsible for coordinating all customer quotation, tender, and PO reviews for products.
- b) The Sales Department is responsible for Contract Review such that:
 - product requirements are defined, understood, and agreed upon
 - contract or order requirements that are different from previous requests are resolved. Any requirements requiring clarification are dealt with until resolved.
 - ACP has the capability to meet the defined requirements.

The review will include and satisfy both the customer and our own requirements.

Records of the results of the review and actions arising from the review are maintained in the Sales Order file. Where product requirements are changed, we will ensure that relevant documents are amended, and that affected personnel are made aware of the changed requirements.

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Product information, such as product specifications, requirements and cost will be dealt with by our sales department.

Once a project has been transferred to the Project Manager, this person becomes the main point of contact with the customers for all amendments, quality and scheduling matters.

Customer feedback is currently managed by the salespeople. ACP will look into implementing a formal customer feedback system by October 2007.

7.3 Design and Development**7.3.1 Design and Development Planning**

The design process is the systematic organization of ideas, concepts, and intellectual property into products/services that will meet customer requirements and regulatory requirements.

Design activities are broken down into two groups:

- new designs or major design changes, and
- adaptation of existing products/services needed to meet specific customer or production requirements (minor changes).

Sales may present requisitions to the Engineering Department for assistance with product design. The engineer is responsible for interpretation of customer design and performance requirements.

7.3.2 Design and Development Inputs

Our design inputs consist of two types of inputs – internal and external.

Internal inputs include

- policies and objectives,
- outputs from other processes,
- employee requirements,
- technological developments,
- past designs, and
- skill requirements.

External inputs include

- customer requirements,
- regulatory (norms, standards) requirements, and
- supplier contribution.

These inputs will be reviewed for adequacy. Requirements must be complete, unambiguous and not in conflict with each other.

7.3.3 Design and Development Outputs

The Engineering Director is responsible for insuring that design and development outputs (product specifications, documents, calculations, and fabrication drawings) are documented and can be verified against input requirements. Fabrication drawings always require customer approval before being released for production.

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Our design and development outputs will

- meet the input requirements,
- provide appropriate information for purchasing, production and quality control, and
- contain product criteria (measurements, tolerances, etc).

7.3.4 Design and Development Review

Design review is part of daily engineering activities and may include the following:

- design inputs,
- cost estimates,
- time schedule,
- control of changes and their impacts, and
- identification of and correction of problems encountered in the production process.

Changes in our design outputs (fabrication drawings) that occur during fabrication are documented using fabrication memos.

7.3.5 Design and Development Verification

The purpose of design verification is to demonstrate that the design output have met the design input requirements. To ensure a conforming final product, the Quality Controller performs verifications at specific points during the fabrication process. Records of in-process verifications include manually filled forms and/or electronic barcode read-outs.

7.3.6 Design and Development Validation

If requested by customer, and/or specified in the contract, ACP will conduct specific tests on the final product to ensure that the resulting product is capable of meeting the requirements for the specified application or intended use. Records of the validation and any necessary actions will be maintained (see 4.2.4).

7.3.7 Control of Design and Development Changes

- a) Problems that are discovered while the product is in production are dealt with immediately and documented in writing using a production memo that is then distributed to all concerned parties.
- b) The review of design changes will include the evaluation of the effect of the changes on the product delivered.
- c) All design activities connected with the design change will follow the same controls that apply to the initial design.

7.4 Purchasing**7.4.1 Purchasing Process**

- a) The Buyer is responsible for insuring that effective and efficient purchasing processes are defined and implemented, and conform to purchasing requirements for the organization.
The responsibilities of the Buyer include the following:
 1. The purchased product and subcontracted services which affect product quality must conform to meet the organization's needs and requirements, as well as satisfy the customer's requirements.
 2. Preparation of purchase orders (PO) or contracts (see Section 7.4.2- Purchasing Information).
 3. Supplier selection and control.
 4. Insuring that purchasing documents clearly describe the product and/or service required.
 5. Evaluation of the cost of purchased product, including price and delivery.
 6. Logistics requirements.

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7. Defining the need for records of purchased product verification, communication, and response to nonconformities in order to demonstrate conformity to specification.
8. All products ordered are required to meet our purchase requirements and will be inspected and tested or verified as required.
9. All outsourced processes of manufacturing equipment and supplies, for measuring and testing, and calibration services that affect product conformity requirements are controlled.

b) Suppliers

The buyer is responsible for the following activities related to our suppliers:

1. Establish an approved supplier list. Establish criteria for selection, evaluation, re-evaluation of suppliers on the basis of their ability to meet requirements for product and service quality, cost, and delivery, and to provide the required products effectively and efficiently within schedule.
2. The supplier list is maintained based upon:
 - the performance and reviews of supplier capability to meet requirements;
 - past response to inquiries/quotations/tenders;
 - supplier service, installation and support capability; and
 - history of performance.
3. Quality performance of all suppliers will be monitored. Determine objective evidence needed to evaluate suppliers related to their capability, QA program implementation, performance, and necessary follow-up actions.
4. Records of their evaluations and any necessary actions will be kept and their records are maintained.
5. Suppliers must have the ability to supply product in accordance with our organization's requirements.

7.4.2 Purchasing Information

The Buyer will insure the following:

- a) That purchase documents clearly describe the product or service ordered and, if necessary, are reviewed and approved for adequacy of specified requirements prior to release.
- b) Purchasing documents will contain data that describe the product to be ordered, including where appropriate:
 1. Requirements for approval of product or service, including copies of engineering drawings.
 2. Amended PO or contracts show the approval for change, the change required, a description of change and date of change.
- c) Adequacy of specified purchase requirements prior to communicating to the supplier.

7.4.3 Verification of Purchased Product

- a) The Buyer and/or Storekeeper will insure that the incoming product is not used or processed until it has been verified as conforming to specified requirements.
- b) Products purchased from supplier's catalogues may not require any inspections and tests.
- c) The Project Manager who initiates the PO will determine inspection and test requirements or other activities necessary for insuring the purchased product meets specified purchasing requirements.
- d) When appropriate, the customer's representative will be authorized to inspect material at our site to verify conformance to specified requirements. The intended verification arrangements and method of product release will be included in the PO. We must be notified one week in advance to allow for necessary arrangements.
- e) Customer verification does not absolve our company of the responsibility to deliver a quality product that conforms to contract requirements and does not preclude subsequent rejection.
- f) Verification through inspection and testing and generation of resulting records is performed.

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2007-04-27**7.5 Production and Service Provision****7.5.1 Control of Production and Service Provision**

The Plant Manager and/or the Production Supervisor, with the help of the Project Manager, are responsible for insuring that they plan and carry out production and service under controlled conditions. These conditions include the following:

- insure availability of information describing characteristics of product (fabrication drawings and memos)
- documentation of work instructions (as necessary);
- use of suitable equipment, availability and use of monitoring and measuring devices;
- implementation of monitoring and measurement (Quality Controller);
- production release (from every in-process check point and for final product), delivery and post-delivery activities.

7.5.2 Validation of Processes for Production and Service Provision

Not applicable.

7.5.3 Identification and Traceability

All products throughout product realization will be identified appropriately with a unique number.

The designation of this unique identification number for each component of our final product, as well as the unique identification number of the final product as a whole, is done before a product is released for production.

In-process monitoring and measurements are documented using the unique part identification number.

Unless required by contract, identification and traceability does not apply to raw materials purchased in bulk. The Project Manager is responsible to insure that the Buyer and the Quality Controller are aware of any special customer requirements pertaining to this. Copies of certificates of analysis obtained from our suppliers are maintained in the Project File.

7.5.4 Customer Property

- a) Product that is supplied and owned by the customer and provided to our company without charge to be included in that customer's final product, will be identified, verified, protected and safeguarded to prevent damage or deterioration until required for use or incorporated in our products.
- b) Property may include
 - component supplied for inclusion in a product;
 - intellectual property (eg: drawings, specifications, etc)
- c) The Plant Manager will insure that our company exercises care and attention with customer property, similar to the attention we have for our company-supplied items.
- d) Should the property be lost, damaged, or unsuitable for its intended use, this condition will be recorded and reported to our customer in writing. The QA Director will retain copies of all communications between our company and the customer related to quality concerns.

A customer supplied product procedure details the handling of customer property.

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2007-04-27**7.5.5 Preservation of Product**

The organization will preserve the conformity of the product during internal processing and delivery to the intended destination. This preservation includes identification, handling, storage, packaging, preservation, and delivery of product. Preservation also applies to the constituent parts of the product.

It is the responsibility of the QA Director and Plant Manager to ensure that the procedures for identification, handling, storage, packaging, preservation and delivery are implemented correctly.

- a) Identification: Product Identification is outlined in 7.5.3 – Identification and Traceability.
- b) Handling: the procedure will include instructions for handling product that prevent damage or deterioration.
- c) Packaging: the procedure will include instructions for control packing and packaging processes to the extent necessary to ensure conformance with the requirements specified on the Purchase Order.
- d) Storage: the procedure will include instructions for designating storage areas and stock areas to prevent damage or deterioration of product, pending use or delivery, and procedures for authorizing receipt to and dispatch from such areas.
- e) Delivery: the procedure will include instructions for the protection of the product after final inspection and test including delivery instructions to the product's destination.

7.5.6 Control of Monitoring and Measuring Devices

The Engineering Director will determine the monitoring and measurement to be undertaken, and the monitoring and measuring devices required to provide evidence of conformity of product to determined requirements.

The Engineering Director will establish processes to ensure that monitoring and measurement can be carried out and are carried out in a manner that is consistent with the monitoring and measurement requirements.

- a) A list of all equipment that affects quality is maintained. Control should be exercised over applicable equipment such as gauges, instruments, sensors and special test equipment. Applicable equipment is that which is used to demonstrate conformance of the product to specified requirements.
- b) For each type of inspection, measurement, and test equipment used, a method must be identified to insure that measurements are accurate. We insure this accuracy and measurement through our calibration program.
- c) Monitoring and measuring devices need to be identified to enable the calibration status to be determined.
- d) Monitoring and measuring devices need to be protected from damage and deterioration during handling, maintenance and storage.
- e) Records of the calibration and verification will be maintained.

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2007-04-27**8 MEASUREMENT, ANALYSIS AND IMPROVEMENT**

The measurement, analysis and improvement section describes the processes needed to demonstrate conformity of our product, quality management system, and improvement of our operations.

8.1 General

- a) Measurement data is very key to providing our company with fact-based information, so that we can make decisions that are necessary to insure the effectiveness and efficiency of our products conforming with products requirements.
- b) The areas we have chosen to monitor are
 1. Customer satisfaction (customer feedback system to be in place in 2007);
 2. Supplier performance (including subcontractor, transport)
 3. Project delivery date (promised vs actual)
 4. Nonconformity process
 5. Engineering drawings
 6. Profitability (on a per project basis – estimated vs actual)
- c) To effectively assess the performance of our processes and product conformance, and to improve our operations, statistical techniques are used.

To compile the results necessary for the analysis during the review of management;

 - To analyze results from a complaint or from a demand of corrective action;
 - To estimate situations presenting excessive costs; and
 - For the projects with poor quality or profitability.

8.2 Monitoring and Measurement**8.2.1 Customer Satisfaction**

The Sales Department insures that customer communication is maintained and that customer satisfaction data is collected, monitored, measured, and analyzed to insure customer satisfaction.

Project post-mortem activities could include surveying customers to measure their satisfaction level and may provide important data to help improve our processes. Records of post-mortem activities are maintained.

Customer satisfaction will be reported quarterly and also reviewed at our management review meetings.

8.2.2 Internal Audit

The QA Director is responsible to establish and maintain procedures for planning and implementing internal quality audits to verify whether quality activities and related results comply with planned arrangements and to determine the effectiveness of the quality-system.

Internal quality audits shall be conducted by qualified personnel. Training records of internal auditors will be maintained. To ensure objectivity and impartiality, auditors must never audit their own work.

Planning will be flexible and will take into consideration the status and importance of processes and areas to be audited.

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The audit results shall be recorded and any corrective actions required shall be processed and brought to the attention to the appropriate department director. Follow-up audits are used to verify the implementation and effectiveness of the CAPAs. The verification results are recorded and reported to the appropriate personnel.

The QA Director shall follow-up on the corrective action(s) resulting from the Internal Quality Audit to verify and record the implementation and effectiveness of the corrective action taken.

The results of the internal quality audit and the records of the follow-up verification of the CAPAs issued by the internal quality audit (if any) shall be reported in the next Management Review Meeting by the QA Director - see 5.6.1 c.

The internal audit procedure will cover the following:

1. Initiating the audit (determine scope, objectives, auditor selection)
2. Preparing the audit (document review, audit plan, on-site audit activities, audit team and working documents/checklists)
3. Conducting the audit (opening meeting, collecting evidence, finding nonconformances-CARs and closing meeting)
4. Audit report
5. Audit completion
6. Audit follow-up.

Copies of audit results are filed in the QA Director's office.

8.2.3 Monitoring and Measurement of Processes

Monitoring and measurement of our processes will be conducted to insure we meet customer requirements and our quality objectives, and insure our processes achieve planned results.

Each department director or manager is responsible for identifying and applying suitable methods for monitoring and measurement of processes applicable to their areas. The procedures used for verification who does what, when and where the verification is required and to what specified criteria, and when and where records will be kept.

The statistical analysis of non-conformities should be performed twice per year. The QA Director will assess the situation should there be insufficient data for the stats to be meaningful.

The QA Director shall report the results of the statistical analysis of nonconformities to management.

8.2.4 Monitoring and Measurement of Product

Our company insures that product conforms to requirements identified. Monitoring and measurement will take place at appropriate stages of the process realization process in accordance with our planned arrangements, insuring conformity with acceptance criteria.

The following will be considered when insuring measurement and monitoring of product:

1. Types of product characteristics – this will determine types of measurement, equipment, the accuracy and skills required, and location of measurement points.
2. Customer authority measurement and monitoring of product (inspection/testing/verification)
3. Recording the results of product measurement (receiving, in-process, and final)

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2007-04-27**Stages of monitoring and measurement:**

We have identified where suitable measurement location points were, how we would measure, and records required. The following indicates where specific monitoring and measurement activities take place and how they are used to verify product conformance:

1. Receiving inspection and testing: see 7.4.3 – Verification of Purchased Product
2. In-process inspection and testing:
The Plant Manager insures that in-process product is held and not used or processed further until it has been inspected, tested or otherwise verified as conforming to specified requirements.
Inspection and testing of in-process materials are performed according to work instructions in place and must be followed in practice.
3. Final inspection and testing:
The Quality Controller is responsible for insuring that the product is not released until final inspection and testing is completed according to the appropriate requirements, unless otherwise approved by a relevant authority where applicable, or by the customer.

Nonconforming Product:

Nonconforming product will be adequately identified and, whenever possible, segregated from other products, to prevent further use until appropriate disposition. The status of parts will be identified throughout the process.

Inspection and Test Records:

Inspection and test records are established and maintained to identify

- persons performing inspection and test activities;
- authorized personnel responsible for the release of the product;
- evidence of conformity with acceptance criteria.

8.3 Control of Nonconforming Product

- a) The QA Director is responsible for:
 1. implementing and maintaining control of nonconforming product procedure;
 2. defining roles and responsibilities and authorities for identification, control and disposition of nonconforming product procedure;
 3. clearly identifying and controlling product not conforming to specified requirements, preventing unintended use or delivery. Action will be taken to eliminate the identified nonconformity.
 4. reviewing or evaluating nonconforming product, determining if product can be reworked, repackaged, reclassified, or scrapped.
- b) Nonconforming product is dealt with in one of the following ways:
 1. identify and segregate from production area and conforming product;
 2. authorize its use, release, or acceptance under concession by a relevant authority and, where applicable, by the customer;
 3. eliminate the detected nonconformity;
 4. document details of nonconforming product: product type, deviation from standard, and quantity, on nonconforming material record;
 5. notify relevant functions of nonconformity;
 6. dispose of nonconforming product;
 7. reworked product will be re-inspected and re-verified in accordance with requirements and procedures, prior to release;
 8. nonconforming product detected after delivery or use will be handled by our Sales Department to follow-up. A CAR will be completed and given to the QA Director to follow-up.
 9. review of nonconformities to determine any trends of occurrence.

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8.4 Analysis of Data

Statistical analysis is used to properly document and evaluate performance status and identify areas for improvement. It is also used for initiating CAPAs where appropriate.

Each department director is responsible for insuring that collection and analysis of data occur in their specific department as identified.

The QA Director is responsible to assist the personnel in establishing and implementing the necessary statistical techniques.

Data will be analyzed to provide information on the following areas as a result of monitoring and measuring in these areas:

1. QMS and its effectiveness
 - 8.2.2 – Internal Audits
 - 8.5.2 – Corrective Actions
 - 8.5.3 – Preventive Actions
2. Customer Satisfaction (8.2.1)
3. Conformity of Product Realization (7.2.1)
 - 7.1 – Planning of Product Realization
 - 7.3.4 – Design and Development Review
 - 8.2.4 – Monitoring and Measurement of Product
 - 8.3 – Control of Nonconforming Product
4. Processes and Product Characteristics – Opportunities for Preventive Actions
 - 7.1 – Product Realization
 - 7.5 – Production and Service Provision
 - 8.2.3 – Monitoring and Measurement of Processes, and
 - 8.5.3 – Preventive Action
5. Supplier Performance
 - 7.4.1 – Purchasing Process (Supplier Performance)

Results of these statistical analyses are properly documented and evaluated to identify levels of performance and initiate corrective actions where appropriate.

8.5 Improvement

8.5.1 Continual Improvement

- a) Top management is responsible for continually improving the effectiveness of our quality management system.
- b) The area of continual improvement is reviewed on an on-going basis, and brought forward to the MRMs.
- c) Our organization will improve the effectiveness of our QMS through the following elements:
 1. 5.3 - Quality Policy
 2. 5.4.1 – Quality Objectives
 3. 8.2.2 – Internal Audit
 4. 8.4 – Analysis of Data
 5. 5.6 – Management Review
 6. 8.5.2 – Corrective Action
 7. 8.5.3 – Preventive Action

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2007-04-27**8.5.2 Corrective Action**

- a) Corrective actions are a key element of our QMS. They insure that we address problems of nonconformities in order to take action to eliminate causes and prevent recurrences and assist us in improving our quality system. We manage our corrective actions by following our Corrective Action Procedure.
- b) The QA Director is responsible for insuring the corrective action process is managed effectively, and according to our procedure on corrective actions.
- c) The responsibility for undertaking the corrective action lies with the director/manager for the related QMS element and/or process.
- d) Corrective action reports (CAR) will be used in the following situations:
 - 1. nonconformities found in audits (internal, third party or customer)
 - 2. product, process or service quality failures or malfunctions
 - 3. procedures/work instructions with incorrect or inadequate information, and
 - 4. customer complaints and supplier issues.
- e) Corrective actions must be appropriate with the magnitude of the problem and risk caused by the nonconformance.
- f) The QA Director will regularly review reports, data, and relevant information to insure that corrective action is effective. Results of corrective actions will be discussed during MRM.

8.5.3 Preventive Action

- a) Preventive actions are used to eliminate and prevent causes of potential nonconformities and are directed at improving our company's quality system, procedures/work instructions, products and processes. It may be necessary for us to change a process/service (transport, storage, etc), revise a product specification, or the quality system itself, depending on the situation.
- b) The QA Director is responsible for insuring the preventive action process is managed effectively and actions appropriate to the effects of the potential problems
- c) The responsibility for undertaking the preventive action lies with the department director/manager who is responsible for the related QMS element and/or procedure.
- d) Preventive actions will be documented on a Preventive action report.
- e) The QA Director will regularly review reports. Results of preventive actions will be discussed during MRM