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Review By: <i>RRP</i>	Date: <i>3/25/09</i>
General Manager: <i>ABZ</i>	This Revision Date : <i>3/24/09</i> <i>3/25/09</i>

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Title: QUALITY POLICY STATEMENT	Revision: A

Hycy Alabama, as a hydraulic cylinder manufacturer, is committed to meeting or exceeding all requirements. We will ensure continual improvement of the effectiveness of our Quality Management System by monitoring, measuring, and reviewing our Policy Objectives, Quality Performance Objectives, Product Quality Objectives, and Quality System Objectives.



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General Manager: <i>AS7</i>	This Revision Date : 3/24/09 <i>3/25/09</i>

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Title: SCOPE	Revision: A

Hyco Alabama, LLC Quality Management System contains documented procedures, deployed throughout the organization, covering all elements of ISO 9001:2000 as they relate to our fields of business:

The design, development and manufacture of Hydraulic Cylinders for Refuse, Construction, Agricultural and the Dump Body Industries.

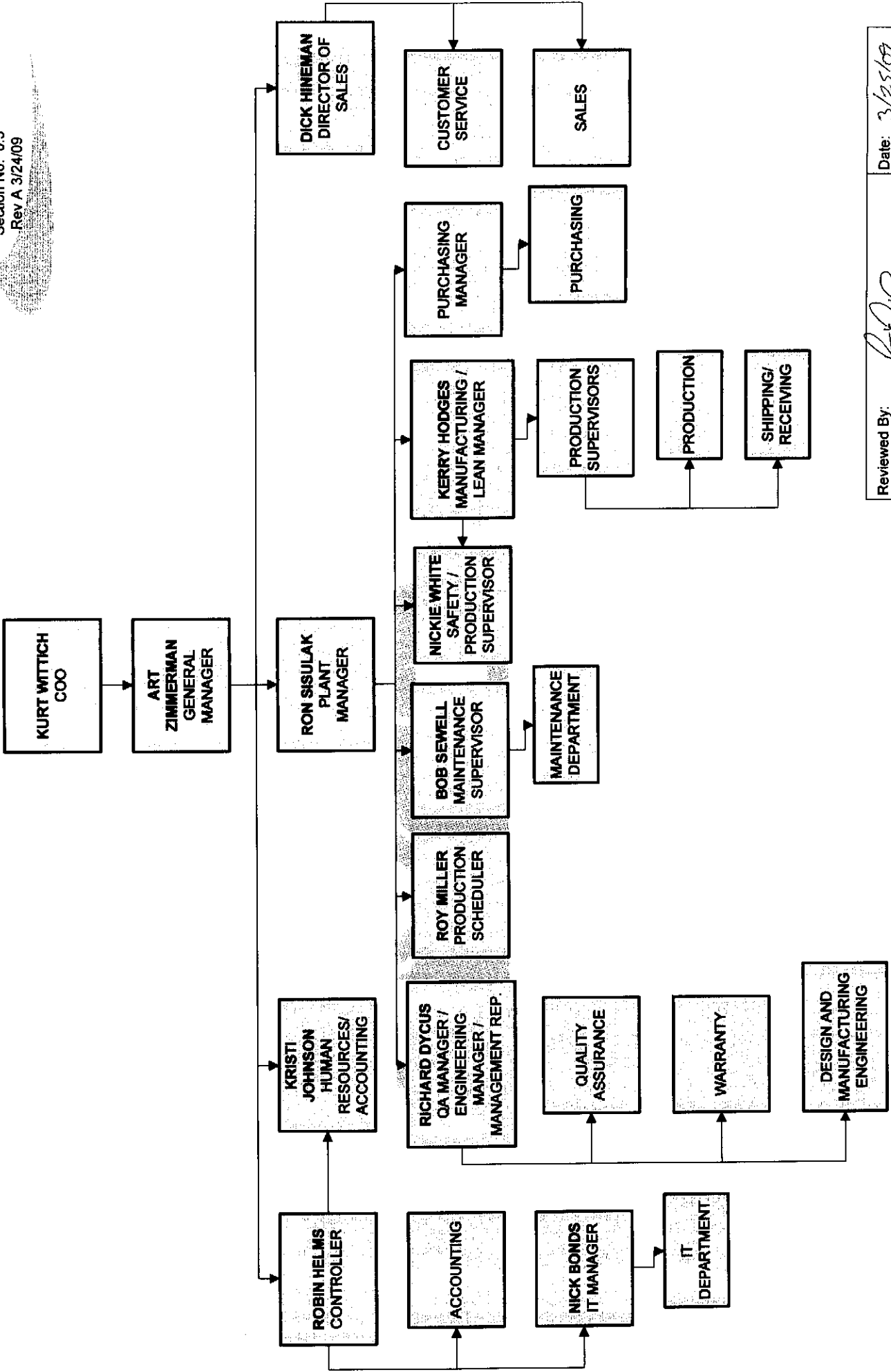
Due to the nature of our products and services, Hyco Alabama LLC has determined that, at this time, all sections of ISO 9001 are applicable and there are no justifiable exclusions.



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ORGANIZATIONAL CHART

Section No: 0.3
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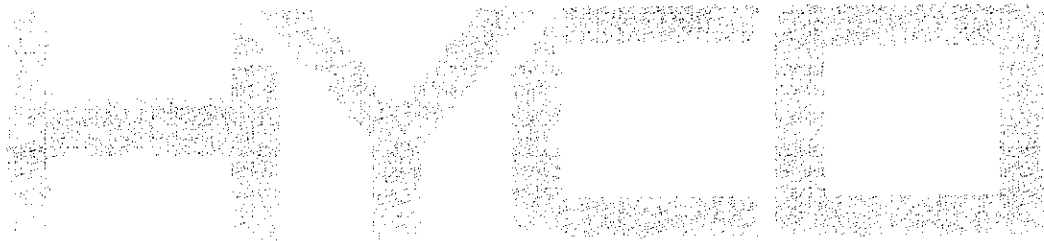
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Title: CONTROLLED CIRCULATION LIST	Revision: A

The designated Holders of controlled copies of the Quality Manual are:

COPY NUMBER	DESIGNATED HOLDER
1	Master Copy (Management Representative)
2	Quality Office – Plant 1
3	Plant 1 – Front of Building
4	Plant 2 – Front of Building
5	Front Office

NOTES:

Controlled copies of the quality manual and related operating procedures are available on the Hyco Alabama intranet. Additional copies of this manual are available upon request and authorized by the Plant Manager. The Management Representative, as necessary, amends the circulation list. Unauthorized photocopying of any part of the quality system is not permitted under any circumstances.



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Title: QUALITY MANAGEMENT SYSTEM	Revision: A

4.0 SCOPE

The system and related operating procedures described in this section of the Quality Manual comply with the requirements of ISO 9001:2008 as specified in:

Quality System Requirements, Element 4.0; Quality Management System

4.0.1 RESPONSIBILITY AND AUTHORITY

The General Manager has the ultimate responsibility for leading and operating the organization successfully utilizing management disciplines including Quality Management.

Department Managers in each area of the business are responsible for the implementation, maintenance, and execution of the Quality Management System within their areas of responsibility and for working in accordance with documented procedures. Individual responsibilities for quality are as defined in the appropriate Quality Operating Procedures (QOP).

The Management Representative is responsible for the control and distribution of control documents affecting the Quality Management System.

All managers and supervisory staff are responsible for the implementation of the quality systems and procedures relevant to their activity and for the quality of the services provided.

All supervisors and employees are responsible for working in accordance with the documented Quality System in their area of activity.

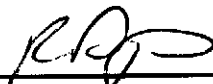

All employees are responsible for the quality of the process, or service that they provide.

4.1 General Requirements

Senior level management at Hyco Alabama LLC is committed to continually improve its effectiveness and to this end, has established, documented implemented and maintained a quality management system in accordance with the requirements of ISO 9001:2008.

The organization:

- a. Determines the processes needed for the Quality Management Systems and their

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- application throughout the organization.
- b. Determines the sequence and interaction of those processes
 - c. Determines criteria and methods necessary to ensure that both the operation and control of processes is effective.
 - d. Ensures the availability of resources and information necessary to support the operation and monitor the effectiveness of the processes.
 - e. Monitors, measures and analyze those processes (where applicable)
 - f. Implements actions necessary to achieve planned results and continuously improve processes.

Out-sourcing of processes that affect product conformity is identified. Type and extent of control is defined in the quality management system and controlled in accordance with Hyco Alabama LLC guidelines.

4.2 Documentation Requirements

4.2.1 General

The documented Quality Management System consists of:

- a. Documented statements of the quality policy and quality objectives
- b. A quality manual
- c. Documented procedures and records required by ISO 9001:2008
- d. Documents, including records, necessary to ensure the effective planning, operation and control of processes

4.2.2 Quality Manual

Hyco Alabama has established a quality manual that includes:

- The scope of the Quality Management System including details of and justification for exclusions. Exclusions are defined in section 0.2 of the Quality Manual
- Reference to documented procedures
- Descriptions of the interaction between the processes of the Quality Management System

These documents support the needs of the company and provide for implementation, maintenance, and improvement of the system. The documents describe the Company's Quality Policy and ensure compliance with the requirements of IOS 9001:2008.

Controlled copies of the quality manual and related operating procedures are available on the Hyco intranet or issued to registered holders, as identified in Quality Manual, Section 0.4; Controlled Circulation Lists.

The Quality Manual is prepared by the Management Representative and approved and

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signed by the General Manager.

Quality operating procedures are reviewed for compliance by the Management Representative, approved and signed by the Department Manager.

Related work instructions are prepared, reviewed and approved by Department Supervisor.

The Quality System is effectively implemented through ISO 9001:2008 awareness training, Quality System Training, Quality Operating Procedure and Work Instruction training of all employees.

4.2.3 Control of Documents

The Management Representative or designee has overall responsibility for effective control of all parts of the documented quality system.

Documented procedures exist to control documents and data that relate to this quality program including documents of external origin, determined to be necessary for the planning and operation of the quality management system, such as customer specifications, engineering specifications, customer drawings and industry manufacturing standards.

Documents and data are reviewed and approved by authorized personnel prior to issue. To ensure that only current, approved documents are used and to preclude the use of obsolete documents, controlling documentation such as a master list, is established to identify the current revision and status of pertinent documents. This controlling documentation is readily available for reference.

Documented procedures ensure that invalid or obsolete documents are promptly removed from service and protected from unintended use. If obsolete documents are retained for reference, they are suitably identified. When superseded documents are needed to meet contract requirements, the purchase order is so noted.

Revisions to controlled documentation and data are reviewed and approved by the same organizations that performed the initial review and approval.

4.2.3 Control of Quality Records

During the various stages of manufacturing, records of operations that demonstrate control of manufacturing process as well as records that provided evidence of product conformity are kept.

Records that provide evidence of the effective operation of the Quality Management

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System are maintained. All records are retained for specified periods and are readily retrievable for review and analysis in accordance with documented procedures. Department Managers are responsible for maintaining quality records that demonstrate the effective operation of the quality system in their area.

The Management Representative maintains specific records that demonstrate the effective operation of the Quality Management System, in addition to monitoring the retention and maintenance of the quality records in all areas of the business.

The precise nature of all records is defined on the Quality Record Log defining the source, content, and retention and individual responsibilities. Documented records are created and maintained in an orderly and accessible manner, within a suitable storage environment.

Records are based on standard forms, retained files, log sheets, computer printouts or electronic records. Information and events are recorded to demonstrate the effective functioning of the Quality System.

Further, records relate to customer orders or pertinent quality records from the subcontractor. All records are retained for specified periods and are readily retrievable for review and analysis.

The record requirements satisfy all governmental or customer requirements. All specified retention periods are considered "minimums."

RELATED DOCUMENTATION

Full details of the Company's working methods and practices in this area are contained in the appropriate quality system procedures:

QOP-001 Document and Data Control
QOP-002 Control of Quality Records

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Title: MANAGEMENT RESPONSIBILITY	Revision: A

5.0 SCOPE

The system and related operating procedures described in this section of the Quality Manual comply with the requirements of ISO 9001:2008 as specified in:

Quality System Requirements, Element 5.0; Management Responsibility

5.0.1 RESPONSIBILITY AND AUTHORITY

The General Manager has the ultimate responsibility for developing and maintaining an effective and efficient Quality Management System in order to sustain and increase customer satisfaction.

Department Managers in each area of the business are responsible for the implementation, maintenance, and execution of the Quality Management System within their areas of responsibility and for working in accordance with documented procedures. Individual responsibilities for quality are as defined in the appropriate Quality Operating Procedure (QOP).

The Management Representative is directly responsible to the Plant Manager for the execution, maintenance, and monitoring of the Quality Management System, and the reporting of its effectiveness.

The Management Representative has responsibility for analyzing and reporting Customer Satisfaction during the Management Review meetings.

All employees are responsible for the implementation of the quality system and ensuring that customer requirements are met to enhance customer satisfaction.



5.1 Management Responsibility

5.1.1 Management Commitment

Senior management at Hyco Alabama is committed to the development and improvement of the Quality Management System. Evidence of this commitment is found in a quality policy that clearly establishes the Hyco Alabama Quality Policy and quality objectives. Quality objectives are communicated to all employees through the posting of the Quality Policy as well as departmental objectives.

Senior management communicates the importance of meeting customer as well as statutory and regulatory requirements to all staffing through the quality policy, key metrics and employee communications meetings.

Top-level management provides equipment, facilities, and human resources to perform assigned tasks to support the Quality Policy and Quality Management System. Performance to stated objectives is reviewed during the management review meetings.

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5.2 Customer Focus

Senior management at Hyco Alabama recognizes that there are several categories of customers, i.e., customers and end users, people in the organization, suppliers and partners and society in terms of the community and the public affected by the organization.

Hyco Alabama identifies the needs and expectations of all interested parties. Utilizing customer satisfaction surveys, employee reviews, corrective action reports and customer complaints, the company translates those customer needs and expectations into defined requirements and operating objectives. Those requirements and objectives are communicated to all levels of the organization and performance in achieving the stated objectives is monitored.

5.3 Quality Policy

The Company's Quality Policy is widely published and circulated to personnel at all levels in the organization. The Quality Policy Statement is contained in this manual. The Quality Policy is consistent with our vision for the company's future and clearly states the commitment of Hyco Alabama to meeting requirements as well as our commitment to continual improvement of the **Quality Management System and enhancing** customer satisfaction. The Quality Policy is reviewed at management review meetings to ensure its on-going suitability. In the event that suitability is in question, the management review meeting addresses necessary revisions to the Quality Policy.

5.4 Planning

5.4.1 Quality Objectives

The Quality Objectives of Hyco Alabama are established during the planning process and are consistent with the Quality Policy. Quality objectives are developed using current and future needs of the customers and our markets. They are developed to support these general goals:

- To achieve the Quality Policy
- To ensure and demonstrate our ability to consistently provide product that meets or exceeds customer requirements
- To facilitate continual improvement
- To comply with requirements of ISO 9001 standard

Performance to the quality objectives are reviewed during the management review meetings and revised as required.

5.4.2 Quality Management System Planning

Quality planning of the Quality Management System includes:

- a Determining the processes and their application needed for the Quality Management

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System throughout the organization

- b The interaction of these processes is defined in the individual procedures
- c Determination of criteria and methods to ensure the operation and control of these processes are effective
- d Monitor, measure and analyze the process
- e Implement actions necessary to achieve planned results and continual improvement

Any change to the Quality Management System is planned and implemented to ensure its maintenance and integrity.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

Functions and their interrelations within the organization are specified in the Company Organizational Chart included in this manual. Responsibility and authority for the Quality Management System is specified in Quality Operating Procedures (QOP) and Work Instructions (WI).

5.5.2 Management Representative

The Management Representative is a member of the organization and reports directly to the Plant Manager for the Quality Management System. The Management Representative is responsible for ensuring that the processes needed for the Quality Management System are established, implemented and maintained. In addition, it is the Management Representative's responsibility to report on the performance and the effectiveness of the Quality Management System during the management review meetings as well as identifying needs for continuous improvement and promoting awareness of customer requirements throughout the organization.

5.5.3 Internal Communication

To ensure communication of the Quality Management System and its effectiveness to all levels and functions, the company utilizes, where appropriate, employee meetings, notice boards, newsletters, in-house memos and e-mail.

5.6 Management Review

5.6.1 General

Management Review Meetings are held semi-annually to ensure the on-going suitability, adequacy and effectiveness of the Quality Management System. The review assesses opportunities for improvement, evaluates the need for changes to the Quality Management System, including quality policy and quality objectives. The Management Representative maintains records of reviews and agreed corrective actions.

5.6.2 Review Input

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Management Review includes information on:

- (a) Results of audits
- (b) Customer feedback
- (c) Process performance and product conformity
- (d) Status of corrective and preventative actions
- (e) Follow ups to action items from previous management reviews
- (f) Planned changes that could affect the Quality Management System
- (g) Recommendations for improvement

5.6.3 Review Output

Output of Management Review includes:

- (a) Improvement of the effectiveness of the Quality Management System and its processes
- (b) Improvement of product related to customer requirements
- (c) Resource needs

RELATED DOCUMENTATION

Full details of the Company's working methods and practices in this area are contained in the appropriate quality system procedures:

None

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Title: RESOURCE MANAGEMENT	Revision: A

6.0 SCOPE

The system and related operating procedures described in this section of the Quality Manual comply with the requirements of ISO 9001:2008 as specified in:

Quality System Requirements, Element 6.0; Resource Management

6.0.1 RESPONSIBILITY AND AUTHORITY

The Plant Manager is responsible for providing human resources, facilities and equipment necessary to meet the needs of the quality management system and ensure customer satisfaction

The Human Resource Manager is responsible for the overall control and administration of the Company's training activities.

Department Managers are responsible for assessing the effectiveness of training for all employees, identifying the work environment needs and maintaining the facilities in a state that meets the needs of the quality management system and all employees.

6.1 Provision of Resources

Labor resources and facilities in every department of the company are periodically and systematically reviewed against past, present, planned and forecasted levels of business activity. These reviews are used to determine and regulate the future program for recruitment and training to ensure improvement in the quality management process and customer satisfaction.

6.2 Human Resources



6.2.1 Assignment of personnel

Company policy is to employ competently trained staff, at all levels in the organization. Competency is defined by education, training, skills and work experience.

6.2.2 Training, awareness and competency

Department Managers define competency levels for each position in their departments. Company policy is to encourage the development and acquisition of new personal skills, wherever practical. This is achieved by comprehensive and thorough recruitment and selection procedures, these recruitment and selection procedures are supplemented by identification of training needs and meeting those needs by on-the-job training, and specialized courses or internal lectures as necessary.

All employees receive quality training during initial orientation provided shortly after date of hire. Orientation includes an introduction to the Quality Management System and the relevance and importance of the new employee's job as well as how the job contributes to the achievement of quality objectives.

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Title: RESOURCE MANAGEMENT	Revision: A

Department Manager's reviews training effectiveness regularly.

Individual training records are kept which demonstrate the Company's commitment to the training policy as well as the competency of each employee, detailing education, experience, training and qualifications. Records include details of courses attended by employees, at all levels in the organization. These records are held by the Human Resource department throughout an individual's term of employment.

6.3 Infrastructure

The Plant Manager has the ultimate responsibility to provide equipment and facilities to perform assigned tasks to support the Quality Policy and Quality Management System.

Department Manager's at each location are responsible for identifying needs for equipment, hardware and software, facilities and supporting services. Maintenance for both key equipment and facilities is performed by internal or external sources.

6.4 Work Environment

The Plant Manager is responsible to ensure that the work environment including the human and physical factors are managed to achieve conformity of product or services.

RELATED DOCUMENTATION

Full details of the Company's working methods and practices in this area are contained in the appropriate operating procedures:

QOP-3.0 Training and Awareness

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Title: PRODUCT REALIZATION	Revision: A

7.0 SCOPE

The system and related operating procedures described in this section of the Quality Manual comply with the requirements of ISO 9001:2008 as specified in:

Quality System Requirements, Element 7.0; Product Realization

7.0.1 RESPONSIBILITY AND AUTHORITY

The General Manager has ultimate responsibility for the planning and development of the processes needed for product realization.

The Plant Manager is directly responsible for the assurance of conformity of product as required by the customer.

Department Managers in each area of the business are responsible for the implementation, maintenance and execution of the Quality Management System within their area of responsibility and for working in accordance with documented procedures.

All employees are directly responsible for the quality of work on product, including planning inputs and implementation outputs of continuous improvement activities.

7.0 Product Realization



7.1 Planning of realization processes

The documented Quality Management System stresses the importance of Quality Planning activities in the never-ending pursuit of continuous improvement. Quality Planning is a structured activity beginning at the contract review stage and continuing through life of process as explained in the different Quality Operating Procedures (QOP's) and Work Instructions (WI's). Advanced Product Quality Planning (APQP) is a tool utilized for the Quality Planning activity.

Internal cross-functional teams consisting of sales, engineering, quality, manufacturing, materials and senior management are used to plan new product or service introduction.

The following techniques are utilized as appropriate:

- Sales and senior management identify the requirements and the quality objectives for the product, project or contract
- Preparation of quality plans or flow charts
- The internal team evaluates the need to establish processes, documents and provides resources specific to the product, project or contract
- The team identifies levels of required verification, validation, monitoring, and inspection and test activities specific to the product acceptance (typically included in the calibration of new products or installation)
- Clarification of standards of acceptability

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Title: PRODUCT REALIZATION	Revision: A

- Identification and preparation of quality records

7.2 Customer related processes

7.2.1 Determination of requirements related to the product

Determination of product requirements including availability, delivery and support is provided by the customer and communicated to Customer Service. Where product requirements are not clear or specific from the customer, assumptions are confirmed and communicated to the customer. The customer or Hyco Alabama defines obligations for statutory and regulatory requirements. Any additional requirements defined as necessary by Hyco Alabama are communicated to the customer in the quote.

7.2.2 Review of product requirements

Sales Personnel review incoming request for quotes, customer purchase orders, and contracts to ensure the Company is able to meet all customer requirements.

Incoming orders and contracts are reviewed by the sales or the contract review team to ensure that: order requirements are clearly and unambiguously defined; necessary documentation, such as product specifications, customer requirements, delivery timing, and all customer specific requirements can be met with available resources, skills, and processes.

Records of these reviews and any actions taken are kept in customer files maintained in the sales office.

Any difference between the contract and the quote package are resolved prior to acceptance of the order. Requests for amendments to the contract are clearly communicated through APQP team meetings and documented. Amendments to the contract are handled as the original contract and reviewed for compliance prior to acceptance. Records of contract review activities are located in the customer files.

Any changes to customer requirements are reviewed to determine production status and effect of the changes. Relevant documentation is amended and distributed to relevant personnel.

Records of these reviews are kept in customer files maintained in the sales office.

7.2.3 Customer communication

Sales personnel or customer service representatives are the normal contacts for all customer communications, including but not limited to:

- Product information
- Inquiries, contracts, order handling including amendments
- Customer feedback, including customer complaints

7.3 Design and/or development

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Title: PRODUCT REALIZATION	Revision: A

7.3.1 Design and Development Planning

Design projects are managed by Engineering. Engineering is responsible for establishing a design plan prior to commencing any design activities. The plan divides the design process into phases, identifies design activities, and specifies design verification requirements and design reviews. The design plan is documented in the Engineering Project Status Report. Schedules and assignments are documented in the Design Planning Schedule Log.

Engineering establishes rules for transmitting information and communication between various departments involved in the design project. The Quality Planning / Item Master and Item Balance Load Route Sheet establishes activities for each department for design projects.

Personnel assigned to design activities are qualified in skills and techniques appropriate to those activities.

7.3.2 Design and Development Inputs

For new product development or improvement of existing product, Engineering receives a request from Sales or Customer Service. The request describes the desired product in terms of its performance characteristics, aesthetic design characteristics, packaging requirements, applicable standards and regulatory requirements, and other relevant information defining the product.

When a product is to be modified to meet specific customer requirements, Engineering receives a request from Sales or Customer Service with customer requirements and specifications. This product is typically a standard product that comes in a variety of diameters, lengths, strokes and mounting styles. Modifications to this product are considered a running change and are not subject to design review meetings.

Engineering reviews both types of requests. When required, Production, Sales, Quality and Purchasing may be added to the review team. The purpose of the review is to verify that:

- Functionality, performance, appearance, and other relevant requirements are clearly defined, to include characteristics that are not specified by the customer but are necessary for intended use;
- Applicable regulatory and legal requirements are identified; and
- Information derived from previous similar designs, or other similar products, is relevant and reliable.

Ambiguous or conflicting requirements are resolved prior to the release of design input to the design team.

Documents defining design input can be in any form, including data sheets, customer drawings and specifications, photographs, samples, references to standards, and so forth. All documents constituting design input are assembled and/or referenced in the project file.

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Changes may be introduced by the customer or initiated internally. All proposed changes or additions are reviewed by Engineering and approved by the customer.

7.3.2 Design output

Primary design output consists of documents that define the product and instruct how to manufacture it, providing appropriate information for Purchasing, Production and Service. These documents include drawings, specifications, procedures, workmanship standards, inspection procedures, release criteria, and specifications for labeling of the product.

Product characteristics and aspects that affect safety and performance are defined in the design output.

Secondary design output consists of documents supporting the design. These documents include calculations, analysis, and test results.

All primary design output documents are reviewed and approved prior to issue. Only Engineering has the authority to issue and release these documents. Design output documents are issued through the use of the Engineering Change Order (ECO) and are controlled documents. Their establishment, review, authorization, issue, distribution, and revisions are carried out in conformance with QOP-1.0 Control of Documents.

7.3.4 Design and Development Review

Design reviews are conducted for new product designs and are scheduled in the design project plan; other departments and outside parties may participate in the design reviews depending of the project and the design phase.

The purpose of design reviews is to audit the evolving design and assess how well it meets the design input requirements at each stage. Design reviews address such issues as: attainment of safety, functionality, and aesthetic requirements; unintended uses; environmental compatibility; reliability; manufacturability; serviceability; acceptance and rejection criteria; capability to inspect and test; availability of qualified suppliers to provide specified materials and components; and so forth. An important function of design reviews is to track the progress of design verification and validation activities. Design reviews may also be utilized directly as a form of design verification.

Design reviews are recorded in minutes of meetings and/or reports prepared and issued by Engineering.

7.3.5 Design and Development verification

The purpose of design verification is to demonstrate that the design output meets the design input requirements. At a minimum, the design is verified through the approval process of design output documents. Other forms of verification, such as carrying out alternative calculations and comparing the new design with a similar proven design, are used when appropriate. All design verification activities are documented and their results are recorded. Engineering is responsible for all verification and activities.

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7.3.6 Design and Development validation

The purpose of design validation is to demonstrate that the designed product performs satisfactorily under real or simulated conditions of intended or unintended use. Validation takes place during final test. All design validation activities are documented and their results are recorded. Engineering is responsible for all validation activities.

7.3.7 Design changes

Design changes may be identified from preliminary studies, design reviews, prototype testing, etc. During development of the design project, proposed design changes are reviewed and authorized by Engineering. If the design input is not affected, design changes implemented prior to the release of the design do not need to go through the ECO process.

Design changes to released products are requested using an Engineering Change Request (ECR) form. ECO's are evaluated, and are either rejected or recommended for implementation by Engineering and for major changes also by Production and Quality Assurance. Approved ECO's initiate and provide design input for design change implementation projects.

Design and design verification activities related to implementation of a design change follow the same rules and controls that apply to the initial design and are reviewed for the effect on constituent part(s) form, fit and function and serviceability.

7.4 Purchasing

7.4.1 Purchasing Process

A cross-functional team consisting of Quality and Purchasing personnel defines the type of control for each supplier. Type and extent of control required is in accordance with the quality and reliability required as well as the impact of non-quality for purchased products or services.

Purchase Orders (POs) are placed only with select suppliers who are approved as follows:

- Customer has an approved supplier list and dictates which supplier shall be used
- New suppliers who are ISO 9001 and/or TS 16949:2002 certified
- Suppliers that have successfully completed a Hyco Alabama Survey or audit

Re-evaluation is conducted by the ongoing monitoring of supplier performance. Records of evaluations and actions are maintained by Purchasing personnel.

7.4.2 Purchasing information

All purchase orders have clearly stated references to associated specifications, drawings, specific quality, and contractual conditions including where appropriate, verification activities, requirements for approval or qualifications of product, procedures, processes, equipment, personnel and Quality Management System requirements, ensuring a clear

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understanding by the subcontractor of the Company's requirement. POs, as well as amendments to POs, are reviewed before issue.

7.4.3 Verification of purchased product

Materials received at the plant are identified and inspected upon arrival to ensure proper quantity and absence of damage. Production or raw materials are further inspected based upon sub-contractor status for conformance to specifications.

Where specified in the purchase contract, the Company or customer reserves the right to verify quality at the subcontractor's premises as part of the purchase contract. Method of product release following verification is specified in the purchase contract.

Where the customer or customer's representative verifies product conformance, such verification does not absolve the Company of its responsibility to provide acceptable product.

7.5.1 Operations control

The manufacture of hydraulic cylinders is controlled through:

- a. The available information that specifies the characteristics of the product
- b. The available WI's, service manuals, and checklists as necessary
- c. The use and maintenance of suitable equipment for repair
- d. The use of monitoring and measuring equipment
- e. The implementation of monitoring activities
- f. The implementation of product release, delivery and post-delivery activities.

Manufacturing activities that impact product quality are controlled by work instructions based on quality plans or by reference to engineering drawings and product specifications. WI's are maintained and accessible to each workstation.

Job set-ups are verified by manufacturing or quality personnel and verified against approved set-up instructions to ensure compliance to specified requirements.

7.5.2 Validation of processes for production and service provision

Hyco Alabama establishes validation criteria to demonstrate the ability of those processes to achieve planned results. Planned arrangements include as applicable:

- a. Defined criteria for review and approval of the process
- b. Approval of equipment and qualification of personnel
- c. Use of specific methods and procedures
- d. Retention of validation records
- e. Revalidation

7.5.3 Identification and traceability

Where applicable, during all stages of manufacture and supply, product is identified by marking, labeling, or accompanying documentation, either individually, or by lot. This

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identification and traceability applies equally to partial, full or repair materials. Where contractually required, unique identification is controlled and recorded.

Product is identified throughout the process as to its inspection or test status. Qualified personnel inspect product at predetermined stages and document acceptance or rejection of product or services against defined quality standards using tags, audit records, or other appropriate identification methods.

The method of indicating inspection or test status of product is dependent upon what it is and where it is in the service cycle, and what needs to be recorded.

7.5.4 Customer property

Customer property is controlled in a manner that identifies, verifies and protects against loss and damage. Any customer property that is lost, damaged, or otherwise unsuitable for use is documented and reported to the customer.

In the event of damaged, lost material or material that is unsuitable for use is recorded and reported to the customer by Customer Service Personnel.

7.5.5 Preservation of product

Handling, storage, packaging, and preservation controls are maintained to ensure the conformity of the product from receipt to delivery to the final customer.

Methods of handling product that prevent damage or deterioration are utilized.

Appropriate equipment and training is provided to employees for correct handling that preserves the conformity of product during internal processing and delivery to the intended destination. This preservation includes identification, handling, packaging, storage and protection. Preservation shall also apply to the constituent parts of a product.

7.6 Control of measuring and monitoring equipment

Inspection, measuring, and test equipment used for recording conformance to specified requirements is maintained in a known state of calibration appropriate to the purpose for which it is to be used. Each item of inspection, measuring, and test equipment used has a unique identification code, is safeguarded from adjustments that would invalidate the calibration, and are stored in a manner that protects them from damage and deterioration during handling, maintenance and storage.

Calibration, verification or both is carried out either by approved testing laboratory facilities or by in-house personnel, in accordance with documented processes, using certified standards traceable to National Standards held by the National Institute of Standards and Technology. Each measurement/test device is recalled as required, checked for damage or malfunction, repaired, and then calibrated, verified or scrapped. When a gage is found to be out of calibration, the affect on previously inspected product is analyzed for risk. In the event that suspect equipment is in use, the Quality Manager is notified.

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Records and/or Certificates of Calibration are kept, showing the date of calibration, any corrective action taken and the results of the calibration.

All inspection and test equipment instruments are labeled to show the date of calibration, calibration status (if applicable), and the date of re-calibration.

The frequency of calibration normally follows manufacturer's recommendation, but is dependent upon the particular type of equipment. The results of calibration are subject to regular monitoring.

RELATED DOCUMENTATION

Full details of the Company's working methods and practices in this area are contained in the appropriate operating procedures:

- QOP - 4.0 Design Control
- QOP - 5.0 Purchasing
- QOP - 6.0 Manufacturing



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8.0 Scope

The system and related operating procedures described in this section of the Quality Manual comply with the requirements of ISO 9001:2008 as specified in:

Quality System Requirements, Element 8.0; Measurement, analysis and improvement

8.0.1 Responsibility and authority

The General Manager has the ultimate responsibility for the measurement, analysis, and continuous improvement activities within the Company.

The Sales Manager is responsible for monitoring information on customer satisfaction and /or dissatisfactions.

The Management Representative has overall responsibility for the effective implementation of the Internal Quality Audit program, to assess conformity, and to measure the effectiveness of the Quality System throughout the organization.

The Production Supervisors have direct responsibility for the assurance of conformity of product including use of statistical methods for process control or process capability measures as needed, or as required by the customer.

All personnel are directly responsible for the quality of work on product, including planning inputs and implementation outputs of continuous improvement activities.



8.1 General

Monitoring, measurement, analysis and improvement processes are planned and implemented to demonstrate that products conform to defined requirements.

To ensure that decisions are based on facts, Management defines the measurements, collection and validation of data that is used to determine objectives and satisfaction of interested parties. Objectives are continually monitored to drive improvement actions and provide data for future improvements.

The results of internal and external audits are monitored to ensure the continuing conformity of the Quality Management System.

Customer Satisfaction Surveys, customer complaints and corrective action requests are utilized to determine levels of customer satisfaction as well as opportunities for improvement. When applicable, appropriate statistical techniques are utilized for pattern and trend analysis.

Review By: 	Date: 3/25/09
General Manager: 	This Revision Date: 3/24/09 3/25/09

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8.2 Monitoring and Measurement

8.2.1 Customer satisfaction

Management uses both internal and external information to determine customer satisfaction/dissatisfaction. Customer satisfaction is part of the Company's operating philosophy.

Internal information includes:

- Analysis of Corrective Action Reports (CAR's)
- Analysis of Warranty
- Highlights from Customer Call Report
- Review of reported customer feedback and complaints

External information includes, where applicable:

- Customer Satisfaction Surveys
- Customer Scorecards
- Customer Quality Audits
- Repeat Customer Rates
- On-time delivery

Customer satisfaction is reviewed on a quarterly basis and includes the following:

- Customer Surveys
- Warranty Claims
- Delivery schedule performance
- Repeat Customer Rates

The Sales Manager reviews all external information and issues a quarterly report highlighting significant customer satisfaction, customer dissatisfaction, and customer complaints. Management reviews this report during Management Review and determines recommendations for Corrective Actions and/or suggested action plans on the specific items of concern. If it is suggested, specific follow up actions may be communicated to the customer via phone contact, written response, or customer visitation within the agreed timeline set forth by the General Manager.

8.2.2 Internal Audit

Internal Quality Audits are conducted in accordance with the audit plan accompanied by a documented schedule. Conformance to ISO 9001:2008 and the effective operation of all parts of the Quality System is evaluated annually. Audit criteria, frequency and scope of audits depend upon the status and importance of each area and prior audit results.

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A documented procedure details the responsibilities, requirements and methodologies for conducting audits, ensuring objectivity and impartiality of the audit process, details for recording results and reporting to Management.

The results of Internal Quality Audits are recorded. Nonconformance with the requirements of the Quality Management System in any area of the business are recorded and corrected in a timely and effective manner by the Department Manager.

The Management Representative reviews the effectiveness of Corrective Actions taken to prevent reoccurrence of nonconformity detected by the Internal Quality Audit program. The effectiveness of corrective actions taken is reported at the Management Review Meetings, and is subject to further review by the Management Representative as appropriate.

8.2.3 Measurement and monitoring of processes

The Company utilizes metrics to track performance to stated quality objectives. Quality levels and operational performance for key products and services are monitored and compares current performance to overall business objectives. Operational performance indicators are communicated to all relevant personnel through the Quality Policy, key metrics and departmental goals. Managers and Supervisors are responsible for reporting and reacting to the metrics. Objectives are the foundation of Company level data and are the action items that drive the continuous improvement efforts of the Company. Quality objectives are reviewed monthly and during the semi-annual Management Review process. In the event that planned objectives are not attained, corrections or corrective actions are taken to meet the stated objectives.

8.2.4 Monitoring and measurement of product

Hyco Alabama monitors and measures the characteristics of its product to verify that product requirements have been met. This is carried out at appropriate stages of the product realization process in accordance with the Quality Plan. Evidence of conformity with the acceptance criteria is maintained. Records indicate the person(s) authorizing release of product.

Product release and service delivery does not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.3 Control of nonconforming product

A detailed procedure details the responsibility and requirement for control of nonconforming product. Nonconforming/suspect product is clearly identified and segregated, where appropriate. All instances of nonconformance from receiving through customer use are recorded and investigated to prevent unauthorized use or further processing of materials.

Nonconforming items are reviewed and disposition made as appropriate. Typical disposition actions are:

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- Use "as is," authorized by deviation or waiver
- Downgrade
- Rejected or scrapped
- Rework and retest/re-inspect

Rework procedures are reported to the customer for concession where contractually required.

Nonconforming processes are analyzed, quantified, and tracked as an integral part of the operating objectives. Performance in this area is reported in the Management Review meetings and is an operational performance category for the Company's continuous improvement effort.

Appropriate personnel utilizing approved rework instructions conduct rework. All reworked material is re-inspected to insure full compliance with original specifications.

8.4 Analysis of data

Management analyzes data to determine the suitability and effectiveness of the system.

Sources of data include:

- Customer Complaints
- Corrective Action Requests
- Customer Scorecards
- Analysis of Internal Performance reports
- Results of Internal or External audit results
- Corrective Action Request Log (preventive action opportunity)
- Warranty Claims

The information is analyzed and becomes the basis for corrective actions and the continuous improvement activity.

8.5 Improvement

8.5.1 Continual Improvement

Continual improvement is a planned and managed activity. The starting point for the continuous improvement activity is the collection and analysis of data. Sources for this data may include but are not limited to:

- Customer Satisfaction Surveys
- Customer Complaints
- Warranty Claims
- Customer Scorecards
- Analysis of Performance reports
- Results of Internal or External audit results
- Corrective Action Log including preventive actions

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The analyzed data forms the baseline for the quality objectives. Performance to stated quality objectives and the continuous improvement activity is reviewed during Management Review Meetings.

8.5.2 Corrective Action

Corrective action corrects nonconformance within the Quality Management System, from customer complaints or for product conformity. Corrective Actions taken are appropriate to the magnitude of the problem.

Procedures document the methods for initiating, investigating, and closing Corrective and Preventive Action requests in all areas as required. Appropriate personnel are advised of status and outcomes of corrective and preventive actions. Any implemented changes to documented procedures shall be recorded.

Procedures for Corrective Action include:

- The effective handling of all customer complaints and reports of nonconformities
- Investigation of the causes of nonconformities relating to product, process and quality system, and recording the results of the investigation
- Evaluating the need for actions to ensure that nonconformities do not recur
- Determination of the **Corrective Action needed to eliminate the cause** of the nonconformities
- **Recording results of Corrective Action taken**
- **Review of effectiveness of Corrective Actions taken**

8.5.3 Preventive Action

Preventive Action identifies and eliminates causes of potential nonconformities within the Quality Management System, originating from customer complaints or product nonconformity. Preventive actions taken are appropriate to the magnitude of the problem.

Procedures document the methods for initiating, investigating, and closing preventive action requests in all areas as required. Appropriate personnel are advised of status and outcomes of corrective and preventive actions. Any implemented changes to documented procedures shall be recorded.

Procedures for Preventive Action include:

- The use of appropriate sources of information such as processes and operations which affect product quality, deviations, audit results, quality records, service reports, warranty claims and customer complaints to detect, analyze, and eliminate potential causes of nonconformities
- Determination of the steps needed to handle any problems requiring preventive action
- Initiation of preventive action and application of controls to ensure effectiveness of
- Recording results of actions taken
- Review of effectiveness of Corrective Actions taken

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- Ensuring that relevant information on actions taken is submitted for Management Review

RELATED DOCUMENTATION

Full details of the Company's working methods and practices in this area are contained in the appropriate operating procedures:

- QOP - 7.0 Customer Satisfaction
- QOP - 8.0 Internal Quality Audits
- QOP - 9.0 Control of Nonconforming Product
- QOP - 10.0 Corrective Action
- QOP - 11.0 Preventive Action



Process Matrix

Input Source	Input	Process	Output	Output Target
Customer Customer Customer Customer Engineering	Customer Drawings Customer Orders Catalog Orders Request for Quotes Quotations	Sales	Orders Orders Orders Customer Inquiries Quotations	Scheduling Scheduling Scheduling Engineering Customer
Sales/Marketing Sales Quality Production	New Product Design Customer Inquiries Deviation Requests Deviation Requests	Engineering	Drawings Quotes/Drawings ECO's Deviations	Sales/Marketing Sales Production Production
Purchasing Sales Sales	Material Availability Orders Forecasts	Scheduling	Production Schedules Manufacturing Orders Material Requirements	Production Production Purchasing
Scheduling Vendors Vendors	Material Requirements Vendors Information Vendors Documentation	Purchasing	Approved Vendor List Material P.O.s Material Availability	Purchasing Vendors Scheduling
Purchasing Vendors Production	Material Material Certifications Parts for Inspection	Quality	Approved Material Inspected Parts Deviation Requests	Production Production Engineering
Engineering Engineering Scheduling Scheduling Quality Quality	Drawings/ECOs Deviations Production Schedules Manufacturing Orders Approved Material Inspected Parts	Production	Deviation Requests Product for Inspection Finished Products	Engineering Quality Customer

Process Matrix

Input Source	Input	Process	Output	Output Target
Customer Customer Customer Customer Engineering	Customer Drawings Customer Orders Catalog Orders Request for Quotes Quotations	Sales	Orders Orders Orders Customer Inquiries Quotations	Scheduling Scheduling Scheduling Engineering Customer
Sales/Marketing Sales Quality Production	New Product Design Customer Inquiries Deviation Requests Deviation Requests	Engineering	Drawings Quotes/Drawings ECO's Deviations	Sales/Marketing Sales Production Production
Purchasing Sales Sales	Material Availability Orders Forecasts	Scheduling	Production Schedules Manufacturing Orders Material Requirements	Production Production Purchasing
Scheduling Vendors Vendors	Material Requirements Vendors Information Vendors Documentation	Purchasing	Approved Vendor List Material P.O.s Material Availability	Purchasing Vendors Scheduling
Purchasing Vendors Production	Material Material Certifications Parts for Inspection	Quality	Approved Material Inspected Parts Deviation Requests	Production Production Engineering
Engineering Engineering Scheduling Scheduling Quality Quality	Drawings/ECO's Deviations Production Schedules Manufacturing Orders Approved Material Inspected Parts	Production	Deviation Requests Product for Inspection Finished Products	Engineering Quality Customer