WL Plastics Corporation
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76177

Quality Management System (QMS) Manual

NSF-ISR
Registered to ISO 9001

NOTICE

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Contents

1. Scope (ISO requirement 4.3)

This manual defines the quality management system WL Plastics has established to ensure our products meet all relevant standards and specifications, and to ensure customer satisfaction. It is based on International Quality Standard ISO 9001:2015 with the exclusion of 8.3 Design, which is not applicable. Our product is produced to required and provided standards such as ASTM, AWWA, API and UL to which we must comply.
Grey Highlight is used to show the latest changes to the document as per QPM 1001.

WL Plastics manufacturing plants are located as follows:

Mills (Casper), Wyoming, USA
2075 North Pyrite Rd. 82644 307-472-6000
Cedar City, Utah, USA
4660 West HWY 56, 84721 435-867-8908
Bowie, Texas, USA
1110 Old Wise Road, 76230 940-872-8300
Elizabethtown, Kentucky, USA
2151 West Park Road, 42702 270-765-1020
Snyder, Texas, USA
2160 South Hwy Business 84, 325-574-6100
Rapid City, South Dakota, USA, 79549
3660 Dyess Avenue, 57701 605-737-4500
Statesboro, Georgia, USA
703 Gateway Blvd, 30458 912-623-2266
Lubbock, Texas, USA
10209 N.Fir Avenue, 79403 806-705-6150
Titusville, Pennsylvania, USA
221 S. Perry Street, 16354 814-827-9665

Founded in 2000, WL Plastics Head Office is now located in Fort Worth, Texas at 3575 Lone Star Circle, Suite 400, Fort Worth, TX 76177. Corporate employees are based out of various plant sites and head office. WL Plastics manufactures high performance High Density Polyethylene (HDPE) pipe and related products for the oil, gas, mining, industrial and municipal water markets. WL Plastics also manufactures conduit for the power and communications markets. WL Plastics is one of the largest manufacturers of polyethylene pipe in North America.

2. Normative References

In addition to ISO9001:2015 WL Plastics also makes reference to relevant North American or International Standards or customer specifications, as appropriate to the product, as well as internal documents such as the Employee Handbook, Safety Manual and Quality Program Manual.

3. Terms and definitions

The following terms apply:

QMS = WL Plastics Quality Management System Manual (Level 1 documentation)

QPM = WL Plastics Quality Program Manual (Level 2 documentation)

SOP = WL Standard Operating Procedure, equipment specific (Level 3 documentation)

Customer = organizations purchasing and specifying product from WL Plastics.

Supplier = organizations supplying WL Plastics with goods or services which affect the company's product. This includes primarily HDPE resin and Black color concentrate (masterbatch).

For the purposes of this document, the terms and definitions given in ISO 9000:2015 apply.

4. Context of the Organization (also see "Scope" in section 1.0)

The quality management system operated by WL Plastics is based upon the requirements of ISO 9001:2015. The QMS addresses the following processes: purchasing and receiving of resin and colored concentrate (masterbatch), sales/customer service/technical service, production and maintenance, quality control and shipping/inventory.

WL is committed to essential business fundamentals that enable us to serve our customers better:

• The latest, state-of-the-art manufacturing extrusion equipment
• Strict quality control standards
• Timely and concise customer communication
• On-time delivery
• Competitive prices

Company Objectives are established by management. They are tracked and reviewed at minimum yearly. Risks and Opportunities for the business are analyzed at the senior management level and may be formal (eg. SWOT analysis) or informal discussions.

Documented information is maintained and retained as specified in the correlating QPM procedure or other legal requirements. Section 7.5 outlines this further.

Interested Parties with regard to WL Plastics Quality system include (ISO requirement 4.2):

- Suppliers of resin and masterbatch – expected to have projected supply requirements provided.
- Customers – expect good product on time
- End users – expect the product to perform as intended
- Employees -expect WLP to be a good employer
- Community around each location – expect WLP to be good neighbors
- Competitors – expect WLP to be fair and ethical
- Regulators for restricted products such as DOT for gas distribution systems and communication regulations for conduit. Expect WLP to comply with the necessary requirements as regulated.

REFERENCES

Appendix A Process Flow Chart

5. LEADERSHIP

5.1 LEADERSHIP AND COMMITMENT

5.1.1 General

Senior management, defined as the CEO and Vice President level, is committed to supporting, implementing and developing the Quality Management System (QMS). Senior management takes the accountability for ensuring the link between established business processes and the QMS is visible, and directing people to contribute to the results with improvement as the goal. The methods and controls applied are outlined in this QMS Manual, QPM documents, and objectives that are established and reviewed.

5.1.2 Customer Focus

The primary objective of the QMS is to ensure and enhance customer satisfaction. A key aspect of this policy is the determination of customer requirements and the measurement of customer satisfaction. Senior management ensures that objectives are aligned with customer focus.

5.2 POLICY

STATEMENT OF QUALITY COMMITMENT (Quality Policy)

WL Plastics statement of quality commitment is:

i) To manufacture products that meet or exceed acceptable quality and product standards to ensure customer satisfaction.

ii) To pursue continuous improvements and best practices in our business processes, by setting, reviewing, and communicating our objectives.

iii) To ensure that all personnel are aware of their individual roles and responsibilities within the Quality System.

Signed: (* Note the ink signed master copy is held at the Corporate office)

CEO: *Mark Wason*

CFO: *Tim Smith*

VP of Operations: *David Taldo*

VP of Sales and Marketing: *Joshua Cottle*

VP of Engineering and Quality: *Dustin Langston*

Director of HR: *Holly Affleck*

Corporate Quality Director: *Barb Donaldson*

5.3 ROLES, RESPONSIBILITY & AUTHORITY

Specific responsibilities within the company and with particular reference to the Quality Management System are defined below. QPM-106 and Job descriptions further define product quality responsibilities.

The Chief Executive Officer (CEO) has the ultimate responsibility for controlling, directing, and coordinating all management activities throughout the company. **Director of HR** reports to the CEO.

The VP of Sales and Marketing is responsible for all commercial activities and directing the sales team. The **Regional Vice Presidents of Sales**, **Outside sales personnel** and **Customer Service** support the VP.

The technical Group under the **VP Engineering and Quality** provides technical support to ensure that customer requirements can be met.

The Vice President of Operations is responsible for all aspects of production and is supported by the **Plant Managers and Production Managers** who have day-to-day control of the production process via the **Shift Supervisors** and **Line Operators**. The **Corporate SHE and Compliance Manager, and Regional Manufacturing Managers** provide support to all locations.

The Chief Financial Officer (CFO) is responsible for the financial aspects of the company, and has support from the **IT department,** and **Accounting** personnel**.**

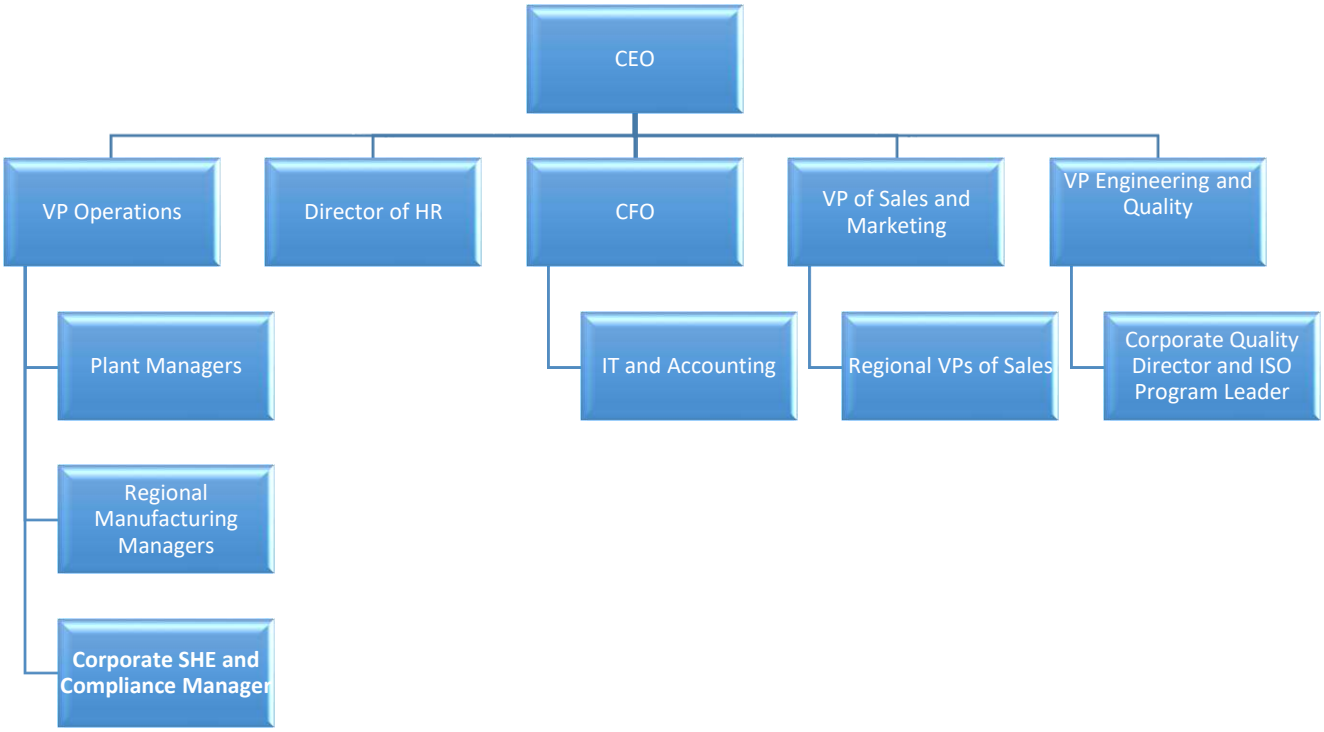
The Corporate Quality Director is responsible for the Quality Management System and is supported by the **Quality Assurance Managers** at each plant location**.** The Quality Assurance Managers are responsible for day-to-day plant Quality Control and are supported by **Quality Technicians**.

The Corporate Quality Director is also assigned responsibility and has the authority to establish, implement and maintain the QMS and all related ISO requirements, and report its performance and outputs to top management.

The Regional Vice Presidents of Sales are responsible for ensuring that **Customer Service** at each site are managing production schedules, customer orders and deliveries in coordination with other plant personnel.

Plant Managers are responsible for overseeing the entire plant operation at their location, ensuring procedures are followed, and communicating best practices, corrective and preventative actions that would benefit the company.

Organization chart updated October 2022 , Rev 20



6. PLANNING

6.1 Actions to address risks and opportunities

Risks and Opportunities are considered at a senior management level to ensure we are meeting customer requirements. Proposals are considered by the business and chosen based on their ability to have desirable results, therefore achieving improvement to product or processes.

6.2 Quality Objectives and planning to achieve them

Plans and objectives to improve performance are established and reviewed as part of the regular management meetings. Objectives are specified in that plan. Key aspects of the process include:

i) Objectives are measurable and consistent with the Quality Policy and established procedures.
ii) Objectives are communicated to relevant personnel.

6.3 Planning of changes

When changes are to be made to the quality system, they are carried out in a planned manner, considering:

i) Purpose of the change
ii) Potential consequences of the change
iii) Ensuring resources are available and responsibilities are established

7. SUPPORT

7.1 Resources

7.1.1 General

WL Plastics ensures that resources are determined and provided in order to maintain and continually improve the quality management system. Internal and External resources are considered.

7.1.2 People

Personnel are provided with appropriate training and equipment to enable them to perform their assigned duties.

7.1.3 Infrastructure

WL Plastics will ensure that all buildings, workspaces and equipment are appropriate and adequately maintained. Plant Managers are responsible for ensuring preventative maintenance programs are in place and appropriate maintenance is done on the site.

7.1.4 Environment for the operation of processes

WL Plastics ensures that its plants and offices comply with relevant health and safety regulations e.g., personnel are issued safety glasses and hearing protection, safety and housekeeping inspections are carried out on a regular basis and Material Safety Data Sheets (MSDS) are retained and made available for the various substances used in the manufacturing process. The Director of SHE carries out regular audits to ensure that standards are maintained.

In addition, all personnel are encouraged to contribute to the success of the business via its open door policy as stated in the Employee Hand Book.

Employee support for personal matters is provided as needed and requested.

7.1.5 Monitoring and measuring resources

Calibration of test equipment is as per QPM 701 – Quality Equipment Calibration. The Corporate Quality Director is responsible for ensuring calibration occurs as required.

All critical test equipment is:

i) Uniquely identified
ii) Periodically checked against equipment that is traceable to national standards - this may be accomplished through internal checks using certified standards, or by use of a calibration service that is A2LA accredited and uses ISO guide 17025 as a standard.
iii) Only adjusted by authorized personnel

Where equipment is found to be out of calibration or damaged, it is taken out of service, the significance of the condition is evaluated, and appropriate action taken.

7.1.6 Organizational Knowledge

WL Plastics determines what information is necessary for the continuing success of the company and ensures that the information is retained within the company. Succession planning for key roles is determined, and records are retained for key requirements at the executive and board level.

7.2 Competence

WL Plastics determines necessary competence for personnel affecting the quality of the product. The Corporate Human Resources guide is a resource used for this purpose. The Director of HR is responsible for maintaining the guide and HR policies.

Training Records
Training records are maintained on site.

Whenever possible, training is conducted in-house. For more specialized skills external seminars or courses are utilized.

The training procedure also covers the induction of new employees which includes an introduction to the company's Statement of Quality commitment, and all safety requirements.

7.3 Awareness

WL Plastics ensures that employees are aware of the quality policy, relevant company objectives pertaining to their role, and how their contribution to the company and their role effects the quality system and ultimately our product. Employees understand how improved company performance benefits them, and that not conforming with the requirements of the quality system has consequences.

7.4 Communication

All personnel are aware of their responsibilities and lines of communication. In addition, the company operates an open-door policy and management encourages personnel to contribute to improving methods, products, etc.

Performance data pertaining to the quality system are communicated to appropriate parties on a regular basis. The audience for each data set are determined by the senior management team, and range from the entire company to only the senior management team. The Corporate Quality Director is responsible for communicating appropriately, and may include posting at locations, emails, QA toolbox talks and formal QA training.

7.5 Documented Information

7.5.1 General

In order to maintain quality assurance a documented quality system has been developed to ensure and demonstrate that all work undertaken conforms to specification requirements. The system is structured in three levels; the overall program is outlined in the QMS Manual (this document), the Quality Program Manual (QPM) which is an internal document that outlines the company's quality policies and operating procedures, and Standard Operating Procedures (SOPs) which are specific to locations and pieces of equipment.

The Corporate Quality Director is responsible for maintaining all QMS and QPM documents. Individual sites are responsible for maintaining SOPs.

7.5.2 Creating and Updating

When creating or updating documented information, an appropriate description or identification, (such as a title and date or document number) will be used. For standalone documents a title and date are preferred, for those documents in a series, a title and document number are preferred.

Upon creation or update of a document, the format and media will be considered. For example: Are multiple languages required? (format) Does the document need to be posted somewhere (paper media) or housed in a shared electronic folder (electronic media)?

Documents will be reviewed for suitability and adequacy by an appropriate person.

7.5.3 Control of documented information

All internal quality documents, manuals, procedures and forms used in conjunction with the QMS issued within the company will be controlled to ensure that they are available and suitable for use as needed.

Controls will address distribution, access, retrieval and use of the documents. Documents are stored on the central fileserver or cloud where it is backed up daily to ensure preservation.

In general, individual personnel and departments are responsible for the long-term retention of the records which they generate.

Records relating to standards and procedures identified in the QPM are retained for periods defined in the standards and guided by QPM 801 Quality Records. Information from the records may be made available to the client if required.

Documents of external origin such as standards controlled by outside organizations (eg. ASTM, AWWA, API etc.) are identified and made available as needed through storage on a central fileserver, cloud or other accessible electronic means.

8. OPERATION

8.1 Operational Planning and Control

WL Plastics has established documented quality plans and procedures throughout the QPM that describe work methods, the controls applied and the records required for production.
Planning is done to ensure the product requirements can be met and the resources that are needed to achieve conformity determined. Equipment, material, and personnel limitations are considered.
Changes to documented procedures are planned and reviewed to ensure risk is mitigated.

8.2 Requirements for products

8.2.1 Customer communication, 8.2.2 Determining the requirements for products, 8.2.3 Review of the requirements for products. 8.2.4 Changes to requirements for products

WL Plastics sales and customer service teams have established procedures to review and record all inquiries, quotes and orders to ensure that all contractual requirements are defined and can be met. Where necessary, inquiries are discussed with the customer and the resolution recorded.

Subsequent orders are reviewed to ensure that;

i) Product requirements are defined,
ii) Any additional or changed requirements are identified and resolved with the customer
iii) The work-load is planned taking into account such issues as time constraints, resources and specified requirements.

Order amendments are treated as part of the on-going process control and appropriate records are maintained.

8.3 Design and development of products

WL Plastics excludes the requirements of design according to ISO 9001:2015 as not applicable. WL Plastics does not design or develop products, all products are made to external standards regulated by governing bodies.

8.4 Control of externally provided products

8.4.1 General

Controls are applied to externally provided products (suppliers) that are intended for incorporation into our own products as per a). This is relevant to suppliers of resin and masterbatch used to make our pipe products.

New resin and masterbatch suppliers are added through the use of QPM 101 Approved Materials. Suppliers are to be PPI listed as appropriate. The approved supplier may be specified by the customer to meet specific requirements for an order. Approved materials are listed in QPM 101, and on the Resin Color Matrix which is found in the public folders.

8.4.2 Type and extent of control, 8.4.3 Information for external providers

Purchase orders via e-mail or by a formal PO form to vendors clearly specify the resin or masterbatch required, quantity and expected delivery date. Purchase orders are approved by the VP of Production, plant manager or designate before release. Purchases are released for each location as desired by the designated person at the plant site. This is generally done electronically via the supplier website or email.

Certificates of analysis are provided for each lot of resin and masterbatch prior to delivery, to show the expected parameters of the material.

Purchased items are checked against the Purchase Order to confirm identity and quantity. Satisfactory items are placed in stock. In the event that items are rejected on receipt a Non-conformance report is prepared and the supplier contacted to arrange replacement or credit. QPM 103 details the verification process for resin and masterbatch.

8.5 Production

8.5.1 Control of production

To control the planning, administrative support and implementation of work, WL Plastics' policy is to describe the work methods, the controls applied and the records required. The process control activities are integrated with many aspects that also relate to quality assurance. Details are described in QPM 106 – Production Control, and other related QPM documents and SOPs.

The following controls are applied:

i) Specifications for all products
ii) These are supplemented by detailed work orders
iii) Plant maintenance
iv) Personnel are trained and considered competent
v) Quality Assurance checks and tests are performed using appropriate equipment as per QPM 410 – Daily Quality Checks
vi) Handling, storage and transportation in accordance with QPM 601 Product Packaging, WL Plastics Safety Manual 1017, and publication WL 101

8.5.2 Identification and Traceability

All customer inquiries are identified with a unique quotation number, allocated upon receipt. Subsequent customer Purchase Orders are identified with a unique Sales Order (SO) number. Each sales order has a related, unique work order with specific work instructions for the creation of the product. The final product is marked with identifiers that can be used to trace the pipe back to material and specification requirements. Documents related to traceability are retained as per policy.

Stored equipment and materials are identified as to type, description and inspection status.
Unacceptable items are identified as such and are removed from the normal work flow.

8.5.3 Property belonging to customers or external providers

In cases where the customer provides specifications they are logged as part of the document control procedure.

Pipe held under "Bill and Hold" provisions are controlled as per appropriate accounting policies.

8.5.4 Preservation

The company ensures that all products and materials are handled and stored appropriately at all stages to prevent damage or deterioration.

8.5.5 Post delivery activities

Post delivery activities are limited to technical service assistance and provision of warranty as per current company policy.

8.6 Release of products and services

In-process checks are performed and recorded as per related QPM documents. Provision is made for the identification and resolution of product non-conformance. The flow chart in QPM 108 is followed as required. The emphasis is to prevent any problems which might affect customer satisfaction.

Action is taken promptly to resolve any problems that arise.

Final verification of the product to the specifications is completed prior to the product being released to inventory or the customer. Documentation of the final verification and traceability to the person authorizing the release is maintained.

8.7 Control of nonconforming outputs

WL Plastics' policy is to detect, identify, control and rectify any aspect of product non-conformance as quickly and efficiently as possible. QPM 108 Product Nonconformance is followed.

9. PERFORMANCE EVALUATION

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

It is the policy of WL Plastics to monitor, measure, analyze and improve the performance of products, processes and the QMS wherever it is appropriate. Objectives are established and reporting of results is completed at agreed upon intervals.

Objectives are reviewed on a yearly basis to determine if it is still appropriate, and what the data means to the company. Results are documented and retained.

9.1.2 Customer Satisfaction

Customer satisfaction is monitored in various ways by the sales team:

i) Levels of repeat business
ii) Growth of key accounts
iii) Informal or Formal Customer surveys
iv) Analysis of customer complaints

9.1.3 Analysis and evaluation

In order to identify opportunities and improvement, the Corporate Quality Director monitors and reviews trends in the following activities;

i) Conformity of products via customer complaints and QC reject
ii) Customer satisfaction via survey results.
iii) Performance and effectiveness of the quality management system via various metrics established for key processes identified in the process map.
iv) Effectiveness of planning and any actions taken to address risks and opportunities.
v) Supplier performance via purchase and customer service experience

9.2 Internal Audit

The Corporate Quality Director ensures effective implementation of the QMS is assessed by a program of regular internal audits which are carried out by trained personnel.

All Audit and Corrective Action Reports are reported and discussed at the Senior Management Meeting.

Internal audits are planned and conducted so that each of the activities documented in the Quality Management System Manual is audited at least once per year. Audit locations can be rotated so that a minimum of half of the plant locations and head office are audited each year. Portions of audits may occur by phone or online as appropriate. See QPM 901 for details.

Corrective Action reports are used to ensure the resolution of any major deficiencies found during an audit. Minor deficiencies are placed on an action item log for resolution. Follow-up audits take place to verify the effectiveness of the action taken. Audits are documented and retained.

An external audit of suppliers for business critical items (such as resin or color concentrate/masterbatch suppliers) may be conducted at the request of senior management or as needed for product specific requirements such as nuclear safety system products.

9.3 Management review

9.3.1 General

The QMS is systematically reviewed at least once every year to ensure its continued adequacy, effectiveness, and alignment with the strategic direction of the company. Management Review meetings are attended by the Senior Management team, as well as other management as required. Records of agreed and outstanding actions are retained.

9.3.2 Management review inputs

As a minimum, the following items are discussed:

i) follow-up actions from previous meetings
ii) changes from internal or external issues that could affect the QMS
iii) Trending information on:
    a. customer feedback (compliments and complaints)
    b. objectives
    c. productivity and quality control issues
    d. status of corrective and preventive actions
    e. results of internal and external audits
    f. supplier performance
iv) adequacy of resources
v) effectiveness of actions taken to address risks and opportunities
vi) recommendations for improvement

9.3.3 Management review outputs

The output from the management review shall include decisions and actions related to improving the effectiveness of the QMS and its processes, improving customer related processes, and resource requirements. Management review is documented and retained.

10 IMPROVEMENT

10.1 General

WL Plastics is committed to a policy of continuing improvements in its products and processes in order to enhance customer satisfaction. This is accomplished by following the requirements of the QMS and seeking innovation and change where appropriate.

10.2 Nonconformity and corrective action

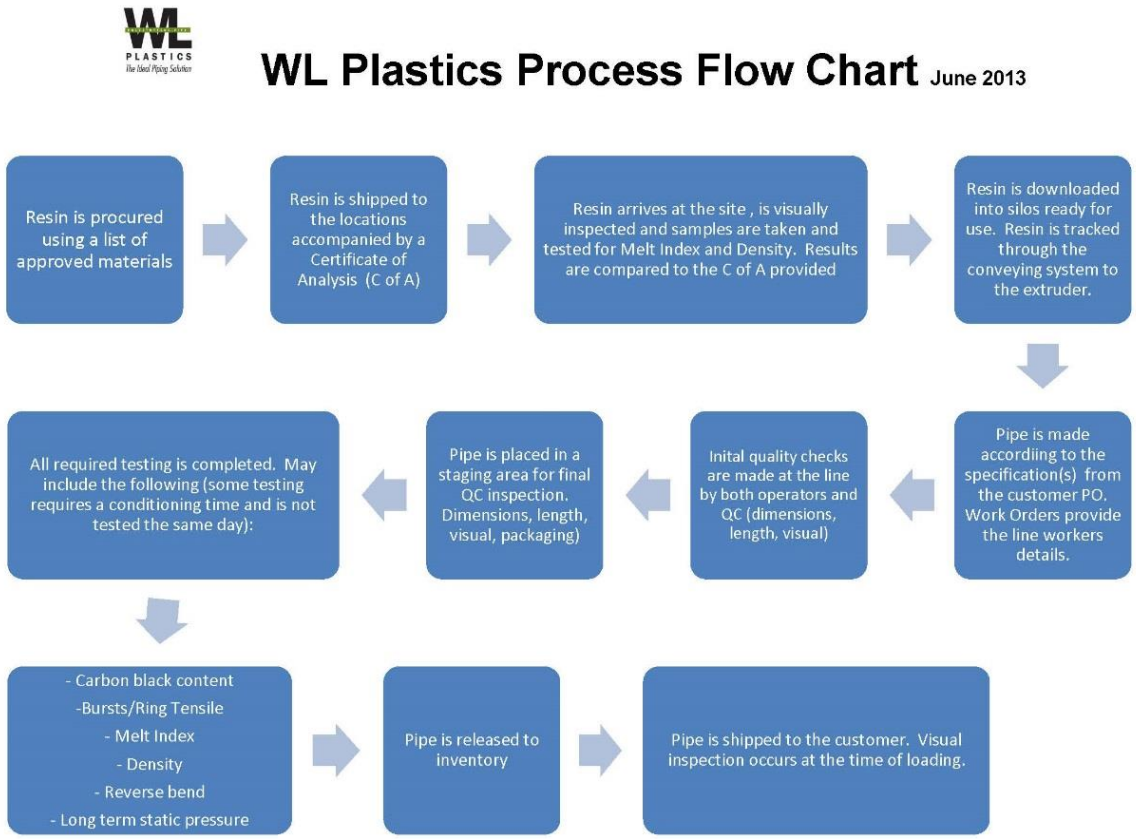
WL Plastics has documented procedures for handling internal problems using QPM 108 and customer complaints using QPM 107. Appropriate reports and/or logs detail the action taken, and discussions take place to consider any long term implications.

10.3 Continual improvement

Continual improvement is addressed in a number of ways:

i) the QMS procedures incorporate various checks to ensure that potential problems are identified, recorded and resolved,
ii) the company provides technical support to enable the customer to effectively utilize and install the product,
iii) an important aspect of the internal audit process is the recording of observations to highlight potential problems and possible improvements. Opportunities for improvement are also considered preventative action because they can alleviate future issues. Opportunities for Improvement can evolve from internal, external, safety audits, or casual observation.
iv) equipment upgrades and plant improvement projects are considered continual improvement, particularly where possibilities exist for non-conformances due to aging equipment and facilities.
v) where possible, Corrective Action solutions are applied to other areas of the business.

Appendix A: Process Flow Charts



Appendix A: Process Flow Charts