



WISDOM ADHESIVES QUALITY MANUAL



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Revision: 1

Introduction –

Wisdom Adhesives is a 140 year old adhesive company. Wisdom Adhesives is a supplier of environmentally safe and compliant waterbased and hot melt adhesives to industrial users throughout the world. Wisdom Adhesives is recognized as a top mid-sized adhesive manufacturer of Waterbased Resins, Dextrins, PSA's and Acrylics; Hot Melt Eva's, PE's and PSA's; Protein Adhesives and Reactive Products. Wisdom supplies adhesives to a wide range of industries including Book Binding, Converting Tissue and Towel, Graphic Arts, Packaging, Product Assembly, Textiles and General Purpose.

Founded in 1875 by Phillip Wisdom in the wake of the Chicago Fire, Wisdom Adhesives has weathered the Great Depression, rationing of raw materials during World War II, increasing competition, and the incredible changes in technology and industry since the birth of the Electronic Age.

Wisdom Adhesives has been and continues to be an innovator and manufacturer of custom adhesives. During the last seven years, Wisdom has tripled its sales by expanding into new industries. Packaging is now the Wisdom Adhesives' largest market, yet the company continues to serve its original market of bookbinders and publishers, a list of which reads like a historical "Who's Who."

Wisdom also serves the graphic arts, paper, product assembly, textile, display and many other industries. Wisdom Adhesives has a long-standing commitment of responding to customer needs faster than any company (with a 24 hour turnaround) and providing personalized service second to none.

The plant operates three shifts a day, five days a week. Wisdom Adhesives strictly adheres to an Efficient Compact Organization structure and has only two (2) reporting levels from the shop floor to Senior Management.

The management team at Wisdom is committed to the establishment, documentation, implementation, maintenance, and improvement of their Total Quality Management System (TQMS) through customer satisfaction, employee development and empowerment, continual improvement and business growth. These are documented and demonstrated through the full and ongoing execution of the Wisdom TQMS.

Related Quality System Documents

Documents related to this manual are:

- System Procedures



- System Work Instructions
- System Forms and Records

Quality Management System

The Wisdom TQMS is documented and maintained as a means of ensuring that products conform to specified requirements. Its purpose is to prevent and/or detect nonconformities in products or processes during all phases of production and delivery so that only product meeting or exceeding requirements is shipped to customers. The emphasis is on continual improvement and customer satisfaction.

This is accomplished by:

- Identifying the processes needed for the Wisdom TQMS and the sequence and their interaction
- Not allowing defects to reach the customer
- Monitoring, measuring and analyzing the business
- Taking actions that achieve continual improvement

When Wisdom Adhesives chooses to outsource any process that affects product conformity with requirements, Wisdom Adhesives maintains control over such processes.

The Wisdom Adhesives plant has:

- Prepared a Quality Manual and documented procedures that are consistent with the requirements of the ISO 9001:2000 International Standard and the Wisdom Adhesives Plant Quality Policy
- Implemented an effective Wisdom Adhesives TQMS with documented procedures, work instructions and records.
- The scope and extent of documentation for the TQMS is determined on the basis of the complexity and interaction of processes, elements, and activities; and on competence of personnel. The documentation for the Wisdom Adhesives TQMS is sufficient to ensure the effective operation and control of the system, processes, and products
- Documentation needed is developed to the extent necessary to ensure effective and consistent operation of the Quality System

This Quality Manual defines the policies of the Wisdom TQMS for:



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Wisdom Adhesives maintains control of documents, including procedures, work instructions, forms, software and records and to the extent applicable, documents of external origin.

Documents and data are reviewed and approved for adequacy by authorized personnel prior to issue.

An electronic master list is used to identify the current revision status of documents and is posted on the server, readily available to preclude the use of invalid and/or obsolete documents.

Masters of forms and controlled documents are stored electronically on a computer system to preclude the use of invalid and/or obsolete documents and to ensure legibility.

This control ensures that:

- Updated issues of documents are available at all locations where operations essential to the effective functioning of the Wisdom Adhesives TQMS are performed
- Invalid and/or obsolete documents are promptly removed from all points of issue or use, or otherwise assured against unintended use
- Where computer access is not possible, master copies of controlled documents are made available

Changes to documents and data are reviewed and approved by the same functions/organizations that performed the original review and approval.

The nature of the change in procedures or work instructions is identified in the document revision history.

Documents posted on the intranet are reviewed and approved before they are posted. Therefore, the actual posting acts as approval of the document. An e-mail is used as the approval signature. The Management Representative or his/her designee has a folder named "Document Approval Folder" in which all request for changes of procedures, work instructions and forms are kept.

All Quality Records are legible and stored and retained in such a way that they are readily retrievable and stored to prevent damage or deterioration and loss.

Management Responsibility



Wisdom Adhesives demonstrates its commitment to develop and implement a TQMS and continually improve it by:

- Communicating to the organization the importance of meeting customer as well as:
 - Statutory and regulatory requirements
 - Establishing the Quality Policy
 - Ensuring that Quality Objectives are established and reviewed
 - Conducting management reviews
 - Ensuring the availability of resources

This Quality Manual is the actual output of the Quality Planning process.

Customer Focus

Lean Six Sigma principles are used at a Customer Focused Accelerated Rate, with Wisdom's TQMS LSS-Focused Accelerated Service Team (FAST).

The Green Bond Sustainable Adhesive (GBSA) product line is Wisdom Adhesives commitment to provide renewable, energy efficient and environmentally friendly products and is at the core values of the organization.



Wisdom's TQMS philosophy and customer commitment is accentuated through the ECO² Approach. This allows for an efficient, compact organization with only two levels from Management to the shop floor.

Wisdom Customer Creed

- **W**illingness to “think outside the box”. In today’s adhesive market, many manufacturers’ are setting the “rules to play by”. Wisdom Adhesives is the exception.
- **I**dealistic is our nature at Wisdom Adhesives and it is how we respond to Customers.
- **S**ervice, Service and more Service is the motto at Wisdom Adhesives – resulting in overall Savings to the Customer.
- **D**emonstrated continual new & customized product development.



- **O**n-call, On-site & On-time, all part of Wisdom Adhesives complete service package focusing on the customer.
- **M**eeting and exceeding customer requirements since 1875. That's 134 years!

Quality Policy

A TQMS philosophy encompassing an efficient, compact organization that delivers unparalleled service and quality and where the “Customer is King”.

The upper management of the Wisdom Adhesives plant, has defined, and is committed to, its Quality Policy and Objectives for Quality. The Quality Policy is reviewed as part of the Management Review Process and is a framework for the established quality objectives being measured.

Upper Management is responsible for ensuring that all personnel understand the policy and objectives, and the policy and objectives are fully implemented and communicated throughout the facility.

Quality Objectives

Upper Management will ensure that Quality Objectives, including those needed to meet customer requirements, are established at the relevant functions and levels within the organization. These objectives will be measurable.

Quality objectives define the direction and priorities for continual improvement.

Management Review

Upper management at the Wisdom Adhesives plant will review the TQMS at defined intervals sufficient to ensure its continuing suitability and effectiveness in meeting the requirements of the system and the Quality Policy and Objectives.

Reviews will consist of information and data related to quality performance of the organization. At a minimum, this includes:

- Results of audits
- Customer feedback and complaints
- Process performance and product conformance data
- Status of preventive and corrective actions
- Changes that could affect the quality system
- Follow-up actions from earlier management reviews
- Recommendations for improvement of the Wisdom TQMS



- Relevance of the Quality Policy
- Review of the Quality Objectives

Results of management reviews are documented in minutes of the review meeting. The minutes include improvement actions, and assign responsibilities, status and allocate resources for implementation of these actions.

Provision of Resources

Upper management will implement and maintain the Wisdom TQMS and continually improve its effectiveness and enhance customer satisfaction by meeting customer requirements. Upper management will provide the resources necessary to maintain and improve the quality system.

Competence, Awareness, and Training

Upper management will ensure that personnel are aware of the relevance and importance of their training and activities and will evaluate the effectiveness of such. Awareness is accomplished through the use of teams, meetings, bulletin boards, the intranet and other communication methods.

Procedures are in place to identify training needs, determine competency, and document completed training. Training consists of on-the-job and specific training courses.

Infrastructure and Work Environment

The Wisdom Adhesives Plant determines, provides, and ensures maintenance of the infrastructure required, such as buildings, workspace, associated utilities, process equipment, and supporting services, to achieve conformity to product/customer requirements.

Wisdom Adhesives maintains a progressive work environment with the intent to satisfy, motivate, and promote enhanced performance of the organization to meet or exceed product/customer requirements. The work area is safe, clean, and monitored for compliance to health and safety regulations.

Product Realization

Determining the Requirements Related to the Product

The Sales Department has the responsibility for discussing with the customer the customer's requirements to assure that the capability exists and is available to fulfill order's received,



Before the acceptance of a contract or order, it is reviewed in order to ensure that:

- The Wisdom Adhesives plant can meet the order requirements based on customer needs, statutory and regulatory requirements, and any additional requirements that may pertain to the customers' request.

Before delivering a quote or acceptance of an order the Sales Manager and/or the General Manager or designee reviews the order to ensure that the customer requirements are adequately defined and documented, the delivery dates are understood and that the Wisdom Adhesives plant has the capability to meet the order requirements.

Records of contract reviews are maintained.

Customer Communication

The Wisdom Adhesives plant implements effective communications with the customer in regards to product/customer requirements, questions, feedback, and amendments. Detailed work instructions exist to provide guidance for dealing with the customer in an efficient and courteous manner.

All changes to a customer order are documented on the order and communicated to the appropriate personnel.

Customer feedback and complaints are classified into categories to allow for better tracking of trends and evaluating improvement in specific aspects. Every complaint is communicated to relevant functions within and outside the organization. Customer Service, the responsible department, and the Quality Manager/Management Representative, decide how to respond to the customer and, when appropriate, what corrective or preventive actions should be implemented internally.

Purchasing

The Wisdom Adhesives plant maintains a documented procedure to ensure that purchased product conforms to specified requirements.

Wisdom Adhesives does the following:

- Evaluates and selects vendors on the basis of their ability to meet contract requirements including the quality system and any specific quality assurance requirements
- Defines the type and extent of control exercised over vendors. This is dependent on the type of product, the impact of the contracted product on the quality of our product and, where applicable, on the quality audit reports and/or quality records of the previously demonstrated capability and performance of suppliers



- Establishes and maintains an “Approved Supplier” list.

Purchasing documents contain data clearly describing the product ordered, including where applicable:

- The type, quantity, class, grade, or other precise identification required to fully and completely describe the item or service being procured

When Wisdom Adhesives verifies purchased product at a vendor’s premises, Wisdom Adhesives will specify the verification arrangements and the method of product release in our purchasing documents.

Verification by the customer does not absolve Wisdom Adhesives of the responsibility to provide acceptable products nor does it preclude subsequent rejection by the customer.

Control of Production and Service

Wisdom Adhesives identifies and plans the production processes, which directly effect quality and ensures that these processes are carried out under controlled conditions.

Controlled conditions include the following:

- Documented procedures defining the manner of processing
- Work instructions
- Use of suitable equipment and maintenance to that equipment, and a suitable working environment
- Conformance with all applicable standards or specifications
- Monitoring and control of suitable process parameters and product characteristics and inspections
- The availability of monitoring and measuring devices where deemed necessary

Identification and Traceability

Identification is recorded by maintaining accurate records at three stages of processing that include receiving inspection, in-process inspection, and finished product inspection.

The inspection and test status of Wisdom’s products are identified by suitable means that indicate the conformance or nonconformance of the product with regard to inspection and tests performed. The identification of inspection and test status is maintained, throughout production activities.

Records of batches are maintained which provide evidence that products have been tested and are within specification. Where the products fail to pass and are marked as “Scrap” or “Rework”, the procedures for control of nonconforming product apply.



Customer Property

Wisdom Adhesives controls customer property in exactly the same manner as our own purchased products.

Any such product that is lost, damaged, or is otherwise unsuitable for use is recorded and reported to the customer.

Preservation of Product

There are methods of handling our products that prevent damage or deterioration.

There are designated storage areas to prevent damage or deterioration of our products, pending use or delivery.

Wisdom Adhesives arranges for the delivery of outgoing products unless instructed differently by the customer's contract. Great care is taken and protection given to preserve the quality of our product during delivery.

Control of Monitoring and Measuring Devices

Inspection, measuring, and test equipment is used in a manner which ensures that the measurement uncertainty is known and is consistent with the required measurement capability.

Wisdom Adhesives:

- Determines the measurements to be made and the accuracy required and selects the appropriate inspection, measuring and test equipment capable of the necessary accuracy and precision
- Identifies all inspection, measuring, and test equipment that can affect product quality and calibrates and adjusts them at prescribed intervals, or prior to use, against certified equipment having recognized standards. Where no such standards exist, the basis used for calibration is documented
- Defines the process employed including such details as equipment type, unique identification, location, and frequency of checks, check method, acceptance criteria, and the actions to be taken when results are unsatisfactory
- Identifies inspection, measuring, and test equipment with an indicator to show the calibration status
- Maintains calibration records
- Ensures that the conditions are suitable for the calibrations, inspections, measurements, and tests being carried out



- Ensures that suitable handling, preservation, and storage of inspection, measuring, and test equipment preserves their accuracy and fitness for use
- Safeguards inspection, measuring, and test facilities from adjustments that would invalidate the calibration setting

Monitoring and Measurement

Wisdom Adhesives evaluates the results of data gathered from customer contacts to determine the performance of the Wisdom TQMS to satisfy customer requirements.

Customer satisfaction is also communicated to the sales force by the customer in the form of repeat orders, verbal communication as to satisfaction with Wisdom quality and service.

Customer surveys may be performed as deemed necessary.

Internal Audit

There are procedures for planning and implementing Internal Quality Audits to verify whether quality activities and related results comply with corrective actions and to determine the effectiveness of the Wisdom TQMS.

Internal Quality Audits are scheduled on the basis of the status and importance of the activity to be audited. The audit criteria, scope, frequency and methods are defined.

Personnel independent of those areas having direct responsibility for the activity being audited carry out internal audits.

The results of the audits are recorded and brought to the attention of the personnel having responsibility in the area audited.

The management personnel responsible for the area take timely corrective action on deficiencies found during the audit.

Follow-up audit activities verify and record the implementation and effectiveness of any corrective action taken.

Monitoring and Measurement of Processes

The Wisdom TQMS processes are evaluated at Management Review Meetings. Any deficiencies identified are corrected and recorded in the minutes, and Corrective Action Requests are generated.

Monitoring and Measurement of Product



Incoming items are not used or processed until they have been inspected and verified as conforming to specified requirements, in accordance with documented procedures.

Records are maintained which provide evidence that products have been inspected. These records show clearly whether the product has passed or failed the inspections and/or tests according to defined acceptance criteria. Where the products fail to pass any inspection, the procedures for control of nonconforming product apply.

Control of Nonconforming Product

There are procedures to ensure that products that do not conform to specified requirements are prevented from unintended use or shipment. This control provides for identification, documentation, evaluation, segregation (when practical), disposition of nonconforming product, and for notification to the functions concerned.

Reworked product is re-inspected per procedures.

Analysis of Data

The Management Team, at the Management Review Meetings, review analysis of data gathered from the various processes, such as inspection results, customer surveys, internal corrective action requests, supplier evaluations, and customer complaints to determine any trends and discrepancies in the Wisdom TQMS.

Corrective Action

There is a documented procedure addressing the implementation of corrective action.

The procedure for corrective action includes:

- The effective handling of customer complaints and customer reports of product nonconformities
- Investigation of the cause of nonconformities relating to product, process and Wisdom TQMS, and recording the results
- Determination of the corrective action needed to eliminate the cause of nonconformities or prevent potential problems from occurring
- Assurance that corrective action is taken and that it is effective
- Results from corrective action are reviewed by management

Preventive Action

Preventive action deals with potential nonconformance. Any preventive actions taken to eliminate the causes of nonconformities are appropriate to the problems.