ITW Workholding

ISO9000:2001

Quality Manual

Revision History

Revision	Date	Summary of Revision
	1/7/04	Creation

Section I- Quality System and Approval

Quality System:

ITW Workholding designs and builds workholding equipment for the Automotive and General Industry business markets. Workholding product is used on general manufacturing equipments such as lathes, mills and grinders. ITW Workholding product is designed to hold (grip) the customer's product while it is being processed. Because this product is widely considered as tooling and/or equipment, ITW Workholding has adopted and adheres to the ISO9000:2001 Quality Management System

Implementation:

This manual is to be used by all ITW Workholding employees. All employees must comply with its policies and procedures. Copies of this manual will be available per the distribution list stated previously. This manual is intended to be used to continuously improve the business operations of ITW Workholding and thereby satisfy the needs and requirements of our customers.

Maintenance:

This manual consists of 5 sections corresponding to the elements contained within the ISO9000:2001 quality system. Each element begins by defining the purpose of that element. This gives a basic description of the impact that element has on our business practices. The purpose of the policy is followed up with a detailed outline defining how the policy will be carried out and responsibilities required therein. The manual is maintained and updated by the document control coordinator(s) or similar representative. Revisions are detailed and revision levels noted. All distributed manuals are listed as uncontrolled and maintained as such. Signed reviews and approvals of the manual are maintained by the current Management Representative. This manual as maintained, electronically, is approved by author based on signed approvals and reviews mentioned above.

Approval:

This manual has been reviewed and approved by the General Manager of ITW Workholding:

_____
Leo Walterich
General Manager

_____
Chris Brown
Management Representative

Section II – Scope and Reference

1 Scope:

This Quality Manual provides specifics on the policies and procedures ITW Workholding uses to meet ISO9001:2000 Quality Management System requirements. This manual is specific to the business operations of ITW Workholding and its 2 North American offices. ITW Workholding independent Sales Representatives and Distributors as well as those businesses that ITW Workholding has alliances with will not fall under the scope and intent of the quality system.

The intent of these policies and procedures is to demonstrate ITW Workholding's ability to consistently provide product that meets or exceeds customer and applicable regulatory requirements and to enhance customer satisfaction through the effective application of the quality system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements

2 Normative Reference:

The following normative documents contain provisions, which, through reference in this text, constitute provisions of ISO9001.

ANSI/ISO/ASQ Q9000-2000, Quality Management Systems – Requirements
ANSI/ISO/ASQ Q9000-2000, Quality Management Systems – Fundamentals and Vocabulary.

3 Terms and Definitions:

"Sales Representatives" and "Distributors" refers to independent representatives of ITW Workholding, engaged in promoting the sale and use of ITW Workholding products and services.

The terms "Subcontractors", "Suppliers" and "Vendor" are synonymous and refer to external source(s) used to acquire purchased products and/or services by ITW Workholding.

Throughout the text of this Quality Manual wherever the term "product" occurs, it can also mean "service".

The terms "organization" or "company" refers to ITW Workholding.

"QOS" is defined as Quality Operating System.

The term “Management Team” refers to a group of selected managers and employees empowered to develop and implement continual improvement projects, report on non-conformances and corrective actions, and monitor the overall quality system.

The term “New Design” refers to product that goes through the design process.

The term “Reorder” refers to product that does not go through the design process

The term “Rework” refers to product that has been returned for the purpose of recondition or repair.

Section III – Quality Statement

ITW Workholding strives to provide our customers with the highest quality Workholding solutions available to the market. In order to achieve total customer satisfaction, we shall adhere to the following objectives:

100% on-time delivery
Zero defects
Value added service and support
Engineered solutions
Employee development and diversity

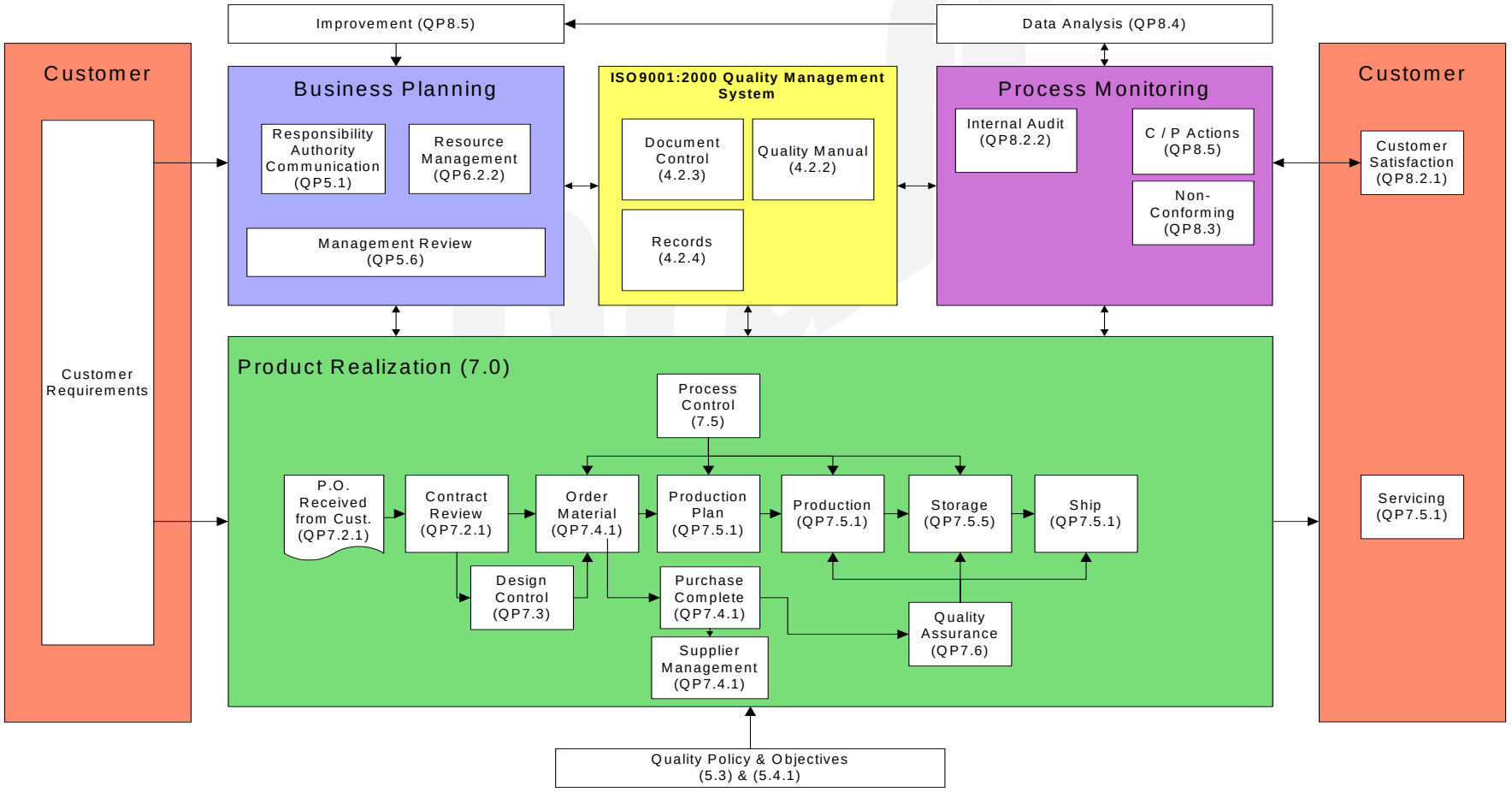
We will commit to continuously improve each facet of our business operations through implementation of, and compliance to our ISO9000:2001 Quality Management System

Leo Walterich
General Manager

Section IV – Process Map

ITW Workholding Process Map

Tuesday, January 11, 2005



Section V - Policies

Quality management system requirements

4.1 Scope and Purpose

The quality system described in this section of the QM conforms to the requirements of the standard: Section 4—Quality management system requirements. This policy defines the corporate commitment to quality.

4.2 Responsibility and Authority (R&A)

General Manager, Business Unit Managers, Manufacturing Segment Managers, Engineering Manager, Management Representative, Human Resource Manager and all other relevant participants, and all other relevant participants, shares the responsibility and authority for overall administration of quality management system activities. Employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements. Employees have been granted authority in order to meet specified requirements.

4.3 Quality Management System Requirements

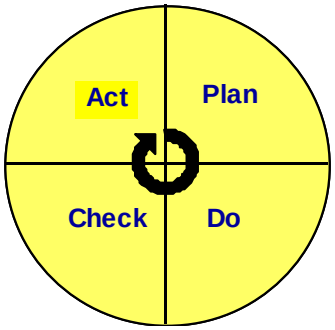
General requirements:

4.3.1 A quality management system has been established, documented, implemented, maintained and is continually improved in accordance with the requirements of ISO 9001: 2000. To implement the system, ITW Workholding, Inc. has:

- identified the processes needed for the quality management system and their application throughout the organization;
- determined the sequence and interaction of these processes;
- determined the criteria and methods needed to ensure that both the operation and control of these processes are effective;
- ensured the availability of resources and information necessary to support the operation and monitoring of these processes;
- monitored, measured, and analyzed these processes; and,
- implemented actions necessary to achieve planned results and continual improvement of these processes.

These processes are managed in accordance with ISO 9001: 2000.

Control is ensured over any outsourced processes that affect product conformity with requirements. Control of such applicable processes is identified within the quality management system.



"Plan" *Establish the objectives and processes necessary to deliver results in accordance with customer requirements and the organisation's policies.*

"Do" *Implement the processes.*

"Check" *Monitor and measure processes and product against policies, objectives and requirements for the product and report the results.*

"Act" *Take actions to continually improve process performance.*

Documentation requirements:

4.3.2 Quality management system documentation includes:

- documented statements of a quality policy and quality objectives;
- a Quality Manual;
- documented procedures required by ISO 9001: 2000;
- documents needed by the organization to ensure the effective planning, operation and control of processes; and,
- records required by ISO 9001: 2000.

4.3.3 A Quality Manual has been established and maintained that includes:

- the scope of the quality management system, including details of and justification for any permissible exclusions;
- the documented procedures established for the quality management system, or reference to them; and,
- a description of the interaction between the processes of the quality management system.

Control of documents:

4.3.4 Documents and records required by the quality management system are controlled.

A documented procedure has been established to define the controls needed to:

- approve documents for adequacy prior to issue;
- review and update as necessary and re-approve documents;
- ensure that changes and the current revision status of documents are identified;
- ensure that relevant versions of applicable documents are available at points of use;
- ensure that documents remain legible and readily identifiable;
- ensure that documents of external origin are identified and their distribution controlled; and,
- prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

Control of quality records:

4.3.5 Records are established and maintained to provide evidence of conformity to requirements and of the effective operation of the quality management system.

Records are legible, readily identifiable and retrievable.

A documented procedure has been established to define the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records.

4.4 References

QP4.2.3 Control of Documents Procedure
QP4.2.4 Control of Records Procedure

Management responsibility

5.1 Scope and Purpose

The quality system described in this section of the QM conforms to the requirements of the standard: Section 5—Management responsibility. This policy defines the corporate commitment to quality.

5.2 Responsibility and Authority (R&A)

General Manager, Business Unit Managers, Manufacturing Segment Managers, Engineering Manager, Controller, Management Representative, and Human Resource Manager and all other relevant participants and all other relevant participants, share the responsibility and authority for overall administration of quality management system activities. Employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements. Employees have been granted authority in order to meet specified requirements.

5.3 Quality System Requirements

Management responsibility:

5.3.1 ITW Workholding has provided evidence of its commitment to the development and implementation of the quality management system and continually improving its effectiveness 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;
- conducting management reviews; and,
- ensuring the availability of resources.

Customer focus:

5.3.2 ITW Workholding has ensured that customer requirements are determined and fulfilled with the aim of enhancing customer satisfaction.

Quality policy:

5.3.3 ITW Workholding has ensured that the quality policy is:

- appropriate to the purpose of the organization;
- includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system;
- provides a framework for establishing and reviewing quality objectives;
- communicated and understood within the organization; and,
- reviewed for continuing suitability.

Planning and quality objectives:

5.3.4 ITW Workholding has ensured that quality objectives, including those needed to meet requirements for product, are established at relevant functions and levels within the organization. The quality objectives are measurable and consistent with the quality policy.

Quality management system planning:

5.3.5 ITW Workholding has ensured that:

- the planning of the quality management system is carried out in order to meet the requirements of the general requirements of this international standard (section 4.1); and,
- the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

Responsibility and authority:

5.3.6 ITW Workholding has ensured that the responsibilities and authorities are defined and communicated within the organization.

Management representative:

5.3.7 ITW Workholding has appointed a member of management who, irrespective of other responsibilities, has responsibility and authority that includes:

- ensuring that processes needed for the quality management system are established, implemented and maintained;
- reporting to ITW Workholding on the performance of the quality management system, and any need for improvement;
- ensuring the promotion of awareness of customer requirements throughout the organization; and,
- acting as liaison with external parties on matters relating to the quality system as appropriate.

Currently, the appointed Management Representative is the Quality Improvement Coordinator.

Internal communication:

5.3.8 ITW Workholding has ensured that appropriate communication processes are established within the organization and that communication takes place regarding the effectiveness of the quality management system.

Management review:

5.3.9 ITW Workholding reviews the quality management system at planned intervals to ensure its continuing suitability, adequacy and effectiveness. This review includes assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives. Records of management reviews are maintained.

Management review input:

5.3.10 Input to management review includes information on:

- results of audits;
- customer feedback;
- process performance and product conformity;
- status of preventive and corrective actions;
- follow-up actions from earlier management reviews;
- planned changes that could affect the quality management system; and,
- recommendations for improvement.

Management review output:

5.3.11 Output from management review includes any decisions and actions related to:

- improvement of the effectiveness of quality management system and its processes;
- improvement of product related to customer requirements; and,
- resource needs.

5.4 References

QP5.1 Management Responsibility Procedure
QP5.6 Management Review Meetings Procedure

Resource management

6.1 Scope and Purpose

The quality system described in this section of the QM conforms to the requirements of the standard: Section 6—Resource management. This policy defines the corporate commitment to quality.

6.2 Responsibility and Authority (R&A)

General Manager, Business Unit Managers, Manufacturing Segment Managers, Controller, Engineering Manager, Human Resource Manager and all other relevant participants, and all other relevant participants, shares the responsibility and authority for overall administration of quality management system activities. Employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements. Employees have been granted authority in order to meet specified requirements.

6.3 Resource Management

Provision of resources:

6.3.1 Resources have been determined and provided to:

- implement and maintain the quality management system and continually improve its effectiveness; and,
- enhance customer satisfaction by meeting customer requirements.

Human resources:

6.3.2 Personnel performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience.

Competence, awareness and training:

6.3.3 ITW Workholding has:

- determined the necessary competence for personnel performing work affecting product quality;
- provided training or taken other action to satisfy these needs;
- evaluated the effectiveness of the actions taken;
- ensured that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives; and,
- maintained appropriate records of education, training, skills and experience.

Infrastructure:

6.3.4 The infrastructure needed to achieve conformity to product requirements has been determined, provided and maintained.

Infrastructure examples may include, but not be limited to:

- buildings, workspace and associated utilities;
- process equipment, (both hardware and software); and,
- supporting services (such as transport or communication).

Work environment:

6.3.5 The work environment needed to achieve conformity to product requirements has been determined and managed.

6.4 References

QP6.2.2 Control of Training Procedure

Product realization

7.1 Scope and Purpose

The quality system described in this section of the QM conforms to the requirements of the standard: Section 7—Product realization. This policy defines the corporate commitment to quality.

7.2 Responsibility and Authority (R&A)

General Manager, Business Unit Managers, Manufacturing Segment Managers, Engineering Manager, and all other relevant participants, shares the responsibility and authority for overall administration of quality management system activities. Employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements. Employees have been granted authority in order to meet specified requirements.

7.3 Product Realization

Planning of product realization:

7.3.1 The processes needed for product realization are planned and developed, and are consistent with the requirements of the other processes of the quality management system. In planning product realization, the following has been determined, as appropriate:

- quality objectives and requirements for the product;
- the need to establish processes, documents, and provide resources specific to the product;
- required verification, validation, monitoring, inspection and test activities specific to the product and the criteria for product acceptance;
- records needed to provide evidence that the realization processes and resulting product meet requirements; and,
- planning output is in a suitable form for methods of operation.

Determination of requirements related to the product:

7.3.2 Requirements related to the product have been determined, including:

- requirements specified by the customer, including the requirements for delivery activity;
- requirements not stated by the customer but necessary for specified or intended use, where known;
- statutory and regulatory requirements related to the product; and,
- determination of any additional requirements.

Review of requirements related to the product:

7.3.3 Requirements related to the product are reviewed. This review is conducted prior to committing to supply a product to customers, and ensures that:

- product requirements are defined;

- contract or order requirements differing from those previously expressed are resolved;
- the organization has the ability to meet the defined requirements; and,
- records of the results of review and actions arising from this review are maintained.

Where the customer provides no documented statement of requirements, customer requirements are confirmed before acceptance.

Where product requirements are changed, it is ensured that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

Customer communication:

7.3.4 Effective arrangements for communication with customers relating to the following are determined and implemented:

- product information;
- enquiries, contracts or order handling, including amendments; and,
- customer feedback, including customer complaints.

Design and development planning:

7.3.5 Design and development of the product is planned and controlled, including determination of the following:

- stages of the design and development process;
- review, verification and validation appropriate to each design and development stage; and,
- responsibilities and authorities for design and development.

Interfaces between different groups involved in design and development are managed to ensure effective communication and clear assignment of responsibility.

Planning output is updated, as appropriate, as the design and development progresses.

Design and development inputs:

7.3.6 Inputs relating to product requirements are determined and records maintained, including:

- functional and performance requirements;
- applicable statutory and regulatory requirements;
- applicable information derived from previous similar designs;
- other requirements essential for design and development; and,
- inputs are reviewed for adequacy, and requirements are complete, unambiguous, and not in conflict with each other.

Design and development outputs:

7.3.7 The outputs of design and development are provided in a form that enables verification against the design and development input, and are approved prior to release. Design and development outputs:

- meet the input requirements for design and development;

- provide appropriate information for purchasing, production and for service provision;
- contain or reference product acceptance criteria; and,
- specify the characteristics of the product that are essential for safe and proper use.

Design and development review:

7.3.8 At suitable stages, systematic reviews of design and development are performed in accordance with planned arrangements:

- to evaluate the ability of the results of design and development to meet requirements; and,
- to identify any problems and propose necessary actions.

Participants in the design and development review include representatives of functions concerned with the design and development stage being reviewed. Records of the results of the reviews and any necessary actions are maintained.

Design and development verification:

7.3.9 Verification is performed in accordance with planned arrangements to ensure that the design and development outputs have met the design and development input requirements. Records of the results of the verification and any necessary actions are maintained.

Design and development validation:

7.3.10 Design and development validation is performed in accordance with planned arrangements to ensure that the resulting product is capable of meeting the requirements for the specified application or intended use, where known. Wherever practicable, validation is completed prior to delivery or implementation of the product. Records of the results of validation and any necessary actions are maintained.

Control of design and development changes:

7.3.11 Design and development changes are identified and records maintained. The changes are reviewed, verified and validated, as appropriate, and approved before implementation. The review of design and development changes includes evaluation of the effect of the changes on constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions are maintained.

Purchasing process:

7.3.12 Purchasing processes are controlled to ensure purchased product conforms to specified purchase requirements. The type and extent of control is applied to suppliers and purchased product is dependent upon the effect of the purchased product on subsequent product realization or the final product.

Suppliers are evaluated and selected based on their ability to supply product in accordance with requirements. Criteria for selection, evaluation and re-evaluation and any necessary actions arising from the evaluation are maintained.

Purchasing information:

7.3.13 Purchasing information describes the product to be purchased, including where appropriate:

- requirements for approval of product, procedures, processes, and equipment;
- requirements for qualification of personnel; and,
- quality management system requirements.

The adequacy of specified purchasing requirements prior to their communication to suppliers is ensured.

Verification of purchased product:

7.3.14 Inspection or other activities necessary for ensuring that purchased product meets specified purchase requirements are established and implemented. Where verification of purchased product is intended at suppliers' premises, including customer verification of such product, the verification activity and the method of product release are stated in the purchasing information.

Control of production and service provision:

7.3.15 Production operations are planned and carried out under controlled conditions, including, as applicable:

- the availability of information that describes the characteristics of the product;
- the availability of work instructions, as necessary;
- the use of suitable equipment;
- the availability and use of monitoring and measuring devices;
- the implementation of monitoring and measurement; and,
- the implementation of release, delivery, and post-delivery activities.

Validation of processes for production and service provision:

7.3.16 Processes for production and service where the resulting output cannot be verified by subsequent monitoring or measurement are validated. This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered. Validation demonstrates the ability of these processes to achieve planned results. Arrangements are established for these processes including, as applicable:

- defined criteria for review and approval of the processes;
- approval of equipment and qualification of personnel;
- use of specific methods and procedures;
- requirements for records; and,
- revalidation.

Identification and traceability:

7.3.17 Product is identified, where appropriate, by suitable means throughout production realization. The status of the product is identified with respect to measurement and monitoring requirements. Where traceability is a requirement, the unique identification of product is controlled and recorded.

Customer property:

7.3.18 Care is exercised with customer property while it is under control or being used. Customer property provided for use or incorporation into product is identified, verified, protected and safeguarded. Any customer property that is lost, damaged or otherwise found to be unsuitable for use is recorded and reported to customers.

Preservation of product:

7.3.19 Conformity of product during internal processing and delivery to the intended destination is preserved. This includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

Control of measuring and monitoring devices:

7.3.20 The monitoring and measurements to be undertaken, and the monitoring and measuring devices needed to assure conformity of product to determine requirements are determined. Processes are established to ensure that monitoring and measurement can be carried out and are carried out in a manner consistent with the monitoring and measurement requirements. Where necessary to ensure valid results, measuring equipment is:

- calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration is recorded;
- adjusted or re-adjusted as necessary;
- identified to enable the calibration status to be determined;
- safeguarded from adjustments that would invalidate the measurement result; and,
- protected from damage and deterioration during handling, maintenance and storage.

The validity of the previous measuring results are assessed and recorded when the equipment is found not to conform to requirements. Appropriate action is taken on the equipment and any product affected. Records of the results of calibration and verification are maintained.

When used in the monitoring and measurement of specified requirements, the ability of computer software to satisfy the intended application is confirmed. This is undertaken prior to initial use and reconfirmed as necessary.

7.4 References

QP7.2.1 Customer Related Processes Procedure
QP7.3 Design and Development (Process) Procedure
QP7.4.1 Purchasing Process
QP7.5.1 Control of Production and Service Provision Procedure
QP7.5.3 Identification and Traceability Procedure
QP7.5.4 Customer Property Procedure
QP7.5.5 Preservation Procedure
QP7.6 Control of Monitoring and Measuring Devices Procedure

Measurement, analysis and improvement

8.1 Scope and Purpose

The quality system described in this section of the QM conforms to the requirements of the standard: Section 8—Measurement, analysis and improvement. This policy defines the corporate commitment to quality.

8.2 Responsibility and Authority (R&A)

General Manager, Business Unit Managers, Manufacturing Segment Managers, Controller, Management Representative, and Human Resource Manager and all other relevant participants, shares the responsibility and authority for overall administration of quality management system activities. Employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements. Employees have been granted authority in order to meet specified requirements.

8.3 Measurement, Analysis and Improvement

General requirements:

8.3.1 ITW Workholding has planned and implemented the monitoring, measurement, analysis and improvement processes needed to:

- demonstrate conformity of the product;
- ensure conformity of the quality management system; and,
- continually improve the effectiveness of the quality management system.

This includes determination of applicable methods, including statistical techniques, and the extent of their use.

Customer satisfaction:

8.3.2 As one of the measurements of the performance of the quality system, ITW Workholding monitors information relating to customer perception as to whether customer requirements have been fulfilled. The methods for obtaining and using this information are determined.

Internal audit:

8.3.3 Periodic internal audits are conducted at planned intervals to determine whether the quality management system:

- conforms to the planned arrangements, to the requirements of this International Standard, and to the quality management system requirements established by the organization; and,
- is effectively implemented and maintained.

An audit program is planned that takes into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods are defined. Selection of auditors and conduct of audits ensures objectivity and impartiality of the audit process. Auditors do not audit their own work.

The responsibilities and requirements for planning and conducting audits, and for reporting results and maintaining records, are defined in a documented procedure.

The management responsible for the audited area ensure that actions are taken without undue delay to eliminate detected nonconformities and their causes. Follow-up activities include the verification of the actions taken and the reporting of verification results.

Monitoring and measurement of processes:

8.3.4 Suitable methods are applied for monitoring and, where applicable, measurement of the quality management system processes. These methods demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action are taken, as appropriate, to ensure conformity of the product.

Monitoring and measurement of product:

8.3.5 The characteristics of the product are monitored and measured to verify that product requirements are fulfilled. This is completed at appropriate stages of the product realization process in accordance with planned arrangements.

Evidence of conformity with the acceptance criteria is maintained. Records indicate the person(s) authorizing the release of product.

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

Control of nonconforming product:

8.3.6 Product that does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming product are defined in a documented procedure.

Nonconforming product is managed by one or more of the following methods:

- taking action to eliminate the detected nonconformity;
- authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer; and,
- taking action to preclude its original intended use or application.

Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained, are maintained.

When nonconforming product is corrected, it is subject to re-verification to demonstrate conformity to the requirements.

When nonconforming product is detected after delivery or use has started, actions are taken appropriate to the effects, or potential effects, of the nonconformity.

Analysis of data:

8.3.7 The determination of, collection, and analysis of appropriate data is completed to demonstrate the suitability and effectiveness of the quality management system, and to evaluate where continual improvement of the quality management system can be made. This includes data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data provides information relating to:

- customer satisfaction;
- conformance to product requirements;
- characteristics and trends of processes and products including opportunities for preventive action; and,
- suppliers.

Continual improvement:

8.3.8 The effectiveness of the quality management system is continually improved through the use of the following:

- quality policy;
- quality objectives;
- audit results;
- analysis of data;
- corrective and preventive actions; and,
- management review.

Corrective and preventive action:

8.3.9 Corrective action is taken to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions are appropriate to the impact of the problems encountered.

A documented procedure for corrective action is established defining requirements for:

- reviewing nonconformities (including customer complaints);
- determining the causes of nonconformities;
- evaluating the need for action to ensure that nonconformities do not recur;
- determining and implementing action needed;
- records of the results of actions taken; and,
- reviewing corrective action taken.

8.3.10 Preventive action is determined to eliminate the causes of potential nonconformities in order to prevent occurrence. Preventive actions are appropriate to the effects of the potential problems.

A documented procedure for preventive action is established defining requirements for:

- determining potential nonconformities and their causes;
- evaluating the need for action to prevent occurrence of nonconformities;
- determining and implementing action needed;
- records of results of action taken; and,
- reviewing preventive action taken.

8.4 References

QP8.2.1 Customer Satisfaction Procedure
QP8.2.2 Internal Audits Procedure
QP8.2.4 Monitoring and Measurement of Product Procedure
QP8.3 Control of Nonconforming Product Procedure
QP8.4 Analysis of Data and Continual Improvement Procedure
QP8.5 Corrective and Preventive Action Procedure

Section VI - Procedures

QP 4.2.3 – Control of Documents

1.0 Purpose:

This procedure complies with Section 4.2.3 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of documents.

3.0 Definitions: none

4.0 Responsibility and Authority:

The Document Control Coordinator (DCC) has responsibility and authority for control of documents; secondary responsibility is assigned to others delegated by this persons.

5.0 Procedure:

1.0 The controlled documents are identified by two methods. First a master list for Quality System related Policies, Procedures, Instructions, controlled forms, and External Standards or Manuals. The Document Control Coordinator is responsible for and has authority over the adding and deletion to the Quality System Documents, Document Master List, all documents will contain a combination of the following a date of issuance, and / or a revision and / or the name of the approving authority.

2.0 Second, for drawings, an equivalent method of control is used. The Engineering Manager or assigned representative is responsible for and has authority over the adding and deletion to the Engineering Document files. Drawings exist in two formats, electronic and hand drawn. As such, controls of these documents are dependent on format. The Engineering Manager is responsible for identifying current issue holders, retrieving the obsolete issue, and replacing it with the changed document, and marking the obsolete one “obsolete or history copy” if retained.

2.1 Electronic drawings will be controlled by designating permissions via the computer LAN network. Permissions will be set at read-only and read-write. Those having read-write permission will be given these responsibilities from the Engineering Manager. Other employees will be given read-only access as required. Electronic data / drawings are backed-up on a regular basis. The computer directories / file structure serves as a “master list”. All documents will contain a combination of the following; a part / product number, a date of issuance, and / or a revision and / or the name of the approving authority.

2.2 Hand-drawn files will be located in a secured area. Drawings released for production purposes will be added to the electronic database as either scanned documents or as new drawings. Those hand drawn files added to the electronic database will be marked accordingly and be considered uncontrolled documents.

3.0 The Document Control Coordinator issues the other type of controlled documentation to areas (referenced above) where needed and keeps a log of how many copies are retained and by whom. When one of these documents has been through an authorized change, the Document Control Coordinator is responsible for identifying current issue holders, retrieving the obsolete issue, and replacing it with the changed document, and marking the obsolete one “obsolete or history copy” if retained. This includes new issues of external nature such as standards and manuals

4.0 The approval process for internal documents (except drawings) involves a draft document or proposal to modify an existing one. Approvals will be obtained through department managers.

6.0 References:

QP4.2.4 Control of Records Procedure
Master List of Controlled Documents

QP 4.2.4 – Control of Records

1.0 Purpose:

This procedure complies with Section 4.2.4 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of records.

3.0 Definitions:

4.0 Responsibility and Authority:

General Manager, Business Unit Managers, Manufacturing Segment Managers, Controller, Management Representative, Engineering Manager and Human Resource Manager have responsibility and authority for control of quality records; secondary responsibility is assigned to others delegated by this person.

5.0 Procedure

1.0 Records will be considered one of the following:

- 1.1 Financial Records
- 1.2 Personnel and Payroll
- 1.3 Environmental and Waste Disposal Records
- 1.4 Quality, Inspection and Certification
- 1.5 Commercial contracts, leases, deeds, etc.

2.0 Additions, revisions and maintenance pertaining to the above documents will be handled as follows:

- 2.1 Financial Records – Accounting will be responsible for retention and maintenance.
- 2.2 Personnel and Payroll – Accounting will be responsible for retention and maintenance of payroll records. Human Resources is responsible for personnel records, including but not limited to: training records, employment records, health records, etc. Records will exist both electronically and in paper form.

2.3 Environmental and Waste Disposal Records – Accounting will be responsible for retention and maintenance.

2.4 Quality, Inspection and Certification –.

2.4.1 Final Inspection - Production Routers will serve as quality records (inspection) pertaining to part quality. These records will be held and maintained in the Troy facility, by the engineering clerk.

2.4.2 Gage Calibration – Retained and maintained by the Document Control Coordinator. Records will be electronic

2.4.3 Sales & Engineering check off – Retained and maintained by the Customer Service Manager. To be referred to as the Order Jacket. Only used for new design orders. Records will held in file cabinets in the Troy facility. Due to engineering locations, records may be temporarily held in the Traverse City facility until engineering releases project to manufacturing.

2.4.4 Customer Contracts (Customer Purchase Orders) – Customer Service is responsible for retention and maintenance. Records are in paper form.

2.4.5 Vendor Contracts (Vendor Purchase Orders) – Records are in electronic form. Accounting is responsible for maintenance.

2.4.3 Internal Audits – Retained and maintained by the Management Representative. To be held in Audit Binder, organized by audit number

2.4.4 Management Reviews – Retained and maintained by the Management Representative. To be located on the company intranet (electronic)

2.5 Commercial Contracts, leases – Accounting will be responsible for retention and maintenance.

3.0 Records are retained per retention matrix: (RF5.02)

3.1 Record retention times are determined based on corporate requirements. Accounting will be responsible for providing these requirements.

3.2 Once documents exceed the required retention time they are destroyed.

Example of Retention Matrix

Record Type	Retention Minimums
Management Review Meetings	3 years
Contract Review & Amendments	5 years
Review of Design Checklist	5 years

6.0 References:

QP4.2.3 Control of Documents Procedure
QP5.1 Management Responsibility Procedure
Quality Records Matrix

QP 5.1 – Management Responsibility

1.0 Purpose:

This procedure complies with Section 5.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of management responsibility and the Management Representative.

3.0 Definitions: none

4.0 Responsibility and Authority:

General Manager, Management Representative, and Business Unit Managers have responsibility and authority for management responsibility; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Organization
ITW Workholding will establish organizational charts reflecting current staffing levels and reporting hierarchy. The org chart will be maintained and held by the HR Manager

2.0 Responsibility
A responsibility matrix will be established to reflect departmental assignments in fulfilling ISO9000:2000 requirements. The responsibility matrix will be maintained and held by the Management Representative.

3.0 Resources
Resources will be managed through various departments.

3.1 Staffing levels will be determined by department managers

3.2 Production resources will be determined by Segment Manufacturing Managers.

3.3 Computer and IT related resources will be managed by the Automotive Business Unit Manager

4.0 Communications
Communications within the company will be conducted via, but not limited to, e-mail, group and individual meetings, phone calls, etc. Management will use these methods to communicate

customer requirements, business performance and adherence to the ISO Quality System.

3.0 Quality System
Management will establish a foundation for implementation and maintenance of the ISO9000:2000 quality system. A Management Representative (MR) will be established. Their responsibilities will include but not be limited to:

3.1 Overall coordination and communication of the ISO quality system. This will involve communicating the status, requirements, and issues pertaining to the ISO quality system, to all affected departments.

3.2 Assume responsibilities of Audit Manager. Schedule and assign audits, schedule and maintain corrective actions and verification.

3.3 Schedule, communicate, and coordinate interaction between ITW Workholding and its ISO registration body. This will include original registration audits and surveillance audits as well as communication with ISO auditors

3.4 Coordinate efforts to maintain and update the quality manual and all its associated policies and procedures. Work with management to assure compliance and enforcement to the quality system.

3.5 Coordinate and manage all management review meetings. Assure that all required topics are covered during this meeting.

4.0 Management Reviews
Management will establish a management review team in order to conduct periodic reviews of the quality system and business issues. This team will involve various departments and will be managed by the MR. See QP5.6

6.0 Customer Focus

1.0 Purchase orders are reviewed for accuracy by an appropriate Sales Staff Member to ensure that ITW Workholding has the capability of meeting customer requirements. This review includes the due date, the quantity required, the price, and the product. Special requirements by the customer are reviewed against past orders for prior approval. Acceptable orders are signed by the Sales Staff Member and forwarded to Order Processing. Orders with new requirements, incomplete requirements, or requirements that we may not be able to achieve, are researched and the customer is contacted.

2.0 If customer approves revisions, order is forwarded to Customer Service. If not approved, order is placed in a Hold status, for weekly review.

- If after reviewing with the customer, revisions are accepted, the order is forwarded to Customer Service.
- If after 1 month of Hold status without resolution, purchase order is forwarded to the Direct Sales Staff Member to finalize the revision with the customer or non-acceptance of the order.

3.0 Customer Service enters the Purchase Order. Order Verification is then reviewed for accuracy. Any revisions are forwarded back to Customer Service for correction.

7.0 References:

QP5.6 Management Review Procedure
ITW Workholding Organization Chart
ITW Workholding Responsibility Matrix
ITW Workholding Process Flow

QP 5.6 – Management Reviews

1.0 Purpose:

This procedure complies with Section 5.6 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of management reviews.

3.0 Definitions: none

4.0 Responsibility and Authority:

General Manager, Management Representative, and Business Unit Managers have responsibility and authority for management responsibility; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 The Management Review meetings are to be held at least quarterly. The date and times for the meetings are to be established by the Management Review Team. This team will consist of representatives from Manufacturing, Sales, and Engineering. If required, member from HR and Accounting may be included.

2.0 The Management Representative (or assigned substitute) will develop and establish the agenda for the scheduled meetings and arranges for an individual to take meeting minutes. Items such as delivery performance, customer concerns and complaints, internal audits, continuous improvement projects, preventative actions, corrective actions, company level data reviews as well as reviewing the minutes of the last meeting will be discussed. Meeting agenda, topics, and objectives will be developed and posted on the Management Review intranet site http://intranet/Communications%20Meeting/default.aspx. This site will be used to track meeting history. Significant quality concerns and rejects are also reviewed.

3.0 The Management Representative chairs the meeting. The Management Representative, after recording attendance, will review previous meeting action items to ensure the proper corrective action has been taken. The Manager responsible for the corrective action item presents the corrective action implemented and provides evidence to demonstrate the effectiveness of the corrective action. Updated documentation is submitted for approval.

4.0 Any customer complaints, returns, or concerns that have been received during the quarter are reviewed for status, root cause, and corrective action. Sales Managers are responsible for reporting on customer concerns.

5.0 Internal Audits performed during the quarter are reviewed per procedure. Staff Management will report on any corrective action occurring within their departments.

6.0 Company level data on quality trends is reviewed. The Management Representative and Business Unit Managers are responsible for presenting the updated information from the QOS meetings. This includes continuous improvement projects, corrective actions specific to production processes, and preventative actions. Items requiring corrective actions are assigned to the appropriate manager and time lines for action are set. The Management Representative documents this meeting and retains all information from management reviews in the management review folder as evidence.

QP 6.2.2 – Competence, Awareness and Training

1.0 Purpose:

This procedure complies with Section 6.2.2 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of training activity.

3.0 Definitions: none

4.0 Responsibility and Authority:

General Manager, Business Unit Managers, Manufacturing Managers, Management Representative, Engineering Manager, Controller and Human Resource Manager all have responsibility and authority for control of training activity; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 The Human Resource Department is responsible for maintaining training records.

2.0 The Human Resource Department is responsible for the creation, revision, and control of facility job descriptions.

2.0 The Human Resource Department is to be assisted in the job description creation, revision, and approval process by the department for which the job description is to be applicable to.

2.1 The job descriptions are to be signed off, dated, and maintained by the Human Resource Department.

3.0 The primary training method for new employees is On-The-Job Training (OTJ). OTJ is conducted for new employee orientation classes, outlining the basic Safety Regulations, Company Rules, and Operating Policies. Ref: Training matrix, Job Qualification check-Off

4.0 Individual and department training needs are reviewed on an on-going basis per requests from department Managers / Leaders, and individual employees.

5.0 Training needs are determined through evaluating skill inventories, Creating an annual training plan, including required training not yet completed and additional training identified. The training plan may include both internal and external training. Ensure that training expenses are included in the annual budget.

6.0 All employees must submit training requests (see WI.18) to department Managers for job related seminars, conferences, course and degree programs that meet developmental and individual needs which will improve job skills and aid in career advancement within the organization.

7.0 Front-line leaders, working with Human Resources, record on-the-job training for employees directly under their supervision.

8.0 Training records for employees are stored in the employees file located in the Human Resource office.

9.0 Training effectiveness is assessed through on-going process audits, management review, reject rate measurable, and employee evaluations.

10.0 ITW provides the proper infrastructure and work environment through the efforts of corporate planning.

6.0 References:

QP5.1 Management Responsibility Procedure
QP5.6 Management Review Procedure
ITW Workholding Quality Policy
ITW Workholding Training Records

QP 7.2.1.1 – Determination of Requirements Related to Product (Formal Quote)

1.0 Purpose:

This procedure complies with Section 7.2.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of customer-related processes as they relate to a formal quote.

3.0 Definitions: none

4.0 Responsibility and Authority:

The General Manager, Business Unit Managers, Sales Manager, Manufacturing Managers, and Engineering Manager all have responsibility and authority for contract review; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

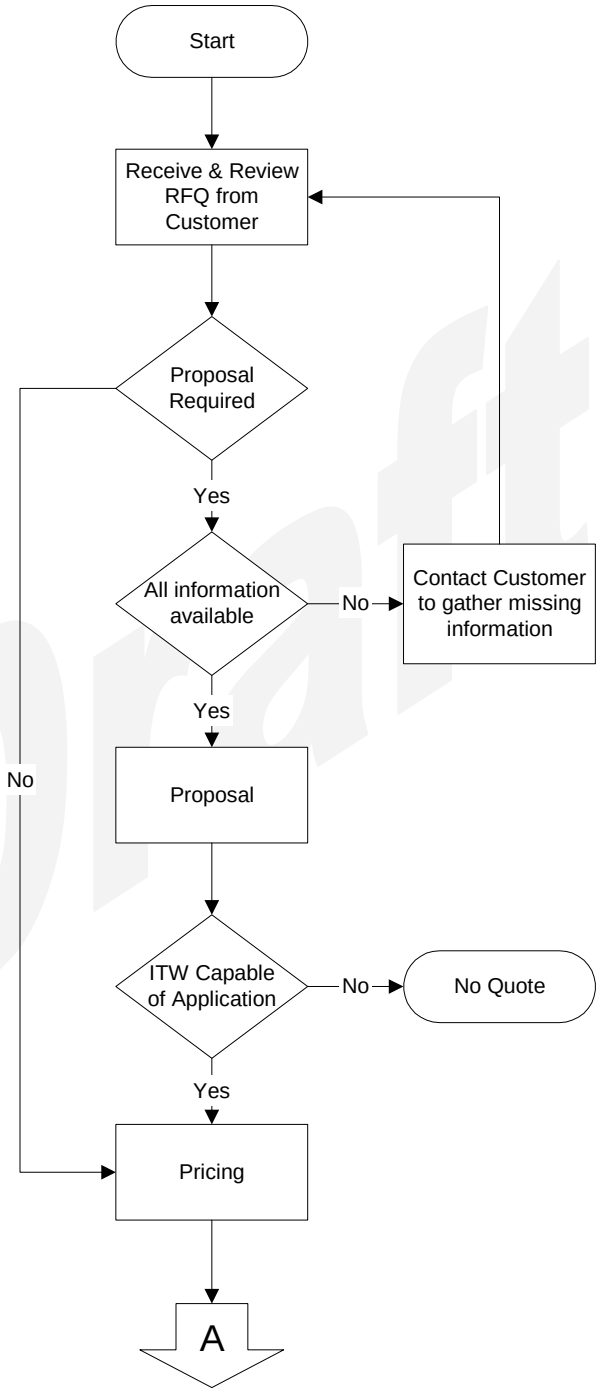
1.0 Receive and Review formal request for quote. Based upon request, a Sales Staff Member will determine if proposal is required. If proposal is required, RFQ will be reviewed for accuracy. If information is inadequate further customer contact is required. If proposal is not required, RFQ is forwarded to Pricing.

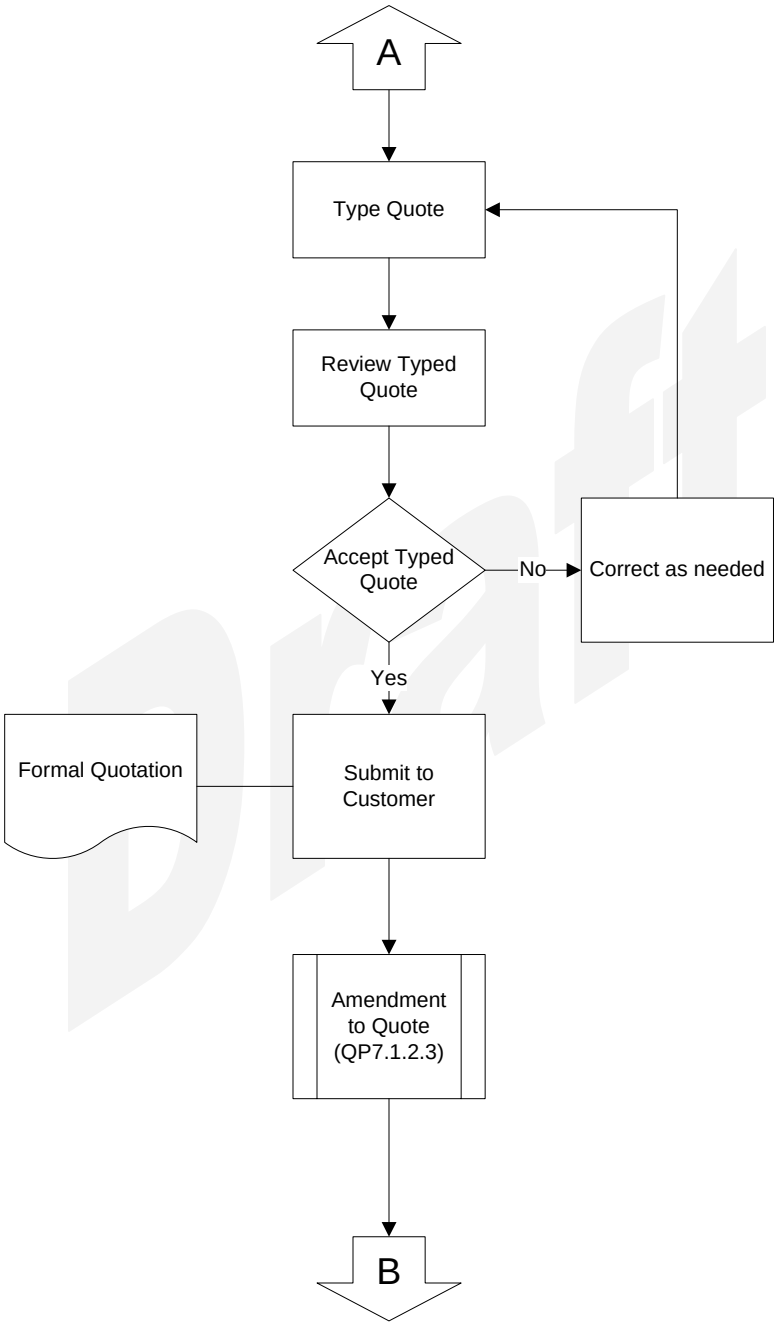
2.0 Once all information is received, RFQ is forwarded to Proposal Department for design and capability evaluation. If acceptable, Proposal Department generates a written description and a proposal sketch (if required) of projected design and submits to Pricing. If RFQ is not acceptable, ITW Workholding will No Quote the proposal.

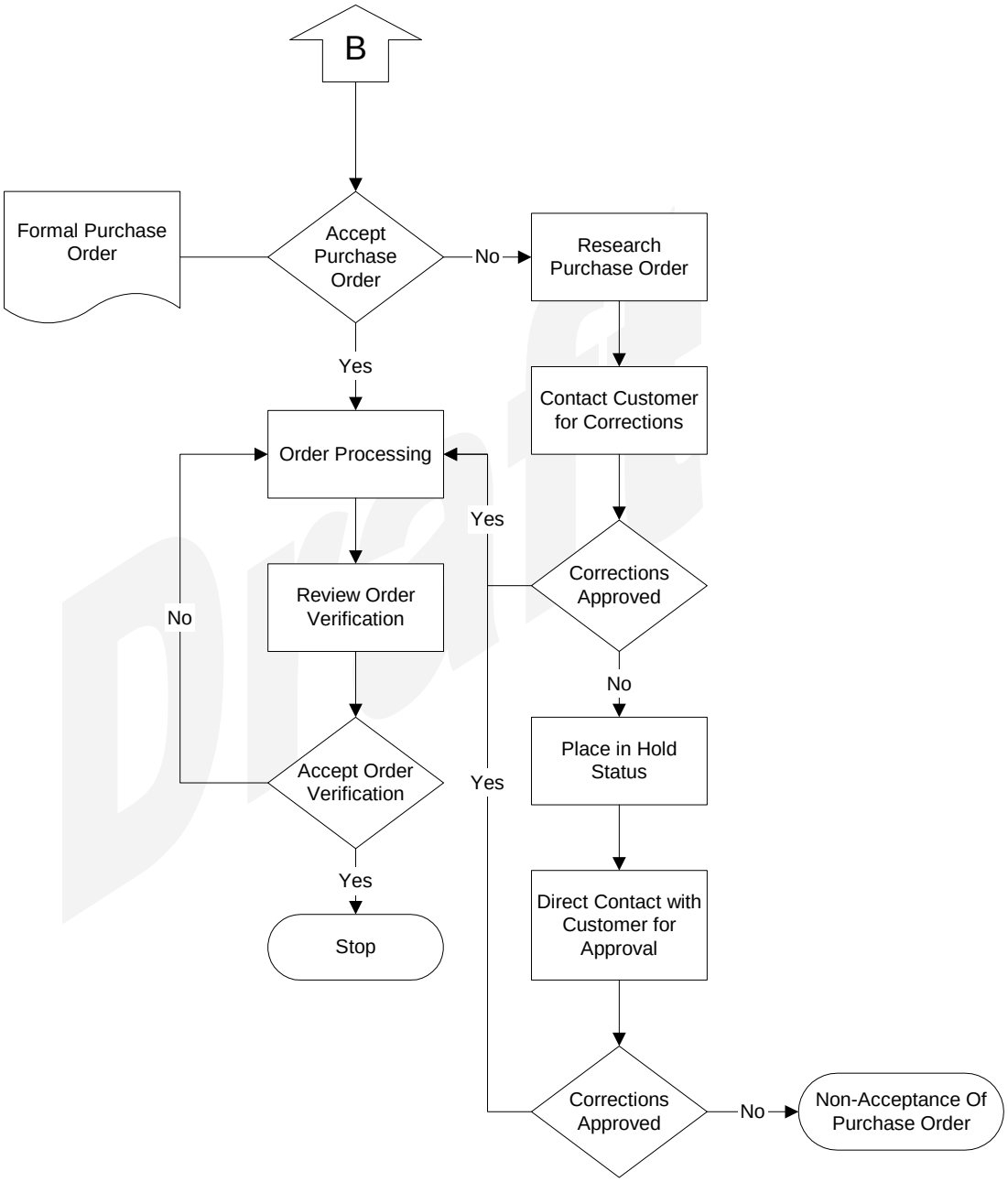
3.0 Proposal Package is forwarded to Pricing.

4.0 After Pricing, Proposal Package is forwarded to a Sales Staff Member for review. Upon review acceptance, Proposal Package is sent to Quote Processing.

5.0 Proposal Package, along with RFQ, are processed at Quote Processing. After Formal Quote is typed, Sales Staff review the Quote (Estimate). Upon review acceptance, Quote is sent to customer. Refer to Procedure QP 7.2.1.3 for Amendments to Contracts.


Start
Receive & Review RFQ from Customer
Proposal Required
Yes
All information available
No
Contact Customer to gather missing information
Yes
No
Proposal
ITW Capable of Application
No
No Quote
Yes
Pricing
A


A
Type Quote
Review Typed Quote
Accept Typed Quote
No
Correct as needed
Yes
Formal Quotation
Submit to Customer
Amendment to Quote (QP7.1.2.3)
B


B
Formal Purchase Order
Accept Purchase Order
No
Research Purchase Order
Yes
Contact Customer for Corrections
Order Processing
Yes
Review Order Verification
Corrections Approved
No
No
Place in Hold Status
Accept Order Verification
Yes
Yes
Direct Contact with Customer for Approval
Stop
Corrections Approved
No
Non-Acceptance Of Purchase Order

QP 7.2.1.2 – Determination of Requirements Related to Product (No Formal Quote)

1.0 Purpose:

This procedure complies with Section 7.2.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of customer-related processes as where no quote is required

3.0 Definitions: none

4.0 Responsibility and Authority:

The General Manager, Business Unit Managers, Sales Manager, Manufacturing Managers, and Engineering Manager all have responsibility and authority for contract review; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

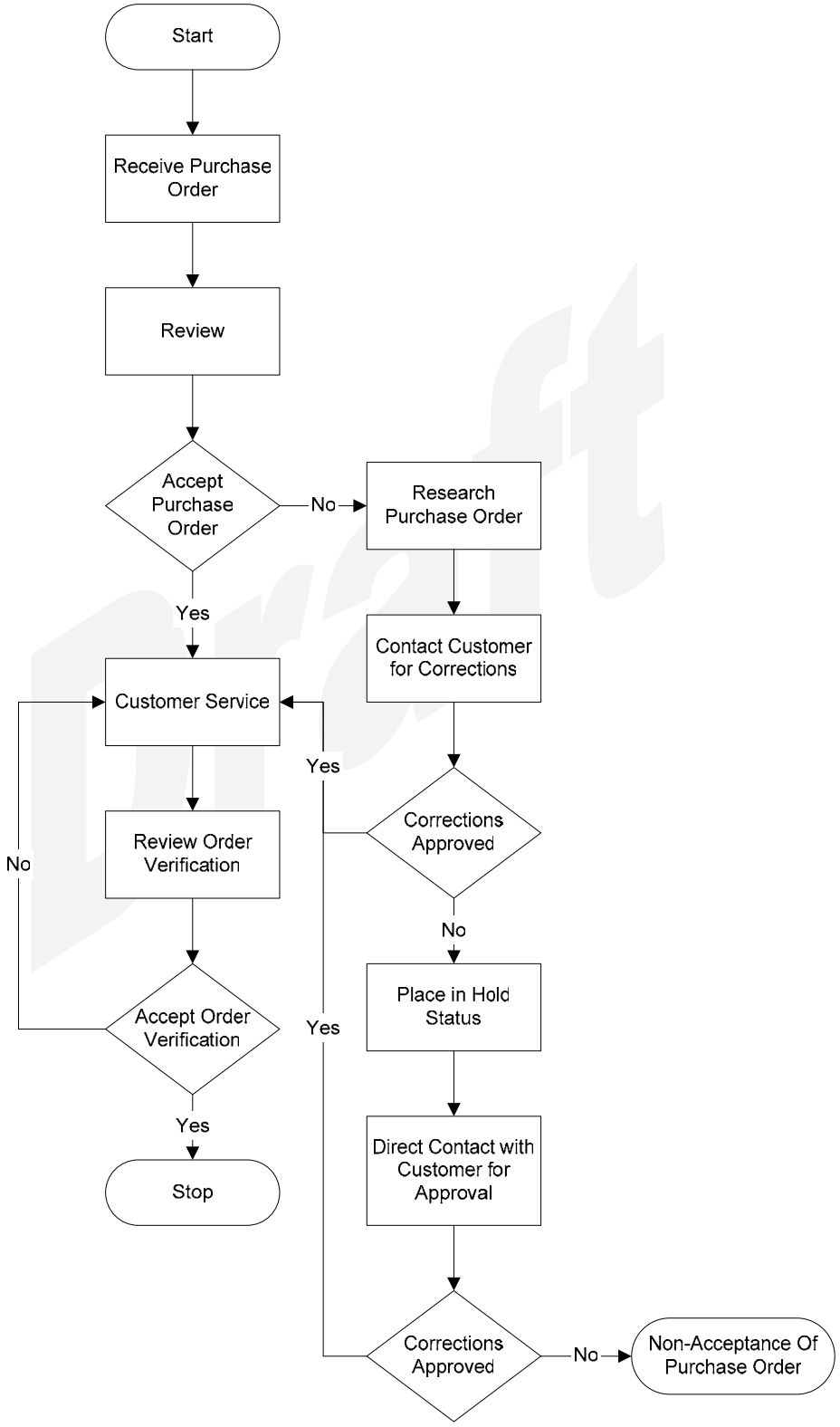
1.0 Purchase orders are received to the Sales Department via accepted industry standards.

2.0 Purchase orders are reviewed for accuracy by an appropriate Sales Staff Member to ensure that ITW Workholding has the capability of meeting customer requirements. This review includes the due date, the quantity required, the price, and the product. Special requirements by the customer are reviewed against past orders for prior approval. Acceptable orders are signed by the Sales Staff Member and forwarded to Order Processing. Orders with new requirements, incomplete requirements, or requirements that we may not be able to achieve, are researched and the customer is contacted.

3.0 If customer approves revisions, order is forwarded to Customer Service. If not approved, order is placed in a Hold status, for weekly review.

- If after reviewing with the customer, revisions are accepted, the order is forwarded to Customer Service.
- If after 1 month of Hold status without resolution, purchase order is forwarded to the Direct Sales Staff Member to finalize the revision with the customer or non-acceptance of the order.

4.0 Customer Service enters the Purchase Order. Order Verification is then reviewed for accuracy. Any revisions are forwarded back to Customer Service for correction.


Start
Receive Purchase Order
Review
Accept Purchase Order
No
Research Purchase Order
Yes
Contact Customer for Corrections
Customer Service
Yes
Review Order Verification
Corrections Approved
No
No
Place in Hold Status
Accept Order Verification
Yes
Yes
Direct Contact with Customer for Approval
Stop
Corrections Approved
No
Non-Acceptance Of Purchase Order

QP 7.2.1.3 – Determination of Requirements Related to Product (Contract Amendment)

1.0 Purpose:

This procedure complies with Section 7.2.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of customer-related processes regarding amendments to customer purchase orders (contracts)

3.0 Definitions: none

4.0 Responsibility and Authority:

The General Manager, Business Unit Managers, Sales Manager, Manufacturing Managers, and Engineering Manager all have responsibility and authority for contract review; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Amendment to contracts are initiated by any of the following, but not limited to, Customers, Engineering, Sales or Processing.

2.0 Customer is contacted as needed for approval of amendment, and revision of Purchase Order, if required. If amendment is not accepted by the customer, acceptance of contract, as is, will be determined by appropriate Business Unit Manager and / or General Manager.

3.0 Sales order is changed per agreed upon amendment

QP 7.3 – Design and Development

1.0 Purpose:

This procedure complies with Section 7.3 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of design and development activity.

3.0 Definitions: none

4.0 Responsibility and Authority:

The Engineering Manager and Design Engineers and designated personnel have responsibility and authority for design and development; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Order for Contract Review is accepted. Engineering Manager or an appointed representative receives Engineering Jacket from sales department. Engineering Manager reviews job, determines scope of project and schedules job accordingly.

2.0 Engineering Manager or an appointed representative assigns job/project to the appropriate Engineer.

3.0 Engineer produces a layout based on Customer Requirements.

4.0 Engineering Manager or an appointed representative assigns a team to review the Layout. The team performs a design review to verify that the Layout agrees with the Customer Requirements. If it does not agree, then an investigation is done and the team returns to step 3.

5.0 If the Layout agrees with the Customer Requirements, then the Layout is sent to the customer for approval.

6.0 If not approved by customer, the Layout returns to step 3. If Layout changes are made, the team updates the documents and communicates the changes to all resources. Changes are logged onto the layout drawing as revisions.

7.0 If approved by customer, Engineering Manager or an appointed representative assigns detailing of design to appropriate Engineer.

8.0 After detailing, Engineering Manager or an appointed representative assigns final check of design to appropriate Engineer.

8.1 Design, Detail and Check can be performed by one individual as appropriate. Authorization to be given by Engineering Manager based on scope of project and engineers skill level.

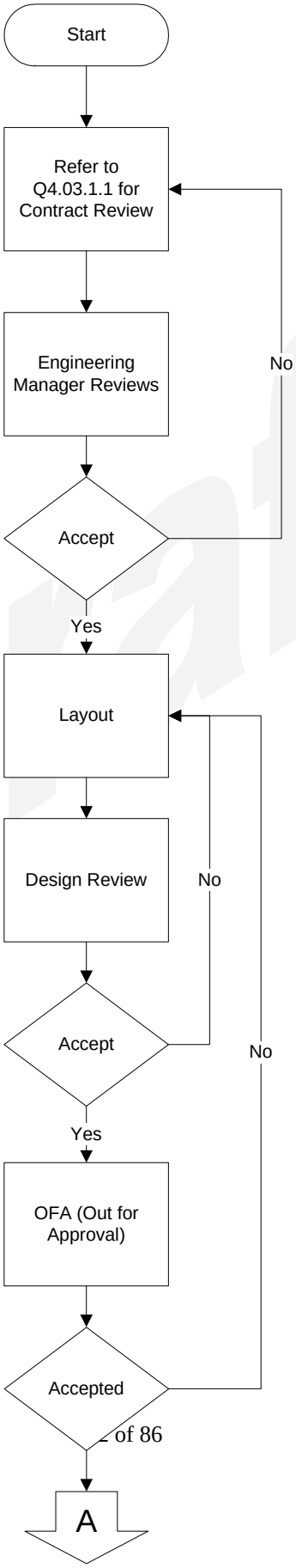
9.0 The design is released to Manufacturing.

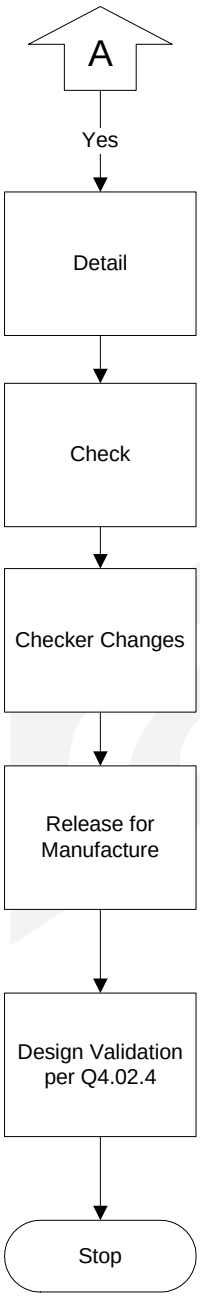
10.0 Final Design Validation will be performed per Qualification Runoff Procedure.

11.0 Changes to design that occur during or after design verification are logged onto the detail or assembly drawings as revisions.

11.1 Design revision wording to be recorded by engineer. Revisions should be considered a summary of the change being recorded. Resultant updated drawing may reflect inclusive changes (i.e. revision of tightened tolerance may include addition of grind marks or updated GD&T)

12.0 Revision logs are located on detail and assembly drawings only. No central log is maintained.


Start
Refer to Q4.03.1.1 for Contract Review
Engineering Manager Reviews
No
Accept
Yes
Layout
Design Review
No
Accept
No
Yes
OFA (Out for Approval)
Accepted
A


A
Yes
Detail
Check
Checker Changes
Release for Manufacture
Design Validation per Q4.02.4
Stop

QP 7.4.1 – Purchasing Process

1.0 Purpose:

This procedure complies with Section 7.4.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of purchasing and control and evaluation of suppliers.

3.0 Definitions: none

4.0 Responsibility and Authority:

The General Manager, Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Management Rep, and Controller have responsibility and authority for control and evaluation of suppliers and purchasing; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Purchase orders are to be considered contracts between ITW Workholding and its suppliers

2.0 All terms and conditions are agreed upon prior to issuance of purchase order.

2.1 In those instances where time constraints do not allow for agreement, the supplier will provide price prior to, or included with, shipments.

3.0 Purchase orders will exist in one of four formats

3.1 Electronic – This will be the main method of creation and storage. Purchase orders will exist on the ITW Workholding business database.

3.2 Paper – This will be the second method.

3.3 Verbal – This will be the last method, and least likely to be used

3.4 Blanket – This is most commonly used in replenishment systems such as nuts, bolts and tooling. Also this type of Purchase Order is used for frequently used services such as chrome plating, black oxide, etc.

4.0 Electronic purchase orders will be used for all finished goods purchases.

4.1 Electronic purchase orders will contain the following, but not be limited to:

4.1.1 Vendor

4.1.2 Item

4.1.3 Description

4.1.3.1 Notes will also be included in the description. These notes will contain any information that may not be contained on the manufacturing blueprint. Items such as, but not limited to, special marking requirements, critical features, coating requirements, job number, operation number, special process requirements (such as oversized threads), etc.

4.1.4 Price

4.1.5 Due Date

4.2 Electronic purchase orders will be communicated to suppliers in one of three ways:

4.2.1 Paper – Printed copies will be sent. These printed copies will have complete terms and conditions listed

4.2.2 Fax

4.2.3 E-Mail – This may be used to send a copy of the purchase order via an attachment using e-mail technology.

5.0 Paper purchase orders will be used in those occurrences where pricing, terms, and conditions are pre-arranged. Also, this method will be used for the purchase of all non-finished goods items.

5.1 Paper forms will exist that can be used. These forms will contain a company header, with pertinent company information.

5.1.1 Other forms may exist. These would be generic forms purchased through office supply providers.

5.2 Purchase made using paper forms will include the following, but not be limited to:

5.2.1 Raw Material – These forms must be retained for a minimum of one year for traceability requirements

5.2.2 Office supplies

5.2.3 Building and ground maintenance

5.2.4 Commodity items such as screws

5.2.5 Tooling

6.0 Verbal purchase orders will only be used in the following circumstances

6.1 Access to a computer or paper forms is unavailable

6.1.1 In those instances, documentation, either electronic or paper, must be completed when access is available

6.2 Pre-arranged terms and conditions are agreed upon and the item that is being purchased has NO impact on product quality

6.3 Format for verbal P.O.'s will be the following:

6.3.1 Purchasers initials followed up by the order date

6.3.1.1 Example: CB081004 (Chris Brown, 08/10/04)

7.0 Blanket purchase orders will be used in replenishment systems. These will generally be agreed upon between the supplier and ITW, and involve items such as nuts, bolts, seals, tooling inserts, etc.

8.0 Due to spending limitations, some purchases may need prior approval before any agreement can be reached. The limitations will be as follows:

8.1 Operating Expenses – those items including, but not limited to, production supplies, machine repair, and packaging

8.1.1 $1,000 – Mfg. Support

8.1.2 $2,000 – Cell Leader

8.1.3 $5,000 – Mfg. Manager, Controller

8.1.4 $15,000 – Business Unit Managers / Operations Managers

8.1.5 $50,000 – General Manager

8.2 Cost of Sale items, including, but not limited to, raw material, resale products, and outsourced services

8.2.1 $25,000 – Mfg. Support, Cell Leader

8.2.2 $50,000 – Business Unit Manager

8.2.3 Over $50,000 – General Manager

8.3 Further detail pertaining to purchases related to capital goods items, budgeted items, computer related, etc., contact accounting for approval limits.

9.0 Purchase orders will be considered complete when all goods have been received and accepted.

10.0 Subcontractor Selection and Monitoring

10.1 When a new product or a new Subcontractor is required, it is the Manufacturing Process Department's responsibility to identify the Subcontractor and to obtain approval for the Subcontractor prior to purchasing products or services.

10.2 The processor or ITW representative contacting a Subcontractor is responsible for assuring that all documentation, policies, and procedures are communicated and followed.

a. confidentiality agreements.

b. Quality policies and procedures.

c. Payment policies and procedures.

d. Any other pertinent documents, policies and procedures.

10.3 The accounting department will maintain all legal documentation. i.e. confidentiality agreements, payment agreements, contracts, etc.

10.4 The quality department will maintain all quality documentation. i.e. discrepant material records, inspection documentation, certifications, etc.

10.5 When required ITW Workholding uses customer-designated subcontractors

10.6 All purchased products must meet ITW Workholding standards for safety, environmental, and quality as well as all governmental regulations

10.7 Selection of new Machining Subcontractors will be based on several factors, including, but not limited to:

· Quality

· Price

· Delivery

· Perceived Quality (including any certified quality programs)

· Capabilities

· Expertise

· References/Reputation

· Location

· Appearance (Organization, Cleanliness, etc.)

10.8 Selection of Commodity and other Subcontractors will be based on several factors, including, but not limited to:

· Quality

· Engineering specifications

· Price

· Delivery

· Availability

· Product Lines

· Location

· Service

· Technical Abilities

10.9 Approval of Subcontractors will be handled within the organization unless the customer designates the subcontractor. Quality, Processing, Manufacturing and Customer Service personnel will meet to discuss and finalize the decision.

10.10 The Processing Departments are responsible for maintaining and updating the Approved Subcontractor List. Processing, Manufacturing and Customer Service can purchase only from approved Subcontractors.

10.11 Accepted subcontractors not already registered as ISO9000:2001 are encouraged by ITW Workholding to develop a quality system similar to or in accordance with ISO9000:2001.

11.0 Subcontractors will be monitored based on delivery, quality, communication and responsiveness.

11.1 Monitoring of subcontractors will be based on the following guidelines:

RATING	**Subcontractors Performance Record / Rating**		
	Delivery performance is computed quarterly unless a significant drop in a subcontractor's performance is noted and requires immediate attention.		
	Excellent	100% on time	No action required
	Good	90 % to 99%	Yearly notification and corrective action report & response required.
	Fair	60% to 89%	Immediate notification and Corrective action / response required
	Poor	Anything below 59%	Immediate notification and placed on probation / Corrective action / response required. Subcontractor is in jeopardy of losing "approved status"

RATING	Quality performance is computed quarterly unless a significant drop in a subcontractor's performance is noted and requires immediate attention. A corrective action can be issued to a subcontractor on an individual issue dependent upon the magnitude of the issue and frequency.		
	Excellent	100%	No action required
	Good	90 % to 99%	Yearly notification and corrective action response is required.
	Fair	60% to 89%	Immediate notification and Corrective action response is required
	Poor	Anything below 60%	Immediate notification and placed on probation. Corrective action response is required. Subcontractor is in jeopardy of losing "approved status".

7.0 References:

QP8.4 Data Analysis and Continual Improvement Procedure
QP8.5 Corrective and Preventive Action Procedure
Purchase Order
ITW Workholding Purchasing Software

QP 7.5.1 – Control of Production and Service Provision

1.0 Purpose:

This procedure complies with Section 7.5.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of production.

3.0 Definitions:

Servicing – For the intent of the Quality Manual, this represents ITW Workholding providing customers with unpaid or paid maintenance service to the customer. Service may be the result of installation, product non-conformance, or End User runoff.

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for control of identification and traceability; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Process Planning

1.1 Process planning with assistance from: engineering, quality control, and any "other" support departments as needed, will compile process information from process prints, specification sheets, and "other" documentation provided with order.

- Work Method
- Process
- Sequence of Operations
- Type of equipment required
- Control of special process and their pre-qualification
- Designated special characteristics

Process planning uses this information to determine production process (routing) and equipment need to manufacture product.

1.2 Supervisor & Leaders write work instructions with assistance from: machine operators, Engineering, and Quality Control. Supervisor & Leaders review and revise operator work instructions, as required. Work Instructions are posted at the appropriate work center (s).

1.3 The Manufacturing segment managers approve work instructions.

2.0 Process Control

ITW Workholding identifies and plans their production, installation, and servicing processes which affect quality. These processes are executed under these conditions:

1.1 Documented procedures defining processes
1.2 Use of suitable, working equipment, in a suitable working environment.
1.3 Compliance with reference standards or codes, quality plans, or documented procedures.
1.4 Monitoring and control of suitable process parameters and product characteristics.
1.5 The approval of processes and equipment as needed.
1.6 Criteria for workmanship is documented in a clear and practical manner.
1.7 Suitable maintenance of equipment to ensure optimum capability

We allow only qualified personnel using only qualified equipment to carry out any special manufacturing or servicing process, and verify through monitoring and control that the process meets the specified requirements. We specify the requirements that must be met in order to qualify any special process operations. We maintain records for qualified processes, including equipment and personnel, where needed.

3.0 Cleanliness of Premises

ITW Workholding maintains an appropriately efficient and clean working environment for its employees and customers

4.0 Storage and Preservation of Equipment, Tooling and Fixtures

4.1 Equipment will be maintained preventive maintenance noted in 7.0 of this procedure. Equipment temporarily taken out of service will be locked out per current safety guidelines.

4.2 Gages (Precision Measuring Instruments), will be classified as either company owned or employee owned. Company owned gages will be maintained within a controlled environment and are to be used for final piece acceptance. Company owned gages will be located within the Quality Control department. Employee owned gages will be maintained by the employee and stored in their personnel cabinets. Employee owned gages will be considered for reference only.

4.3 Tooling, as defined in this procedure, will pertain to fixturing used in the manufacturing process. Fixtures will be stored and maintained within the individual departments. Fixtures will be marked with designated numbers, and oiled for preservation

5.0 Contingency Plan

ITW Workholding has contingency plans in place that will significantly protect our production capabilities in a time of emergency, not related to an act of God.

6.0 Designation of Special Characteristics

ITW Workholding complies, and documents the compliance, with any special characteristics required by our customers.

7.0 Preventative Maintenance

7.1 Leaders / Department Heads identify the Key Process Equipment on the Manufacturing floor. This list is forwarded to the Operations Manager.

7.2 Together they prepare a Preventive Maintenance Schedule for the Key Process Equipment.

7.3 They develop and approve a maintenance system, and schedule for all designated equipment, based on manufacturer recommendations and standard practices. Review downtime, repair and quality records/history. Modifies equipment maintenance procedures based on experience and tracks maintenance costs and documents objectives for improvement. Reviews the current Predictive Maintenance Input such as manufacturers recommendations, operator recommendations, etc. and use this information in the creation of and modification of the maintenance schedule.

7.4 Once there is a prepared Preventive Maintenance Schedule, some tasks are assigned to operator and other tasks to the lead operator. Operators are informed when to do their part and where to record the details of their maintenance, on the machine log that is assigned to their machine. The lead operator reviews the schedule to determine when the Preventive Maintenance they are responsible for is due. Coordinates availability of equipment, parts and material, personnel, and outside services to ensure that tasks can proceed as scheduled. Records work performed, time used, and parts consumed.

7.5 Once there is a prepared Preventive Maintenance Schedule, some tasks are assigned to operator and other tasks to the lead operator. Operators are informed when to do their part and where to record the details of their maintenance, on the machine log that is assigned to their machine. The lead operator reviews the schedule to determine when the Preventive Maintenance they are responsible for is due.

7.6 If Preventive Maintenance is due according to the schedule, leaders perform the Preventive Maintenance and update the Preventive Maintenance log.

7.7 If replacement parts are needed and are available, they replace the parts, using the manufacturer’s manual as a guide. If the parts are not available, the Leader purchases the necessary parts.

7.8 Once Preventive Maintenance has been performed and completed, the Leader verifies that the equipment is operational.

7.9 When enough data is available, the Department Leader or the Operations Manager may modify the schedule to include the new predictive findings from the log.

7.10 If tooling, equipment or gaging is taken out of use for any period of time, the tool, gage, or equipment is packaged, preserved, and stored per the procedure for preservation.

8.0 Process Monitoring and Operator Instructions

ITW Workholding uses process monitoring and operator instructions, where applicable, to document our manufacturing process. Each of our employees understands the work instructions and the objectives of their respective job assignments.

9.0 Verification of Job Setups

Qualified personnel verify job setups prior to a job being run. Job instructions are available for set-up personnel, and statistical methods are used for verification when appropriate.

10.0 Validation of Job Setups and Product

10.1 A qualified machine operator initiates the setup and determines parameters for setup, equipment prior to process commencement.

10.2 The machine operator performs setup and inspection with assistance from: engineering, quality control, and any "other" support departments as needed. The machine operator performs setup and produces first piece. Completes inspections, initiates any changes if needed. Completes and submits all required documentation. When required submits parts to appropriate department for testing/Inspection and approval.

10.3 After successful completion and approval of first-piece part the process and equipment are approved. If first-piece parts are nonconforming, the operator makes necessary changes and / or adjustments and repeats the first-piece process until 100% conformance is achieved.

10.4 The Machine Operator will start production run upon satisfactory completion of all tests, inspections, and revisions. Machine Operator will monitor and control process to assure product conformance. (see work instructions)

10.5 Upon completion of entire process, product is moved to Quality Control for final piece acceptance.

10.5.1 Those items that are accepted are moved to staging area for final determination (storage, shipment, etc.)

10.5.2 Those items found non-conforming are handled per QP8.3

11.0 Product Storage
Refer to procedure QP7.5.5

12.0 Delivery

12.1 Finished goods are in storage per procedure QP 7.5.5

12.2 All product is released from the Staging / Inventory area and moved to the Shipping Department. Shipping clerk makes transportation arrangements based on customer request or best way. Approved sources are used to transport per approved subcontractor list.

12.3 Delivery performance will be tracked based on ship date vs. due date. This performance will be reviewed monthly at Management Review meetings. Trends reflecting the objective of 100% on time delivery will be addressed through corrective actions.

13.0 Servicing

13.1 Types of service (warranty, paid or installation) will be determined at point of contact.

13.1.1 Warranty service will be determined based on runoff results, customer complaint (corrective action), or time in service.

13.1.2 Paid service will be determined based on customer request for services done to finished product that has expired any warranty claim.

13.1.3 Installation at customers facility

13.2 Service Manager will assign technician to perform service required based on technicians knowledge of customer and product.

13.3 Technician will review sales order and drawings for pertinent information. If needed, technician will contact Designer and sales contact for additional information.

13.4 Upon completion of the service, the technician will complete a Customer Service report (QSF4.19.1) and route to Service Manager, Sales and Engineering.

7.0 References:

QP 7.5.5 Preservation of Product
QP 8.3 Control of Non-Conforming Product
QSF4.19.1 Customer Service Report

QP 7.5.3 – Identification and Traceability

1.0 Purpose:

This procedure complies with Section 7.5.3 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of product identification and traceability.

3.0 Definitions: none

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for control of identification and traceability; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

11.0 Material as received is identified using two methods. Certain material received is delivered in boxes with the part number and description on a label on the outside of the box as received. Certain material arrives in bulk form (raw steel) and these are identified by the supplier. Each piece is marked with the job number and detail number.

2.0 The Receiving clerk verifies receipt of material, components, and other incoming items, identifying the shipment by P.O. number and other characteristics. Material received without identification is held in receiving until identified. The receiving clerk marks (the material if necessary) and logs into Computer database. Moves material to appropriate holding or storage area.

3.0 When the material begins to be manufactured, or processed it may be identified by the routing paperwork or vendor shipper that accompanies the product or processed material throughout the manufacturing operations. The router shows the job number and operation number. All subcontractors' shippers must contain either the job number or sales order number. Identification During Production. Material identified as nonconforming is segregated and identified nonconforming material. Per: nonconforming material procedure.

3.1 Departments exist where no production router is used. These departments are designed so that product is self contained and does not leave that department. In these instances, two methods of identification and traceability may be used.

3.1.1 Product will be held in containers showing part number and quantity. Upon completion of processes, product will be marked with a completion date.

3.1.2 Production routers may be printed, but not updated electronically. Items will be marked with sales order number. Printed routers may be updated to reflect production progress

4.0 Finished product will be identified using either customer requirements or ITW Workholding standards. One of the following methods will be used:

11.0 Stamped when applicable by metal punch

11.1 Electro chemical etch when applicable

11.2 Bagged and/or tagged due to size constrictions

11.3 Placed in a staging box or on a staging skid that is marked with the job number.

5.0 When, specified in the contract, material that is received which requires unique identification will be detailed on shop traveler/router and/or blue print.

6.0 All material will be traceable to a P.O. or other characteristics logged into computer database. Traceability to P.O. is maintained throughout the operation using Job order, tags, and/or other methods of identification used in the operation. The receiving P.O. database and Job order will be maintained and used for record keeping.

6.0 References:

QP8.2.4 Monitoring and Measurement of Product Procedure
QP8.3 Control of Nonconforming Product Procedure
QP8.4 Data Analysis and Continual Improvement Procedure
QP8.5 Corrective and Preventive Action Procedure
Manufacturing Order (Router)
Traceable Inspection Record

QP 7.5.4 – Customer Property

1.0 Purpose:

This procedure complies with Section 7.5.4 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of customer property.

3.0 Definitions:

Sample Parts – Product used in the testing and tryout phase of assembly approval. Sample parts typically are not returned to the customer

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for control of customer property; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 When product, packaging, or tooling is received, the receiving clerk determines by the shipping paperwork if this is our purchase or if it is customer supplied. For customer supplied product, the receiving clerk fills out a paper receiving document and tags / marks the part where appropriate. The receiving document will be distributed to Sales / Engineering, Shipping, and one copy remains with the product.

2.0 Customer supplied product will be placed at a pre-determined location, by the receiving clerk, for review. Based on nature of return, product will be distributed as follows:

2.1 Customer sample parts used for design tryout purposes will be forwarded to the engineering department (depending on size). After review, sample parts will be moved to a staging area located in the assembly department. Large sample parts will move directly to the staging area.

2.2 Product returned for rework purposes will be moved to the assembly area for assessment. For both warranty and paid reworks, product will be held for disposition using either pallets or containers.

2.3 Customer product returned for reasons other than those in 2.1 and 2.2 will remain in the pre-determined location pending resolution.

6.0 References:

QP8.2.4 Monitoring and Measurement of Product Procedure

QP 7.5.5 Perservation of Product

1.0 Purpose:

This procedure complies with Section 7.5.5 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of preservation of product.

3.0 Definitions:

Electronic ERP System – Mapics Syteline version 7.3

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for preservation of product; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Handling

1.1 Lift truck operators are trained in the proper use of the equipment they use for safety and for minimizing damage to the materials and products they handle. The Human Resource Manager is responsible for training scheduling and records of training.

1.2 Material is maintained in plastic totes or on die carts.

1.3 Manufacturing builds orders as scheduled on scheduling system. Upon completion of operations, product is placed in boxes located in the Staging / Inventory area if required or shipped per instructions. Product will be packaged in order to minimize damage during transit.

1.4 Handling totes are kept in the Staging / Inventory area.

1.5 Shipping ships material per customer request or best method.

2.0 Storage

2.1 Shipping Clerk receives raw material and components. Material is checked in by clerk. Required updates to electronic ERP system are completed

2.2 Material is moved if acceptable to designated storage areas and placed in specific rows or on specific shelves. This product and location information is entered into the inventory control system database by the Staging / Inventory Clerk.

2.3 Raw material is released to manufacturing as scheduled, dependent on priority.

2.4 Manufacturing builds order

2.5 Completed order is moved to Staging / Inventory area. Product is stored and preserved using rust preventative methods. Product pending final assembly will be stored in the Staging area, in properly marked containers, awaiting assembly. Any product that appears damaged will be reported to the Quality Manager.

2.6 Product that is ready for shipment, will be moved to the shipping department. The shipping clerk processes the order and ships according to customer request or best way.

5.0 References:

QP7.5.3 Identification and Traceability Procedure
QP8.2.4 Monitoring and Measurement of Product Procedure
QP8.3 Control of Nonconforming Product Procedure

QP 7.6 – Control of Monitoring and Measuring Devices

1.0 Purpose:

This procedure complies with Section 7.6 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of monitoring and measuring devices.

3.0 Definitions:

4.0 Responsibility and Authority:

The Manufacturing Manager(s) in conjunction with the Quality Control Technician has responsibility and authority for control of monitoring and measuring devices; secondary responsibility is assigned to others as delegated.

5.0 Procedure:

1.0 SELECTION – Measuring devices are determined based on historical need and design requirements

1.1 Based on design requirements, as stated on the manufacturing blueprint, measuring devices will be selected dependent on accuracy of measurement required.

1.1 Machine operators will determine gage selection based on process and tolerance requirement. If operator does not have necessary measuring equipment available, they must contact Quality Control in order to obtain said gage or have Quality Control inspect those features.

1.2 All employee owned gages are to be considered for reference only. All final measurements (those measurements that determine final part acceptance), will be performed within Quality Control using calibrated gages

1.3 All company owned measuring devices will be verified.

2.0 MAINTENANCE- Only those measuring devices used in product verification MUST be maintained within the gage software. Employee owned gages MAY be contained within the gage software depending on resource availability

1.1 On the first workday of each month, a list is printed from the program by Quality Control or trained designee of the gages/testers that are due that month for verification. The list is used in date order to ensure that the verifications are completed

1.2 Measuring devices are retrieved in date due order. The measuring device is verified prior to cleaning or adjusting and the actual reading found in it's current condition is recorded into the gage tracking software program for that gage identifier.

1.3 Any condition comments are also noted as found (dirty, rusty, damaged etc). If any inaccuracy condition is found, Quality Control or designee will determine status in regards to repair or de-commission

1.4 Any problems found are noted in the gage software

1.5 If no problems are noted with the measuring device, or if all items stated have been resolved, the measuring device is cleaned, lubricated as needed, re-verified, returned to its original location, and the software program is updated. The measuring device is re-marked to show the next verification date needed per the software program

2.0 FREQUENCY- The Quality Department initially uses manufacturers recommendations or company experience to set the verification and / or calibration frequency. As each measuring device goes through the cycle or if problems are found through general use, this frequency is re-evaluated and can be modified based on data and reports.

2.1 The frequency may be increased or decreased depending upon history findings for the type of gage and the specific measuring device. Quality Control will have the responsibility to and authority for determining the initial frequency and modifying the historical frequency.

3.0 Repair, Replace, Store - measuring device replacement, and repair are handled by the Inspection department using current company guidelines.

3.1 Gages that require repair are sent to a gage repair facility repaired and re-certified or replaced.

3.2 When a measuring device is not going to be used for a period of time it is selected for storage notification to the Inspection Department who will check it, clean and lubricate it and store it, in the inspection area with location updated in the software program.

4.0 OUTSIDE CALIBRATION- If a type of measuring device is determined to be beyond the scope of the in-house abilities by Quality Control, MFG. Management is notified to determine the best source for outside calibration or design. This applies to CMM, Hardness Testers, and that type of device. Certificates of conformity and Qualified Subcontractors are required for this, and the quality department tracks and documents the Subcontractors abilities and performance.

6.0 References:

QP8.2.4 Monitoring and Measurement of Product Procedure
Calibration software

QP 8.2.1 Customer Satisfaction

1.0 Purpose:

This procedure complies with Section 8.2.1 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of customer satisfaction.

3.0 Responsibility and Authority:

The General Manager, Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Management Rep, and Controller have responsibility and authority for control of customer satisfaction; secondary responsibility is assigned to others delegated by these persons.

4.0 Definitions: none

5.0 Procedure:

1.0 Data is collected via three sources.

1.1 Direct contact through customer service.

1.2 Input via customer survey located on the company's website

1.3 Distribution of customer survey via outside sales contacts. Preferred customer (those comprising 80% of business revenues) will be the main source for this feedback.

2.0 Data will be collected via input through the ITW Workholding website (http://www.itwchucks.com/Custsurveyrev1.htm) or through direct contact with customers.

3.0 The collected data will be input into an Excel spreadsheet for analysis (Customer Satisfaction Analysis). The data will be analyzed and reviewed at Management review meetings. Completed surveys will be maintained by the Management Representative, to be kept in their records for the appropriate time period per retention matrix.

4.0 Customer satisfaction is measured and improved through a disciplined, scheduled and documented process. Customer satisfaction measurements shall be:

4.1 Delivery

4.2 Quality

4.3 Product Selection

4.4 Service

4.5 Cost

5.0 Trends are documented and compared to past company history and the records are maintained.

6.0 References:

ITW Workholding Management Review Meeting Records
Corrective Action Form
Customer Satisfaction Survey

QP 8.2.2 Internal Audits

1.0 Purpose:

This procedure complies with Section 8.2.2 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of internal audits.

3.0 Responsibility and Authority:

The Audit Manager and the internal audit team have responsibility and authority for control of internal audits.

4.0 Definitions: none

5.0 Procedure:

1.0 Set Audit Schedule
The Audit Manager maintains a schedule of internal audits based on the status and importance of the activities involved, as determined by customer complaints and non-conformance. All elements of the quality system will be audited a minimum of once a year. The audit number and lead auditor will be on the schedule in the month that the audit is to be performed.

2.0 Conducting and Documenting the Audit
A qualified auditor from an area other than the one being audited, conducts the audit. Audit criteria will be based on two requirements:

1.1 General Observations: Auditors may observe non-conformances during day to day working conditions. Auditors can then investigate and record non-conformances accordingly. Auditors may also encounter areas of compliance. In this instance the auditor may record this and submit for review.

2.2 Scheduled: These will be pre-planned audits where the auditor will have defined criteria, based on existing procedures. Auditors will interview various departmental employees based on their level of involvement within that process

All audit results are documented on the auditors form and any nonconformance's found are recorded in page 1 of QSF4.17.1. Observations may also be recorded on this sheet, but are not required to have a corrective action plan.

3.0 Request Corrective Action

The Audit Manager assigns responsibility for distribution of all QSF4.17.1 forms to the appropriate people. All reports must be distributed with in 5 days of the audit.

4.0 Document and Submit Corrective Action
The responsible person (any person assigned to a corrective action) completes section 2 of the internal Audit Corrective Action Request (QSF4.17.1) form with the corrective action plan, root cause and an implementation date. This form must be submitted to the Audit Manager within 10 working days for approval.

5.0 Close Audit Non-Conformances
Audit Manager and/or audit team review open corrective action items for effectiveness after the implementation date has passed and records results on Section 3 portion of the internal audit corrective action request form (QSF4.17.1)

6.0 Summary of Internal Audits
Audit Manager submits the internal audit corrective log to the Management Representative who then takes it to the Management Review Meeting.

6.0 References:

QP5.1 Management Responsibility Procedure
Management Review Meeting Records

Auditors Documentation:

Auditors Forms	QSF4.17.1
Audit Calendar and Corrective Action Log	Auditors Schedule

QP 8.2.4 – Monitoring and Measuring of Product

1.0 Purpose:

This procedure complies with Section 8.2.4 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of monitoring and measurement of product.

3.0 Definitions: none

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for control of monitoring and measurement of product; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Receiving **-** The product related to raw materials, subassemblies, assemblies, and processed material (heat treat, plating, etc.) are received and visually inspected by the Receiving Department. When the inspection is completed, if acceptable, a receiver form is filled out and attached to the material or product. Product does not have a receiver if it is waiting visual inspection. After visual inspection, should further dimensional or functional inspection be required, the product is moved to the Quality Department. Upon successful completion the inspector initials the receiver. The inspector moves product to Staging / Inventory area. Non-conforming product in all areas is handled per procedure QP8.3

2.0 In-Process **-** When each operator or machinist completes their work, they are required to inspect and verify his/her operation for correctness and completion. Upon inspection acceptance, each operator initials the router to identify that they have inspected their part of the process.

3.0 Final - Final product is visually checked, verification is done to ensure all previous inspection has been completed, and as applicable, the router is signed to indicate ready for Staging / Inventory. Upon completion, the router and all other paperwork applicable to the order is given to the Staging / Inventory clerk. Once product is dispersed to the proper location (assemblies or inventory), paper router is retained per retention matrix: (R4.05.02 Retention Matrix) and serves as a quality record.

6.0 References:

QP4.2.3 Control of Documents Procedure
QP4.2.4 Control of Records Procedure

QP8.2.2 Internal Audit Procedure
QP7.5.1 Control of Production and Service Provision Procedure
QP7.5.3 Identification and Traceability Procedure
QP8.3 Control of Nonconforming Product Procedure
QP8.5 Corrective and Preventive Action Procedure

QP 8.3 – Control of Non-Conforming Product

1.0 Purpose:

This procedure complies with Section 8.3 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of nonconforming product.

3.0 Definitions: none

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Sales Manager, Engineering Manager, Inspectors, and operators have responsibility and authority for control of nonconforming product; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Vendor and Outside Sources

1.1 Non-conforming product is found through inspection (including receiving) or by customer notification and returned to our facility. It is immediately isolated or separated from acceptable product and is identified using a red tag or "other" acceptable form / tag, where applicable, or by placing the nonconforming product into an identified container such as a scrap barrel, or an identified location for all non-conforming material. The person finding the nonconforming material does the isolation and identification. A Discrepancy Ticket will be written up for internal non-conformances showing the total quantities and more details of the discrepancies.

2.0 Internal Sources

2.1 Non-conforming product will be determined at one of two locations.

2.1.1 At the process. Operators who determine they have created a non-conformance or have received a non-conformance will identify it via tag or other appropriate means. Product will be held for determination.

2.1.2 Quality Control. Product that has entered quality control and is found to be non-conforming will be tagged and held pending determination.

3.0 Reviews Non-Conformance

3.1 Non-conformances will be evaluated for severity. Severity will be determined based on impact to the design.

4.0 Disposition of all non-conformities:

4.1 Disposition on all non-conformities will be scrap, rework, or use as is. Depending on severity, final disposition will be determined by the engineering department. Items and issues requiring a permanent change will be addressed per Engineering Change. Those items determined to be scrap will be disposed of in an appropriately marked container. After disposition has taken place, product will be processed and released to manufacturing. Those items determined as rework, will be repaired as necessary and inspected for conformity.

4.2 Quality Control Re-inspects reworked material and verifies that disposition and rework actions are adequate to resolve the nonconformance problem. (with engineering guidance)

6.0 References:

QP4.2.3 Control of Documents Procedure
QP4.2.4 Control of Records Procedure
QP7.5.3 Identification and Traceability Procedure
QP8.2.2 Internal Audit Procedure
QP8.2.4 Monitoring and Measurement of Product Procedure
QP8.5 Corrective and Preventive Action Procedure
Discrepancy Notification Report
Management Review Meeting Records

QP 8.4 – Analysis of Data

1.0 Purpose:

This procedure complies with Section 8.4 of ISO 9001: 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of analysis of data and planning for continual improvement.

3.0 Definitions: none

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Management Rep, Internal Audit Manager, Human Resource Manager, Controller, Sales Manager and Engineering Manager are responsible for analysis of data and planning for continual improvement; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 ITW Workholding collects and analyzes data to determine the suitability and effectiveness of the quality management system and to identify improvements that can be made.

1.1 Data is analyzed to provide information on the following:
- Customer satisfaction;
- Conformance to customer requirements;
- Characteristics of processes, product and their trends;
- Suppliers.

1.2 Quality Control maintains the following information:
Scrap rate; Nonconforming product rate.

2.0 Customer satisfaction measurables are monitored according to Procedure QP 8.2.1.

3.0 Supplier measurables are monitored according to Procedure QP 7.4.1.

4.0 Continual improvement of processes is also planned and managed via the contract review process, corrective and preventive action, and through overall project and product management efforts.

5.0 Continual improvement of the quality management system is addressed via each Management Review Meeting and via facilitation of, or response to, the following:

- Quality policy;
- Quality objectives;
- Audit results (both internal and 3rd party);
- Analysis of data;
- Corrective and preventive action;
- Customer complaints;
- Supplier monitoring;
- Management Review.

6.0 References:

QP7.4.1 Purchasing Procedure
QP8.2.1 Customer Satisfaction Procedure
QP8.2.2 Internal Audit Procedure
Management Review Meeting Records

QP 8.5 – Improvement

1.0 Purpose:

This procedure complies with Section 8.5 of ISO 9001 2000 as applicable to the quality management system of ITW Workholding.

2.0 Scope:

This procedure is intended to ensure control of corrective and preventive action.

3.0 Definitions: none

4.0 Responsibility and Authority:

Business Unit Managers, Manufacturing Managers, Management Rep, Internal Audit Manager, Human Resource Manager, Sales Manager and Engineering Manager have responsibility and authority for corrective and preventive action; secondary responsibility is assigned to others delegated by these persons.

5.0 Procedure:

1.0 Corrective Actions will be required for the following instances (identifying non-conformance):

1.1 Non-Conforming Product – Discovery takes place either through in-process inspection or final inspection. Non-conformities will be recorded on the discrepancy form within Quality control. Any product requiring corrective action will be held and a determination made via engineering or other designated party. Preventive action (if any) will be recorded on discrepancy form

1.2 Customer Complaints – These will be determined based on severity and customer. Those that require documentation will be recorded on the Customer Service Report and distributed accordingly. Determination will be made as to root cause department and what actions were taken to correct the problem. Minor customer complaints will not be recorded. These will range from pricing to possibly delivery (see below).

1.2.1 Corrective Actions based on delivery will be dealt with as follows:

- Delivery trends that reflect non-conformance to the objective of 100% on time will be reviewed through a corrective action. Preventive action (if any) will be recorded.

- Delivery complaints by customers will be reviewed based on severity and customer importance (based on revenue).

- Customer satisfaction surveys that reflect poorly on delivery performance may be handled through corrective action, based on trending.

1.3 Misc. – This area will cover areas not mentioned above, such as internal audits, service, etc.

2.0 Cause of non-conformance
Once a non-conformance has been identified, cause will need to be determined. This can be achieved through several means:

2.1 Assign a team – This may be required for those instances where a thorough examination of the process is needed, and multiple departments are involved. In these cases, several root cause techniques may be employed such as fishbone diagrams, 5 whys, etc.

2.2 Individual assignment – In areas such as internal audits, delivery delays, etc. corrective actions may be handled by individual managers. In these instances they may determine root cause and handle accordingly.

2.2.1 There may be times where a corrective action is assigned an individual manager and they may assemble a team to determine root cause.

2.2.2 Delivery delays may require immediate corrective action and time may not allow for development of a team to determine cause and resolution.

3.0 Implementation
Once cause has been discovered, a corrective action will be taken (if required). In those instances where no corrective action is needed, approval will be required by departmental managers, based on nature of non-conformance. When corrective action is needed, it will be determined and implemented based on who(m) determined cause (see 2.0 above).

4.0 Corrective actions will be reviewed at Management meetings / reviews and Quality Team meetings. Corrective actions will be reviewed with any / all “effected” employees. If additional input is required, the proper employees / departments will attend for further discussion.

6.0 Records will be maintained in various formats. These records will be maintained by the Document Control Coordinator and/or the ISO Coordinator. Formats for corrective actions will exist, but not be limited to, the following formats:

6.1 Omniform (electronic) – This will be used to record customer service calls, internal audits and part non-conformities. This will be the main area for corrective actions.

6.2 MS Office – In instance where Omniform is not applicable, MS Office may be used (Word or Excel).

6.3 Records will be held per record retention requirements.

7.0 Preventive Actions
Based on severity and opportunity, preventive actions will be implemented. Preventive actions / requirements will be determined based on 2.0 above (team or individually). Preventive actions will be recorded within same record as corrective action and will be documented as such. In those instances where no corrective action occurred, yet preventive action is taken, records will be maintained as in 6.0 above.

6.0 References:

QP4.2.3 Control of Documents Procedure
QP4.2.4 Control of Quality Records Procedure
QP5.1 Management Responsibility Procedure
QP5.6 Management Review Procedure
QP8.2.2 Internal Quality Audits Procedure
QP8.3 Control of Nonconforming Product Procedure
ITW Workholding Management Review Meeting Records

Section VII – Reference Approvals

ITW Workholding QS-9000 / TE Supplement
Policy Guide

Doc. ID: Q4.00 **Revision #**:

Quality System:

ITW Workholding designs and builds workholding equipment for the Automotive and General Industry business markets. Workholding product is used on general manufacturing equipments such as lathes, mills and grinders. ITW Workholding product is designed to hold (grip) the customer's product while it is being processed. Because this product is widely considered as tooling and/or equipment, ITW Workholding has adopted and adheres to the QS:9000 1998, TE Supplement Quality System.

Implementation:

This manual is to be used by all ITW Workholding employees. All employees must comply with its policies and procedures. Copies of this manual will be available per the distribution list stated previously. This manual is intended to be used to continuously improve the business operations of ITW Workholding and thereby satisfy the needs and requirements of our customers.

Maintenance:

This manual consists of 21 sections corresponding to the elements contained within the QS-9000 quality system. Each element begins by defining the purpose of that element. This gives a basic description of the impact that element has on our business practices. The purpose of the policy is followed up with a detailed outline defining how the policy will be carried out and responsibilities required therein. The manual is maintained and updated by the document control coordinator(s). Revisions are detailed and revision levels noted. All distributed manuals are listed as uncontrolled and maintained as such.

Approval:

This manual has been reviewed and approved by the General Manager of ITW Workholding:

Leo Waltenich
General Manager

Chris Brown
Management Representative

ITW Workholding QS-9000 / TE Supplement
Policy Guide

Doc. ID: Q4.00 **Revision #**:

Quality Statement:

ITW Workholding strives to provide our customers with the highest quality Workholding solutions available to the market. In order to achieve total customer satisfaction, we shall adhere to the following objectives:

100% on-time delivery
Zero defects
Value added service and support
Engineered solutions
Employee development and diversity

We will commit to continuously improve each facet of our business operations through implementation of, and compliance to our QS9000/TE Supplement Quality System.

Leo Walterich
General Manager