

PRECISION GAGE & TOOL CO.

Quality Manual

Revision 21

5/3/2021

Conforms to ISO 9001:2015

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1.0 Welcome to Precision Gage & Tool Co.

Vision Statement

Precision Gage & Tool Co. is proud of our manufacturing heritage providing trust, reliability, and accuracy in all its standard and non-standard products. PG&T will continue to provide excellent service and excellent manufactured products.

History

- **1929** - Precision Gage & Tool Co. (PG&T) was founded and Incorporated by James Jacklin in Dayton, OH. The company was housed in an old grain mill built in the 1840's on the banks of the Erie Canal. In 1930, PG&T worked closely with Bernard Hegman of Lowe Brothers Paint to develop what is now known as the Hegman Gage. PG&T became a leader in the manufacturing of high-accuracy fineness of grind gages and film applicators for the worldwide paint and ink industries.
- **1958** - Victor O. Waltz purchased the company from James Jacklin. PG&T started manufacturing more complex and custom gaging.
- **1960** - Victor O. Waltz's son Victor R. Waltz and his wife Gwendolyn J. Waltz joined the staff at PG&T.
- **1966** - Victor O. Waltz and his son Victor R. Waltz became business partners.
- **1970** - Precision Gage & Tool Co. added the railroad gaging product line. PG&T is a major manufacturer of railroad gaging in the United States. PG&T also does the certification for many large rail manufacturers and railroads.
- **1987** - Victor and Gwendolyn's daughter Vicki Waltz joined the firm. Vicki is now President of Precision Gage & Tool Co. Over the years, PG&T added to its capability a line of specialized gaging equipment for railroads, and a wide variety of custom gages and fixtures for a broad range of industrial applications.
- **1998** – Precision Gage & Tool Co. acquired the complete line of world-renowned Sheffield gages, including Precisionaire®, Micronaire® and related air gage tooling and accessories. In addition, PG&T has added the P-400 Metrology Interface to its line of air gaging products.

Precision Gage & Tool Co. is a woman owned company and is certified with WBENC (Women's Business Enterprise National Council) and WOSB (Woman Owned Small Business). PG&T is very proud to have participated with a non-profit organization called "Project Peanut Butter" who targets global starvation mainly in Africa. PG&T made a custom gage and trained those involved for "Ready to Use Therapeutic Foods" (RUTF). Precision Gage & Tool Co. has also been awarded the Goering Center of Family & Private Business Award for being in business 50+ years.

2.0 Quality Policy

The management team has developed the following Quality Policy which governs day-to-day operations to ensure quality. Our Policy conveys our company's commitment to quality, continual improvement, and most of all to meeting our customer's needs.

PG&T's management will periodically review and will assure that this policy is understood, implemented, and maintained at all levels of the company including the new employee induction process.

Quality Policy

As a team, PG&T's Quality Policy will focus on enhancing customer satisfaction by providing:

- a) **Quality products that meet or exceed our customer's and legal requirements**
- b) **Products delivered on time without defects**
- c) **Continuous improvement of processes and performances to offer quality products at cost effective prices**

PG&T will use the Plan, Do, Check, Act Cycle (PDCA) in our ISO Quality Management System.

3.0 Scope of the PG&T Quality Management System

PG&T has determined the scope of the Quality Management System (QMS) as follows:

The design, manufacture, distribution, repair, and certification of high precision inspection gages for multiple industries and machined parts. Product categories include: fineness of grind gages, railroad gages, custom and standard attribute, fixed, air and air/electronic gaging.

The facility is located at:

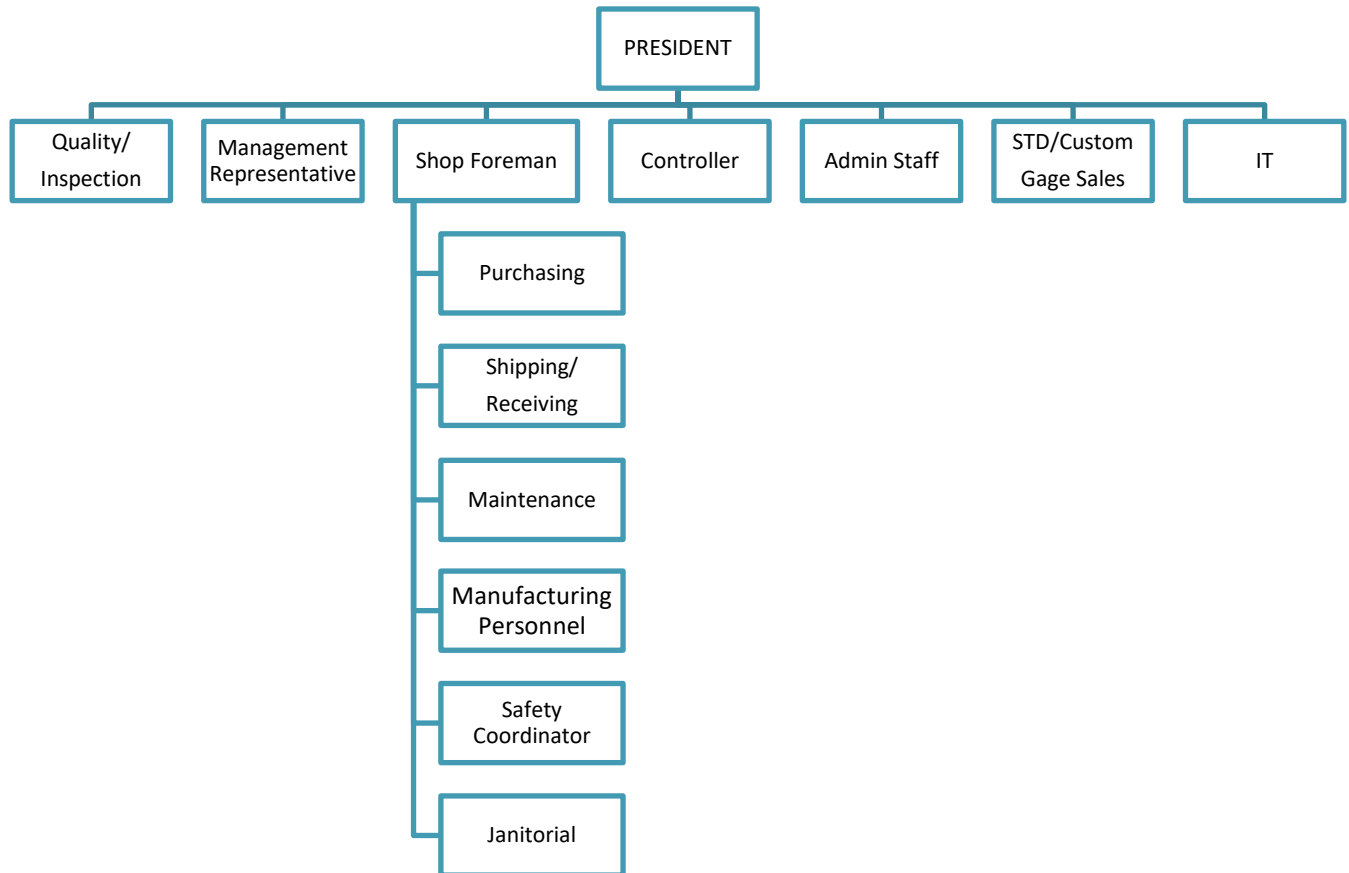
Precision Gage & Tool Co.
375 Gargrave Rd.
Dayton OH 45449
Phone: (937)866-9666
Fax: (937)866-9661
Web: www.pgtgage.com

The company claims no exclusions from the ISO 9001:2015 standard.

4.0 Context of the PG&T Organization

PG&T has reviewed and analyzed key aspects of itself and its stakeholders to determine the strategic direction of the company. This requires understanding internal and external issues that are of concern to PG&T and its interested parties; the interested parties are identified per the document **Risk Matrix**. Such issues are monitored and updated as appropriate. This information is then used by management to determine the company's strategic direction.

Organization Chart



5.0 QMS Processes

PG&T has adopted a process approach for its management system. It reduces the potential for nonconforming products and services discovered during final processes or after delivery. Nonconformities and risks are identified in real time by actions taken within each of the top-level processes.

It is noted that not all activities are considered “processes” – the term “process” in this context indicates the activity has been elevated to a higher level of control and management oversight.

PG&T has identified these top-level processes/activities.



These processes/activities are discussed more in *Appendix A*.

Additional QMS documented procedures have been developed to support the QMS and its processes; these are listed in *Appendix B*. This list only provides some top-level procedures, and does not reflect the entirety of all QMS Documented Procedures.

Throughout the year, metrics data is measured and gathered in order to present the data to the management team. The data is then analyzed by the management team in order for them to set goals and make adjustments for the purposes of long-term continual improvement.

Appendix A: Overall Process Sequence & Interaction

Quality Objectives

Company quality objectives are established by management and are documented. These objectives are measurable and reviewed on a regular basis during the management review meetings

A. Products will meet or exceed manufacturing expectations, customer specifications and legal requirements

a. Process Control (DP-8)

This is to ensure that work is scheduled for production in a manner to meet customer delivery deadlines and to ensure that manufacturing operations meet the relevant drawing and sales order requirements.

b. Inspection & Testing (DP-9)

To safeguard the production of high-quality products and services and to confirm that purchased products and materials meet the quality requirements. This describes when inspection and testing is required. The organizational function is responsible for inspection, record keeping, and dispositioning of items during and after the inspection process.

B. PG&T will ship products in the time frame established between PG&T and the customer

a. Handling, Storage, Packaging, and Delivery (DP-13)

PG&T will certify no product will be shipped without the completion of final inspection. PG&T will confirm that the product is adequately identified and preserved during handling, storage, and shipment.

C. PG&T will use continuous improvements on process management including QMS to provide quality products

a. Monitoring and Improvement (DP-18)

Our objective is to identify and monitor various processes within PG&T to ensure the quality objectives are met. PG&T will identify the responsibilities for monitoring process performance and reporting on the performance achieved. PG&T will define the responsibilities for initiating corrective actions when the performance criteria is not met. Most importantly, PG&T will make sure that corrective actions initiated are successful.

These Process Flows are viable options where we may have an allowable margin for variation

Sales/Administration

Sales Administration	Input	Output	Measurables
<ul style="list-style-type: none"> •Employees with Sales Responsibility 	<ul style="list-style-type: none"> •Customer Orders •Customer Satisfaction 	<ul style="list-style-type: none"> •Communication to Customer •Orders to Mfg Floor •Preparation for Shipping 	<ul style="list-style-type: none"> •Shipment Report •Warranty Report

Design Review

Design Review	Input	Output	Measurables
<ul style="list-style-type: none"> •President •Shop Foreman •Sales Contract 	<ul style="list-style-type: none"> •Customer Communication •Customer/PGT Drawings •Identifying Revision Level 	<ul style="list-style-type: none"> •Create Parts List •Release Order for Manufacturing 	<ul style="list-style-type: none"> •Shipment Report •Warranty Report

Purchasing

Purchasing	Input	Output	Measurables
<ul style="list-style-type: none"> •For Manufacturing 	<ul style="list-style-type: none"> •Receive Order Info •Communicate Between Various Sources •Purchase Material •Monitor Inventory Parts 	<ul style="list-style-type: none"> •Manufacture of Product •Monitoring Quality Supplier Products 	<ul style="list-style-type: none"> •Shipping Report •Warranty Report

Manufacturing

Manufacturing	Input	Output	Measurables
<ul style="list-style-type: none"> •Shop Forman •Purchasing •Manufacturing Staff 	<ul style="list-style-type: none"> •Drawings •Work Instructions •Verbal Instructions •In Process/or Final Inspection 	<ul style="list-style-type: none"> •Finished Product •Certifications •Shipment 	<ul style="list-style-type: none"> •Backlog Report •Shipment Report •Warranty Report

Support

Resources	Training Awareness	Competency	Infrastructure	Organizational Knowledge
<ul style="list-style-type: none"> •Employees must have a minimum of 5 year experience •Monitor Reputation of Vendors We Use for Product Parts, etc. 	<ul style="list-style-type: none"> •Each Year Management Review Training With Each Employee •Risk Management Review & Training 	<ul style="list-style-type: none"> •Monitors and Updates Employee Competence in Their Job 	<ul style="list-style-type: none"> •PG&T has the right equipment, employees, and vendor system to build and maintain the products we sell •Update & continue to evaluate our software to get realtime in information 	<ul style="list-style-type: none"> •Understands Customer Needs •Has a Wealth of Knowledge of How the Product is Manufacturing, Used, Maintained

Leadership

Leadership	Input	Output	Measurables
<ul style="list-style-type: none"> •President •Shop Foreman 	<ul style="list-style-type: none"> •Sales •Customer Communication •Admin Staff/Quality Staff/Mfg Staff 	<ul style="list-style-type: none"> •Quality Product •Effective Processes •Achieving Goals •Continuous Improvement 	<ul style="list-style-type: none"> •Backlog Report •Shipment Report •Warranty Report •Mgmt Review Notes

Appendix B: Subordinate QMS Procedures

- Context of the Organization – Quality Manual
- Management Review – DP-01 Management Review
- Hiring and Training – DP-02 Training
- Quoting and Order Acceptance – DP-03 Quotation and Contract Review
- Design Control – DP-04 Design Control
- Control Documents – DP-05 Document and Data Control
- Control of Records – DP-05 Document and Data Control
- Outsourced Processes – DP-06 Purchasing and DP-10 Receiving Inspection and Testing
- Purchasing – DP-06 Purchasing
- Special Processes – DP-06 Purchasing and DP-10 Receiving Inspection and Testing and DP-14 Quality Records
- Control of Nonconforming Service – DP-10 Receiving and Inspection and Testing
- Receiving – DP-10 Receiving Inspection and Testing
- Validation of Equipment – DP-11 Control of Measurement and Test Equipment
- Identification and Traceability – DP-11 Control of Measurement and Test Equipment and DP-17 Calibration Service
- Calibration of Equipment – DP-11 Control of Measurement and Test Equipment
- Control of Nonconforming Product – DP-12 Control Nonconforming Product and Corrective Action
- Corrective and Preventive Action – DP-12 Control Nonconforming Product and Corrective Action
- Risk and Opportunity Management – DP-12 Control Nonconforming Product Corrective Action
- Preservation of Product – DP-14 Quality Records
- Internal Audits – DP-15 Internal Audits
- Control of Third-Party Property – DP-16 Customer Supplied Product-Repair and Servicing