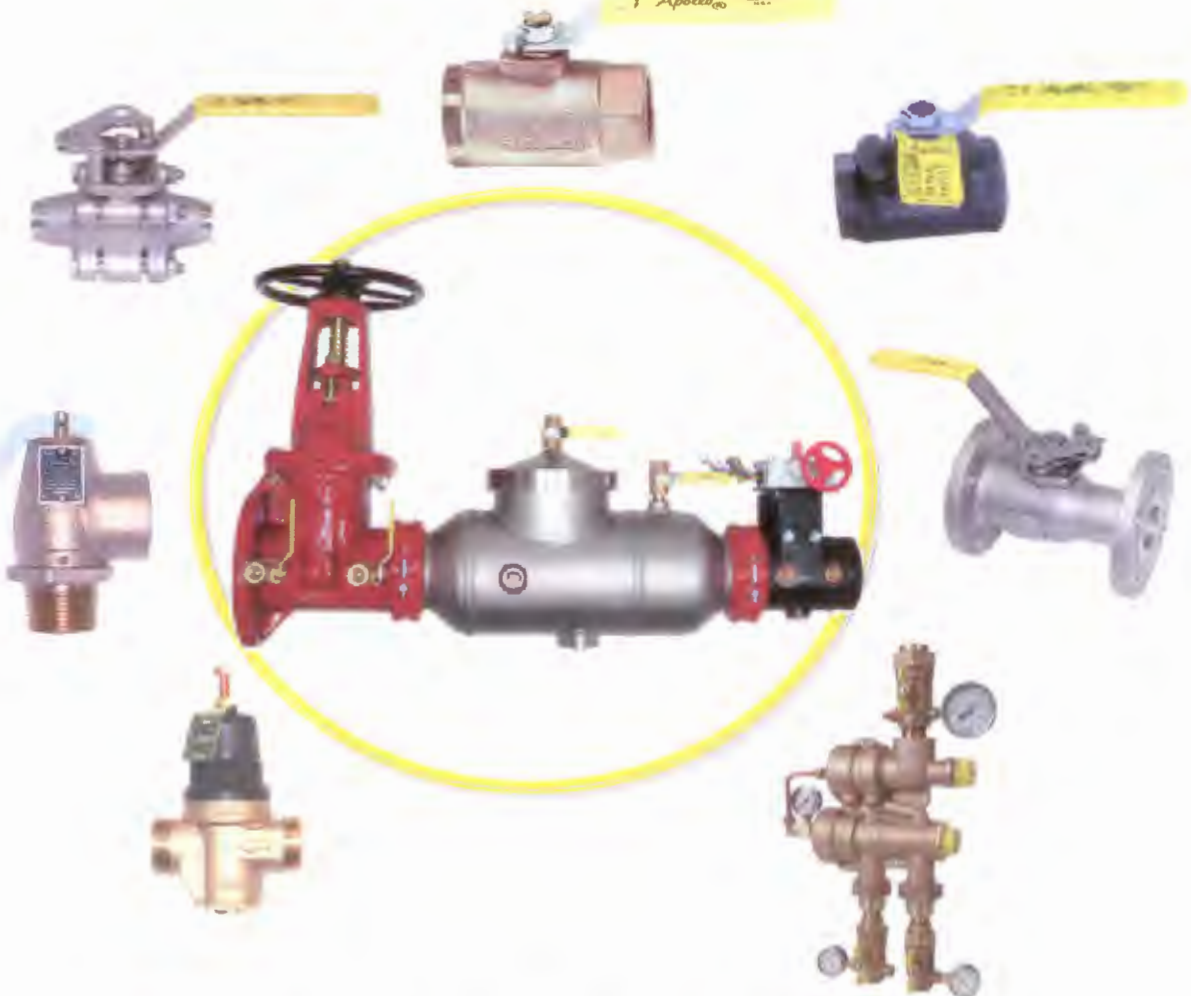


# "Apollo" Valves

Made In The USA

"Apollo" Valves



## Corporate Quality Manual

Rev. M

**AI** an Aalberts Industries company

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## 1 Introduction

Apollo Valves / Conbraco Industries, Inc., (hereafter referred to as Conbraco), is a provider of flow control and safety relief valves and associated accessories. Conbraco also operates a Gage Calibration Laboratory that provides services for internal and external customers. Conbraco has developed, documented, and implemented its Quality Management System (QMS). This manual is revised as needed to reflect current practices, and describes Conbraco's QMS in a brief, overview format. Printed copies are considered uncontrolled documents.

## 2 Company Overview

American Lubricator and Brass Company and Sterling & Skinner Manufacturing Company, two established Detroit-based manufacturers of brass valves and fittings, merged in 1928. They adopted a new name, Consolidated Brass Company, and Conbraco Industries was born. Conbraco is an American success story that is still being written.

Despite a weak economy during the early years, Conbraco thrived, driven by a spirit of innovation and a shared commitment to hard work and teamwork. That energy enabled the new company to succeed. Demand for valves and flow control products in new materials, designs and sizes was on the increase and Conbraco answered the call.

Twenty-five years after its founding, Conbraco began planning a major expansion. The company bought land outside Charlotte, North Carolina in 1955 for a new headquarters, plant and foundry. It took five years to build, and in 1960 Conbraco moved its entire operation south. The new facility was distinguished by its degree of advanced design, manufacturing and testing technology. It was a formula the company would rely on later as it built new manufacturing and foundry facilities in Pageland and Conway, South Carolina.

Conbraco earned a reputation for developing new products to meet emerging market demands. In 1968, the company introduced its Apollo<sup>®</sup> 70 Series ball valve to the commercial market. A revolutionary innovation at the time, the product quickly became the most specified ball valve in the world.

While some see valve manufacturing as a mature industry, Conbraco sees continuous opportunities for innovation. The company is constantly developing and introducing new products to meet the changing needs of the marketplace.

Conbraco's understanding of manufacturing technology and a commitment to controlling quality and cost has led to a continual reinvestment in plants and equipment. Including state-of-the-art foundries and machining facilities for both bronze and steel valves, Conbraco's investments in manufacturing, quality control and distribution have surpassed \$100 million in the past 10 years alone.

Beginning in 2005, every Conbraco product proudly bears the Apollo Valves name – not just our ball valves, but backflow preventers, check valves, safety relief valves, vacuum breakers, and plumbing and heating valves.

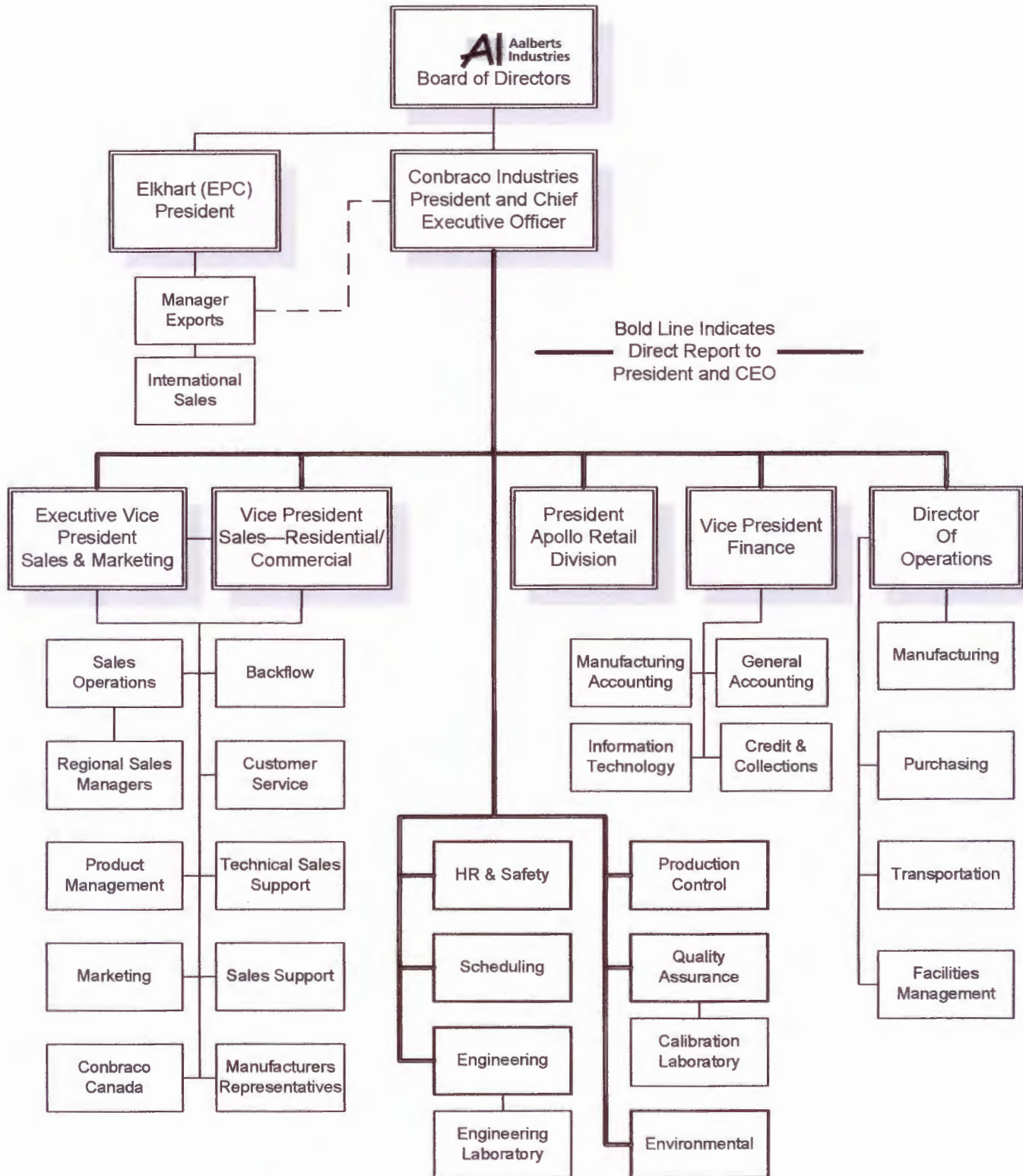
In 2010, Conbraco was acquired by Aalberts Industries.

Conbraco offers one of the world's largest selections of quality American-made products for backflow, plumbing and heating and industrial flow control products. Our employees are proud of their company and its traditions. The lessons of our history tell us that by focusing on quality, helping our customers with problem-solving innovations, and working hard as a team, Conbraco will continue to thrive.

### ***Mission Statement***

Conbraco's objective is to provide products and services that meet our customers' needs while growing in both sales and profit at rates substantially greater than the industries of which it is a part. This is accomplished by emphasizing integrity, quality and fairness with our customers, suppliers and employees.

**Organization**



### 3 Quality Policy

*With a commitment to continual improvement, we will design, manufacture and deliver products which consistently meet or exceed customer requirements.*

### 4 Quality Management System

Conbraco has established its quality management system (QMS) in order to produce quality products and services. Conbraco’s QMS is designed to demonstrate compliance to commitment to the latest revisions of ISO 9001 and ISO 17025. The QMS demonstrates management’s commitment to quality. The QMS is documented, implemented and maintained.

Conbraco management:

1. Determines the criteria and methods needed to insure that both the operation and control of QMS processes are effective;
2. Insures the availability of resources and information necessary to support the operation and monitoring of QMS processes;
3. Monitors, measures and analyzes QMS processes; and
4. Implements actions necessary to achieve planned results and continual improvement of QMS processes.
5. Is committed to compliance of the ISO 17025 standard as applied in the company’s testing and calibration laboratories.

In addition to our goal of producing defect-free products, our testing and calibration laboratories are committed to sound professional practices to produce quality results for their customers. All members of Conbraco’s labs are required to be familiar with the quality documentation and implement the related policies and procedures in their daily work.

### 5 Scope of the QMS

The QMS is established for the design, manufacture and testing of flow and pressure relief valves for commercial and industrial applications *and* the provision of contract calibration services.

The activities related to the QMS are carried out at Conbraco’s four locations:

<p>Corporate Headquarters 701 Matthews – Mint Hill Road Matthews, NC 28105 704-847-9191</p>	<p>Pageland Division 1418 S. Pearl Street Pageland, SC 29728 843-672-6161</p>	<p>Engineering Test Lab Calibration Lab</p>
<p>Brass Foundry Division 1509 S. Van L. Mungo Blvd. Pageland, SC 29728 843-672-1508</p>	<p>Conway Division 125 Hwy. 501 East Conway, SC 29526 843-347-4666</p>	

## 6 Normative References

- ISO 9001:2008, Quality Management Systems – Requirements
- ISO 9000:2005, Quality Management Systems – Fundamentals and Vocabulary.
- ISO 9004:2009, Quality Management Systems – Guidelines for Performance Improvements
- ISO/IEC 17025:2005, General Requirements for the Competence of Testing and Calibration Laboratories
- PED (97/23/EC) European Council Directive
- ASME Quality Manual, Rev. 12

## 7 Terms and Definitions

All terms and definitions used within Conbraco's QMS are in agreement with those supplied in the normative references. Clarification on some abbreviations or terms are made in lower level documents.

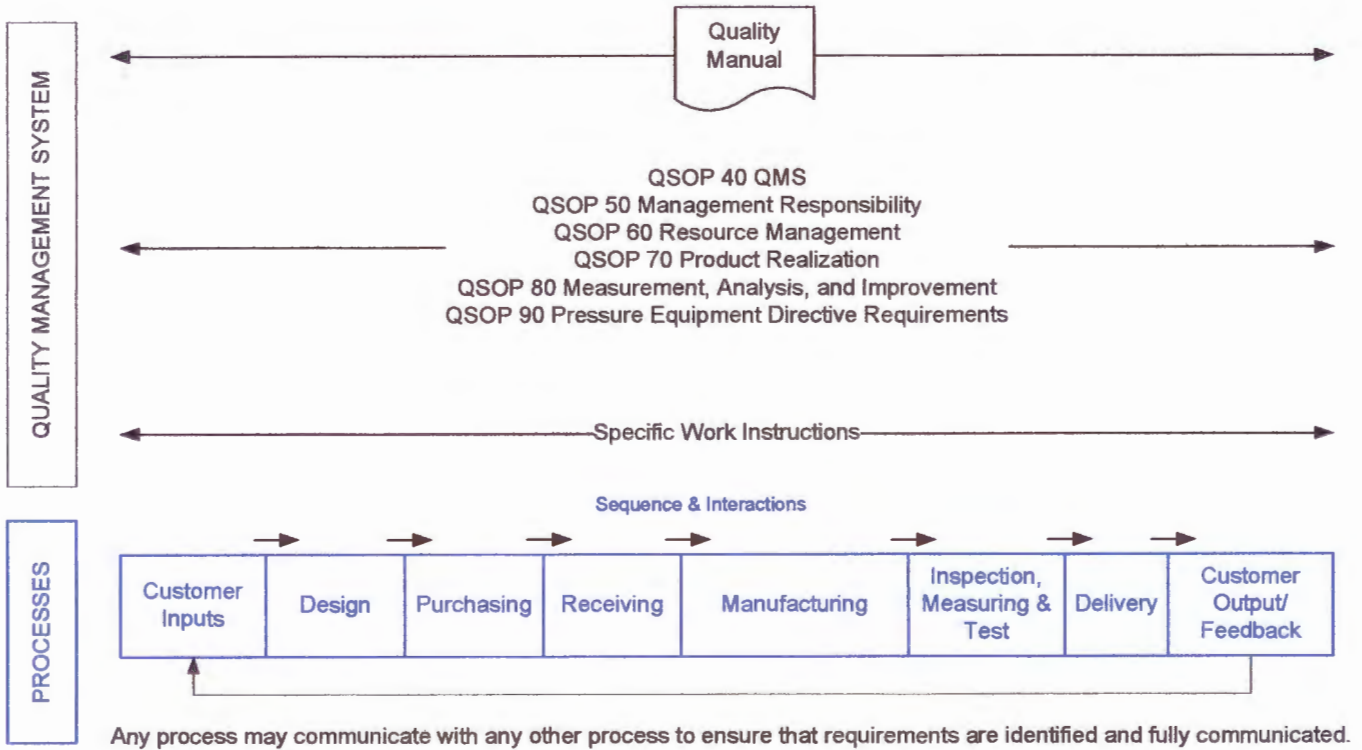
## 8 Exclusions

Conbraco has determined that the following requirements are not applicable to our operations and are documented as exclusions:

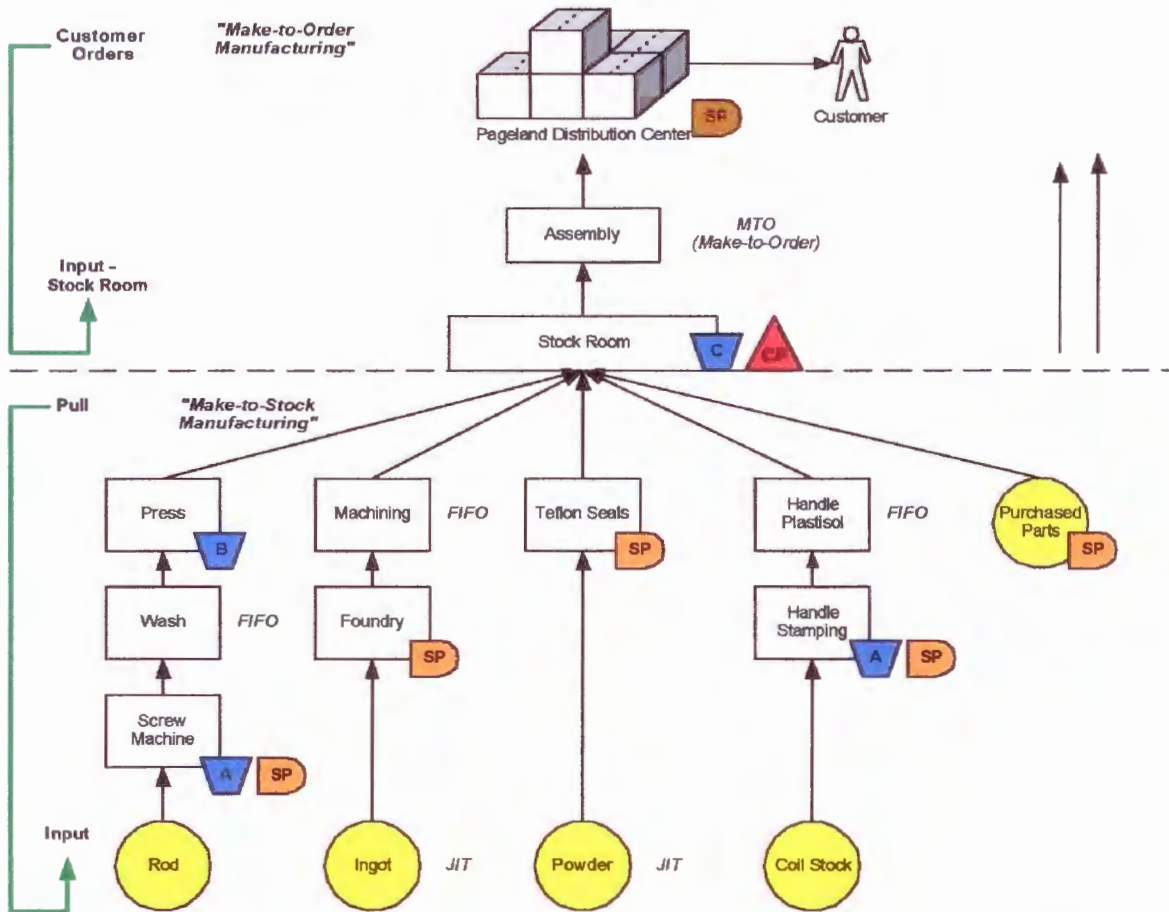
- ISO 9001:2008 Clause 7.5.2 is excluded from Conbraco's QMS. All processes can be verified by subsequent monitoring or measurement.

# 9 QMS Process Models







## 9 A QMS—Process Model (Descriptive only see appropriate QMS document for details)



9 B Product Processes

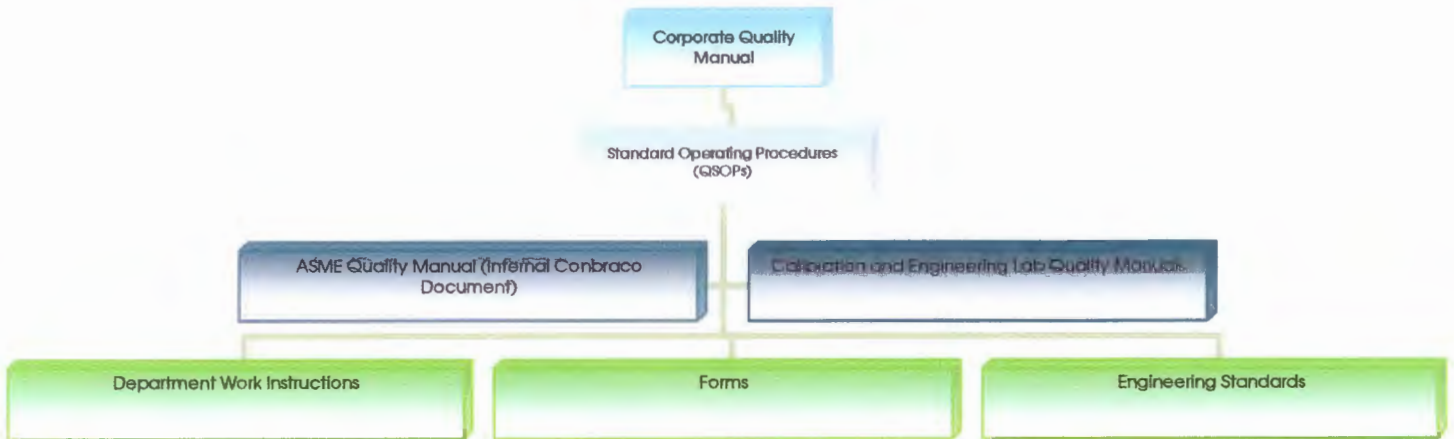


**LEGEND**

-  Raw Material Buffer
-  Press Dept. Buffer (selected items only)
-  Component Stock Buffer
-  Suppliers & Purchased Parts
-  Schedule Point/ Schedule Visibility => get demand signal from stock buffer or Make-to-Order Customer Demand
-  Control Point for schedule visibility, make-to-order, and sequence of demand => Focused on Delivery Performance. Determines overall Conbraco consumption

## 10 Documentation

The structure of the QMS documentation follows the following format:



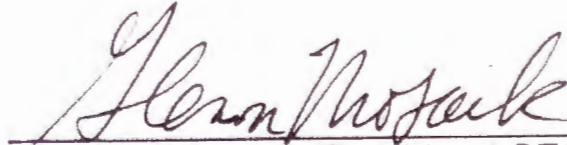
The Standard Operating Procedures (Second Tier documents) listed below are those that relate to departments company-wide and include the procedures for required QMS controls.

<b>QSOP 40</b>	<b>Quality Management System</b>
	<ul style="list-style-type: none"> <li>↳ { Control of Documents</li> <li>Control of Records</li> </ul>
<b>QSOP 50</b>	<b>Management Responsibility</b>
<b>QSOP 60</b>	<b>Resource Management</b>
<b>QSOP 70</b>	<b>Product Realization</b>
<b>QSOP 80</b>	<b>Measurement, Analysis &amp; Improvement</b>
	<ul style="list-style-type: none"> <li>↳ { Internal Audits</li> <li>Control of Non-conforming Product</li> <li>Corrective Action</li> <li>Preventive Action</li> </ul>
<b>QSOP 90</b>	<b>PED Requirements</b>

Departmental work instructions and related forms are maintained by the individual departments. Engineering Standards originate from the Engineering Department.

11 **Revision History.** See QM AR for amendment register.

12 **Approvals**

  
\_\_\_\_\_  
Glenn Mosack, President/ CEO 9-23-11  
Date

  
\_\_\_\_\_  
Ray Cellemme, Director of Engineering & Quality Assurance 9/23/11  
Date

  
\_\_\_\_\_  
John F. Higdon, Corporate Quality Assurance Manager 9/23/11  
Date