

Citadel RFP 2017

E. QUALITY

Describe your company's quality programs (i.e., ISO9000, CMMI assessments) and quality control procedures (i.e., SAS70). List any quality awards, certifications, standard levels met, etc.

Haworth's Quality Journey

The Priority

Quality of both products and services has been a long-standing priority at Haworth. We continuously implement core strategies that require all of our key business processes to be documented, measured, improved, and validated through auditing to ensure superior quality. Haworth is committed to continuous improvement and the elimination of waste.

Our Leadership believes that "there's not a single thing we are doing that we cannot do better." We have a formalized Continuous Improvement program we call the Haworth Management System (HMS), in addition to a corporate HMS support staff that helps both our manufacturing operations and as well as our office processes to continuously improve results for our internal and external customers. We are also committed to teaching our members the principles and fundamentals of lean through a structured program called the HMS University.

Increasing customer expectations and business complexity have become the norms in the contract office furniture industry. Haworth's expansive product offering, multi-plant lean manufacturing, sophisticated logistics and information systems are effective in meeting these challenges.

Quality programs and philosophies are an integrated part of Haworth's culture and have been key to its success since 1948. Haworth's guiding values were first documented in the "Haworth Creed" in 1975 and are found today in our "Values" statement. The values come to life at Haworth through the daily decisions of our members around the world, and are the framework for everything we do.

Haworth has implemented core strategies that deliver ever-increasing value to our customers. This requires all key business processes to be documented, measured, continuously improved and validated by auditing to ensure both compliance and effectiveness.

As a result of our dedication to quality, Haworth became the first company in the industry and one of first in the nation to achieve ISO 9001 certification in 1992, and in 2017 we maintain the latest ISO certifications available. We also maintain a staff of dedicated professionals who manage all aspects of Quality Assurance. Haworth's Chairman Emeritus, Dick Haworth, has said, "Everyone talks about quality - we do it."

The quality journey also includes environmental sustainability as an integral part of our philosophy. We constantly monitor the environmental impact of raw materials and work processes used to manufacture office furniture. We are committed to finding new ways to reduce, reuse, and recycle. Haworth was named the 2003 Recycler of the Year in the Outstanding Reduction and Reuse Program by the Michigan Recycling Coalition. Haworth's

newest showrooms are rated LEED Gold. Haworth holds ISO 14001 environmental certification at several locations including the Holland, Ludington, Big Rapids, Michigan and Haworth's COMFORTO Plant in Germany was among the first in the industry to be ISO 14001 certified.

Haworth has also used the Baldrige State and National Quality Program. The Baldrige criteria are used for self-assessments for Haworth and its Dealers that provide guidelines for improvement and assess quality initiatives. As an industry leader and pioneer Haworth won the Michigan Quality Leadership Award in 1994. In 1996, Haworth was a national finalist and received a site visit from the Baldrige quality evaluation team. In 2006 and in every year since, Haworth has presented Quality awards, based on Baldrige criteria, to its most outstanding Dealers, and all Haworth Preferred and Best In Class Dealers maintain a threshold level of quality performance.

The Process

All key Haworth processes are documented through a formal system of Standardized Operating Procedures. The processes are measured and provide a performance baseline from which to evaluate continuous improvement opportunities. The documentation is a component of the ISO 9000:2000 Quality Management System and is certified by a third party - BSI Group America, Inc.

Each Haworth manufacturing plant designates a Quality Assurance (QA) position to lead, administer, and maintain its quality function. These QA representatives are equal in influence with the heads of all other quality-contributing functions. Each QA representative is the quality management agent for the Functional Unit/Plant and has direct access to the highest position within that organization. These QA representatives have the freedom and authority to establish and direct the Functional Unit's quality program. They are responsible for implementing and maintaining the details of the Quality and Environmental Management System Manual and its supporting procedures at the Functional Unit/Plant level. This includes:

- Initiating action to prevent the occurrence of any non-conformities relating to product, processes, services, and the quality system
- Identifying and recording any problems relating to products, processes, services, or quality system
- Initiating, recommending, or providing solutions through designated channels
- Verifying the implementation of solutions
- Participating in quality system and product/process audits and report monthly on outgoing product quality and overall quality system performance
- Contributing to improvements of the internal and external quality costs reporting system
- Communicating quality issues from suppliers, manufacturing, and customers
- Delegating authority through the line quality organizations to implement and fulfill this assignment
- Halting and controlling any process or stopping shipment of any product that does not meet the applicable quality standards, or other stated Haworth corporate policies; and controlling non-conformities until the deficiency or unsatisfactory condition has been corrected

Haworth uses a Closed-Loop Quality Assurance Program, where we monitor not only internal quality processes, but also the quality of our suppliers, dealerships and of our own internal

programs and services. Haworth then "closes the loop" by measuring customer satisfaction and maintaining a certified corrective action system. Quality initiatives and tools include:

- Online satisfaction surveys from our dealers and customers
- ISO 9001 Certification
- The Shingo Guiding Principles to measure our business excellence and to provide focus for annual improvement cycles
- Value Stream Mapping - Product/Process, Material and Information Flow analysis that begins with suppliers and ends with our customers
- Demand Pull Systems - Six-step design process for implementing demand flow attributes in lieu of traditional MRP scheduling methodologies
- TPM - A set of techniques, originally pioneered by Denso in the Toyota Group in Japan, to ensure every machine in a production process always is able to perform its required tasks
- Autonomous Maintenance - Highly trained operators perform all routine maintenance, inspections, and minor repairs on equipment
- 5S - A team-based approach that creates and maintains high performance workplaces using the basic principles of workplace organization, standardization, and visual management
- Benchmarking - Haworth members visit and borrow ideas from participating companies known for their expertise in given areas; Haworth reciprocates as an active participant when other companies chose to benchmark Haworth for such quality programs as ISO and our internal suggestion programs

The Measure

Quality improvement is monitored at all levels: supplier, dealer, material, engineering, manufacturing, and internal processes and procedures. Our system utilizes several different programs and tools to measure and gauge progress and refine goals. Haworth measures product quality-related data in multiple ways. Haworth dealers (who oversee all installations) regularly conduct satisfaction surveys of their key customers. Haworth also tracks customer loyalty, market share, and other statistics that indicate the degree of customer satisfaction. Haworth's reject rate on finished goods, ready for customer delivery, is less than 1% of sales. Returned product represents less than one half of one percent of sales (<.5%). Warranty expense is less than 1% of sales. All quality reports and statistics are reviewed by Haworth's Quality Council.

The Quality Council is made up of managers, directors, and executives responsible for enacting the Quality System. The Director of Corporate Quality Assurance chairs the Quality Council. The Council monitors, implements, helps administer, reviews performance and maintenance, and recommends changes to the Quality System. It develops and recommends long-range strategies for quality planning to each Business Unit based on reported quality measurements and statistics. All Plant Quality Assurance representatives report through their respective plants to the Vice President of Global Manufacturing. Supplier Quality Assurance (SQA) is a function within the Corporate Quality team that reports to the Director of Corporate Quality and Customer Satisfaction.

The Standards

Haworth tests all of its products to standards developed by the Business and Institutional Furniture Manufacturers Association (BIFMA). BIFMA is accredited by the American National Standards Institute (ANSI). Known as ANSI/BIFMA standards, these tests and their methods were created to provide manufacturers, specifiers, and end-users with a common basis for evaluating safety, durability, and the structural adequacy of furniture. The standards define specific tests, laboratory equipment, and test conditions as well as minimum acceptance levels to be used in evaluating products.

Product lifetime is based on how the product is designed and tested to meet industry standards. The majority of the office furniture manufacturers design and test their products to ANSI/BIFMA standards, as does Haworth. The ANSI/BIFMA Standards Committees determine how many test cycles a product needs to survive based on ten years of eight-hours-a-day use.

- As an example: If a product is used in a normal application five times daily, they multiple that times the work week times a year times ten years. (5 uses X 260 days X 10 years = 13,000 testing cycles for one lifetime).

This cycle is based on a normal 40-hour workweek. Haworth testing, in our Third Party Accredited Test Lab, goes beyond the industry's standards. Unlike our competitors, Haworth tests the safety and durability of all Haworth products to *three times* ANSI/BIFMA standards in our own Haworth Corporate Test Lab accredited by the American Association for Laboratory Accreditation (A2LA). A2LA accreditation makes us the equivalent of an independent test lab; our results are accepted by federal, state, and local agencies without question. The lab also participates in the UL - Client Test Data Program, which includes safety standards for mechanical and electrical systems in all the products we produce.

Haworth also tests its products to National Fire Protection Association (NFPA), National Electrical Manufacturers Association (NEMA), National Electric Code (NEC), UL Life Safety Code, Telecommunications Industry Association (TIA), American Society for Testing and Materials (ASTM), and State of California (CAL) standards, among others. The Federal Government, including the United States Military, is one of our largest customers. Their requirements for test standards are rigorous. The ability to meet those requirements—called “technical compliance”—actually outweighs almost everything else in a government bid response submission. Haworth is always technically acceptable.

Our additional testing is based on our research and workplace knowledge. We know our products are used more than eight hours a day, and, depending on user job function, the cycles per day our product is used may be more than two to three times the cycle numbers established by ANSI/BIFMA. Therefore, we drive our testing times and cycles farther and insist our products are able to meet or exceed at least three times the current industry standards. Further, we monitor our product performance in our own workplaces over time to help us adjust our product development and design to meet evolving workplace needs.

Once designed and tested, many other factors influence the actual useful lifetime of a product. Looking at the examples in the list below, the impact (high or low) or presence of a particular factor may result in a shorter product lifetime:

- Churn rate involving furniture moves over 40%
- Dirty or dusty environments
- Direct exposure to sunlight
- Lack of maintenance
- High traffic or motion areas
- Exposure to chemical or abrasive agents
- Weight bearing more than testing standards

Haworth not only tests during and right after product development, we audit our products and continue to test them randomly for years. This ensures our products are verified for safety and overall performance during the entire life of the product.

E. QUALITY & WARRANTY INFORMATION

Provide a list of your certifications related to furniture (ANSI/BIFMA).

Haworth BIFMA product certifications include:

- 29 BIFMA level 1
- 8 BIFMA level 2
- 26 BIFMA level 3

Haworth also has 161 GREENGUARD certified products, and so far has released Health Product Declarations (HPDs) on nine products through Portico, Google's Healthy Materials Library reporting tool.

Haworth tests its products to National Fire Protection Association (NFPA), National Electrical Manufacturers Association (NEMA), National Electric Code (NEC), UL Life Safety Code, Telecommunications Industry Association (TIA), American Society for Testing and Materials (ASTM), and State of California (CAL) standards, among others.

If you need individual BIFMA certifications related to each proposed product, please provide a list of Haworth products.