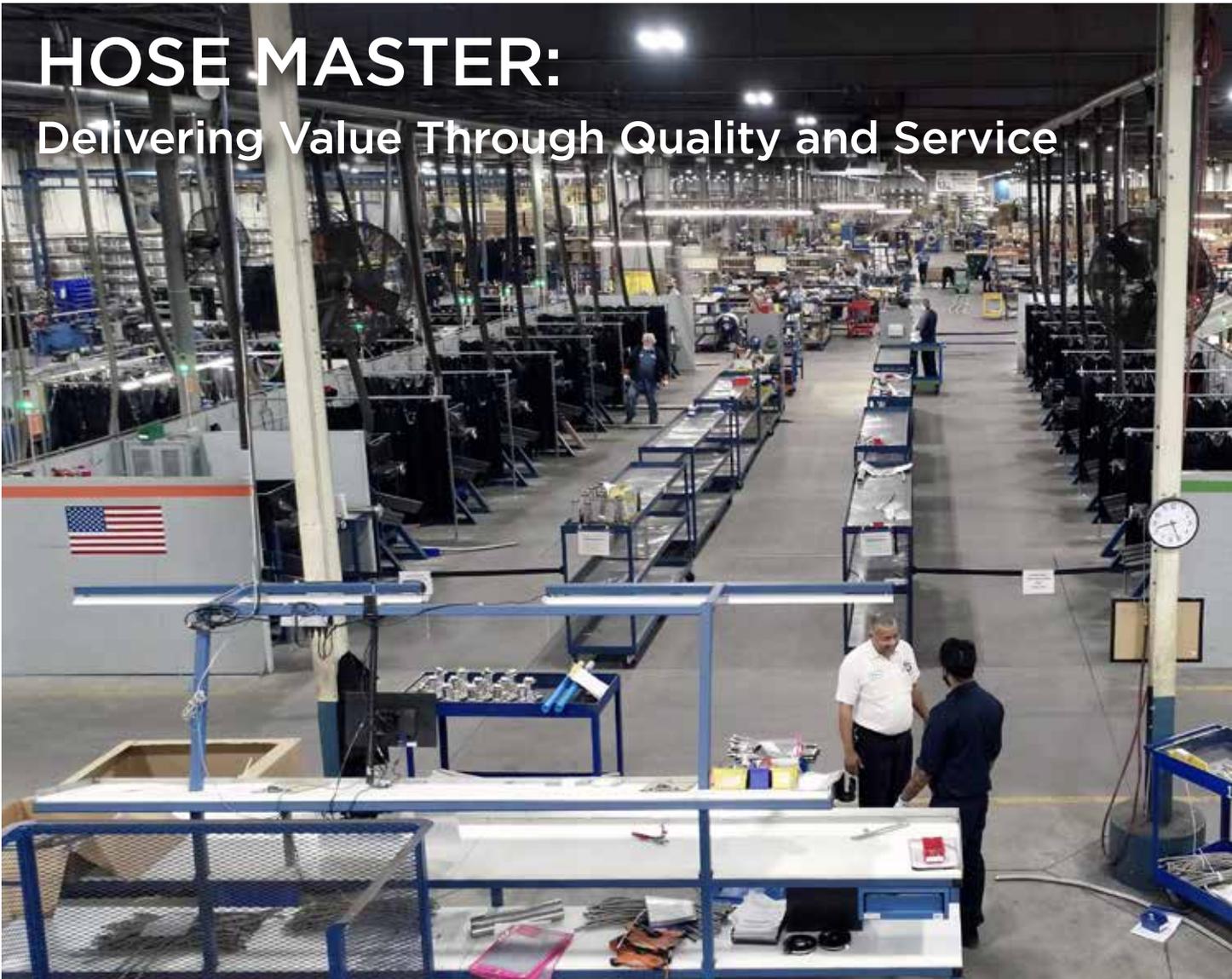


HOSE MASTER:

Delivering Value Through Quality and Service



Hose Master has evolved into a leading manufacturer of flexible metal piping components despite a rather humble beginning. Their recipe for success is simple: make the best products possible and back them up with great service. By focusing on quality products, engineering excellence, and application expertise, Hose Master has flourished as it provides a level of value that extends far beyond merely offering a competitively priced product.

By Frank Caprio Corporate Trainer, Hose Master

Family Roots

Hose Master was founded in 1982 when Sam Foti Sr. and his son Sammy realized their shared vision to fill a niche in the metal hose industry. After leaving the metal hose manufacturer where he had been employed, Sam joined with Sammy to begin their business. They rented a small industrial space in Euclid, Ohio where the owner gave them a break on the rent as long as they fixed up the facility along the way. They bought a few pieces of used machine shop equipment and began their business by building a machine to manufacture interlocking metal hoses.

From the beginning, Sammy was involved in all aspects of design, construction, and operation. With Sam at the helm, Sammy learned the business from the ground up. Together, they would build a machine, make some hose with it, then sell it where they could, before moving onto the next project. It was truly a family-run business.

As the business grew, the pair decided to expand their product offering to include corrugated metal hose. In the 1980s, corrugated metal hose was treated as a commodity item: there was little differentiation between products, low brand loyalty,



and a very price-sensitive market. Despite these headwinds, Sam and Sammy saw the need for a high performance premium product.

After considering various manufacturing methods, their commitment to quality led them to employ a corrugating technique referred to as hydroforming (when water is used to form corrugations into metal tubes). The Fotis felt that their proprietary design, manufacturing ability, and fabrication processes would produce assemblies that could outperform hoses formed by other methods, and set out to prove it to the customer.

Dynamic Growth

At this time, nearly all corrugated metal hose assemblies were being fabricated by distributors who were large enough to invest in a metal hose fabrication shop. Therefore, most distributors were not initially attracted to the notion of purchasing a premium product that would cost nominally more money. As Sam and Sammy knew that getting their

hoses put into service would prove their value, Hose Master began fabricating assemblies and selling them to distributors who did not have fabrication shops. Once these assemblies went into service, end users noticed a significant increase in service life, which decreased their maintenance costs and improved productivity. It was not long before Hose Master's business took off as more and more fabricating distributors expressed interest in their products.

Over the years the company has made several expansions to its Cleveland headquarters. Hose Master increased its service levels by opening fabricating locations in Houston and Atlanta, as well as a Product Analysis Lab that provides detailed reports to help customers identify and correct potential service life issues. The corrugated product line was expanded, and metal expansion joints were added to the product offering. The company continued to expand despite the Great Recession, and another fabricating facility was opened in 2015 in Reno, Nevada. With 38 years of experience, Sammy now leads the company as CEO with close to 500 employees in four locations. He, and the company President Jeff Tennant, continue to maintain the same approach that has been followed since the company's inception: strive to keep the customers happy by producing quality products that are backed by great service and engineering excellence.

Commitment to Quality

From the beginning, Sammy wanted to do more than just talk about quality. In order to ensure that their product truly stood up to their quality promise, he focused on two important goals. The first was to implement an ISO quality management system; Hose Master became the first metal hose manufacturer



All Hose Master products are proudly made in the USA.



in the USA to achieve ISO 9001 certification. The second goal revolved around ensuring fabrication expertise, as a means to improve quality.

As with any hose assembly, the skill of the fabricator plays a vital role in the ultimate service life of the assembly; this is especially true with corrugated metal hose. That is why all of Hose Master's welders are required to obtain certification in accordance with Section IX of ASME's Boiler & Pressure Vessel (BPV) code. This is no small task, considering the company employs more than 90 welders. A staff of four welding specialists, including two AWS Certified Welding Inspectors, are assigned the task of training, certification conformance, and continuous improvement. This strategy allows the company to offer quality fabrication on a larger scale than anyone else in the domestic metal hose industry. Conformance to international standards such as Pressure Equipment Directive (PED) or DNV GL is also available.

Aside from assembly design and application assistance, Hose Master's engineers are involved in every stage of product testing and development, machine design, and manufacturing engineering.

Sammy put it this way, "We need engineers to ensure that our products are made to be the best they can be, and work like nothing else the customer can buy when put into service. Our engineers can work directly with the end user to solve tough application requirements. This world-class engineering assistance combined with the distributor's local service provides value that the typical end user just cannot get anywhere else."

Roughly 10% of Hose Master's workforce is involved with engineering, R&D, or technical services.

Another way the company ensures excellent quality is by the careful selection of suppliers. Most of the raw materials are domestically sourced, which allows for tighter control over specifications and tolerances. Much of the strip purchased has very narrow material tolerances, often tighter than ASTM requirements. By working with domestic vendors, lead times are more reliable, product specifications are locked down, and pricing is more stable. Hose Master takes great pride in providing products made in the USA.

Distributor Relationships

Hose Master's business model requires close cooperation between the manufacturer and the distributor. "As a manufacturer, our distributors trust us to provide them with every possible means to bring value to their customers. In return, we trust our distributors to get our products into the hands of those end users, so they can find out for themselves how the products perform," expressed Tennant.

As distributors must remain nimble enough to adapt to an ever-changing marketplace, their fabrication personnel must have wide-ranging skill sets. Very often, the person who welds a corrugated assembly also manages inventory, prepares the components for welding, inspects and tests the finished assembly, and may even deliver the finished goods to the customer. This multitasking makes it very difficult to accurately establish the true costs associated with fabricating a corrugated metal hose assembly. Hose Master's fabrication model not only supports local distributors who may, or may not, fabricate their own assemblies, but it also offers great economies of scale. Tennant stated, "Those distributors who have accurately determined their true fabrication costs tend to rely on Hose Master to handle orders for larger quantities of assemblies,



Hose Master's four locations offer nearly 500,000 sq. ft. of manufacturing, engineering, and sales space.



Hose Master ships thousands of fabricated assemblies across the country every week.

which would otherwise tie up their fabrication personnel for days or weeks.”

Relying on Hose Master’s fabrication frees up distributors to handle urgent inquiries from their customers, where higher margins are often enjoyed.

Educational Opportunities

Great products and services are only part of the equation, however. Beyond that, the company is also able to offer the best product, fabrication, and sales training in the industry. Hose Master provides welder training programs to ensure fabrication expertise at all levels, along with various welder tools and accessories to facilitate and streamline their operations. It also established Hose Master University (HMU) in 2009, and has since become the benchmark for product and application training in the metal hose industry. Frank Caprio, the ‘Dean’ of HMU, brings his 40+ years of experience in distribution and manufacturing as well as his knowledge of industrial hose types to the course. Frank provides training on all aspects of the products, industries, and applications in which they are used. The dynamic and thorough coverage of products and applications is why HMU is accredited by The NAHAD Hose Safety Institute Continuing Education Program.

Recipe for Success

By working with the customer, Hose Master has been able to custom-design a combination of flexible metal hoses and expansion joints that could accommodate any required movement and stress. These customized solutions can only be provided by a company that has expertise in both hose and expansion joints. Hose

Master’s 12 regional sales managers, along with a team of factory representatives, provide distributor support and that is rare in an industry where many manufacturers treat metal hose as a commodity.

As Sammy likes to point out, Hose Master has gained market share not through mergers or acquisitions, but by expansion. “We have grown our business organically, from the ground up. We build our own equipment and develop our own technology, including advanced forming technologies and the most sophisticated expansion joint design program that we know of. We became the leader by teaming up with strong distributors and providing them with quality product and knockout service.”

Hose Master’s business strategy has not changed in 38 years. As the product offerings continue to evolve in response to market dynamics, both Sam and Sammy continue to seek innovative ways to bring value to the industrial market. The trust between manufacturer and distributor must continue in order for both to thrive.



Hose Master manufactures many different styles and sizes of stripwound hose, including interlocked, square-locked and roll-locked profiles.

