

VanAire: 20 years of providing Engineered Valve Automation Hardware

VanAire continues to be the primary go-to source for Engineered Valve Automation Hardware (EVAH) for many leading valve and actuator companies and their distributors across North America. This year marks the Michigan-based company's impressive 20th year in business engineering and manufacturing custom mounting kits.

VanAire has uniquely positioned itself as an independent, full service provider dedicated to rotary valve mounting kits. With over 35 CNC machines, two production shifts and 75 plus employees, this highly skilled and motivated team prides themselves in being able to quickly respond to customer needs.

These critical EVAH components are used across the globe in many different sectors, such as oil and gas, power, water/wastewater, chemical and pulp/paper. Because of the wide range of applications for VanAire hardware, kits can range in size anywhere from about a pound to well over half of a ton.

The Valve World Americas team recently had the pleasure of traveling to the beautiful Upper Peninsula of Michigan to visit the VanAire team in Gladstone. After Mr. Eric Miller, VP of Manufacturing, provided a tour of the ISO 9001:2008 registered facility, we sat down with him, Mr. Tony Lambert; VP of Valve Automation Hardware and Mr. William VanDeVusse; President and CEO to discuss how VanAire began operations, the impact ISO registration has had on the company, and its highly engineered products.

By Candace Allison and Josh Gillen

How business began

"VanAire actually began in response to a need in the industry for a consistent, high quality, engineered product for mounting kits," said VanDeVusse. He further explained that the need was found as a result of working closely with customers in the field and listening to what they had to say. "In the early 1990s, my brother Richard VanDeVusse, a mechanical engineer, was working for a valve distributor and found it difficult to obtain quality mounting kits to meet his customers' requirements. In pursuit of finding a solution to this need, he convinced his employer that they should manufacture mounting kits. Finally, his customers were getting quality kits; but after a few years, the company decided to refocus on distribution and wanted to sell the manufacturing equipment. My brother saw an opportunity that he could not pass up so he bought the equipment, moved it into his garage and continued to design and manufacture mounting kits."

In 1995, the business grew to the point that enabled Richard to expand the mounting kit business from his garage into an 'incubator' building that the local Economic Development Committee (EDC) had available for new businesses. VanAire

began by leasing only a portion of the space, but within five years the space was totally filled. The company then invested in a new 30,000-square-foot facility, but very quickly added on 15,000-square feet because of the ever-increasing demand for EVAH. This 45,000-square-foot facility is the company's current location.



ISO certification

"Achieving ISO 9001 registration is one of the most distinguishing differences between and other bracket suppliers," stated VanDeVusse. The certification standards were initially adapted at the company's highest level but have since become a part of the culture of quality that permeates every aspect of the business. VanDeVusse added, "Early in the pursuit of ISO registration, we made the decision to implement the certification and its stringent requirements to the very core of our business and although it took several years to complete the process, we continue to see rewards payoff."

Lambert added, "ISO provides formal methods for ensuring continual improvement and customer satisfaction. Internally, we use ISO to help create procedures and work instructions to ensure consistency in everything we do. ISO has provided opportunities for VanAire to investigate every area of our company and determine if there are any opportunities for improvement."

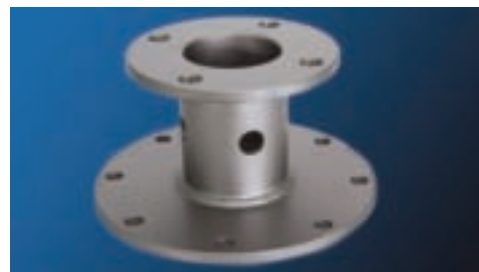


A key indicator of their successful implementation of ISO 9001 is the results of the On-Time Delivery percentage. Before ISO, it was averaging 35% with an average four week leadtime. 2015 YTD average is 96.44% with a typical leadtime of less than 2 weeks, including many orders shipped same or next day.

sure." VanDeVusse added, "The transformation that has occurred on the shop floor has greatly enhanced VanAire's ability to do what they do best: engineer, manufacture and ship Valve Automation Hardware from within one facility."

Skilled employees

Involving the manufacturing team in the restructuring of the shop floor plan is just one of many examples of where VanAire utilizes the team approach. Lambert emphasized that it takes a team of dedicated, skilled and inspired employees to accomplish the goal of VanAire's quality policy for "exceeding our customer's expectations." The VanAire team is made up of a Professional Engineer, Mechanical Engineer, Certified SolidWorks Professionals (CSWP), AWS (American Welding Society) Certified Welding Inspectors, AWS qualified welders, ASME (American Society of Mechanical Engineers) Section IX welders, and other skilled positions. He further details, "Incorporating these individual skillsets to achieve a single goal is yet another key to our success. Our commitment to quality and ensuring that we provide a consistent product is evident in every aspect of the process. The mounting kit is a very critical part of the valve assembly. Every department here understands how critical their part in the process is to ensure that the mounting kit meets the customer's desired expectation and end-use application."



Work flow efficiency

During the ISO certification process, it became clear that the manufacturing workflow required re-organization. "When you have over 35 CNC machines and two separate shifts, an efficient flow is critical for increased throughput and quick lead times," recalled Miller. "In the early years, our response to growth was very reactionary, and as a result flow through the shop became very inefficient. We were cramped in individual work areas, which led to increased stress levels and the feeling of always being under pressure. During the ISO journey, we involved everyone on the shop floor in restructuring the entire manufacturing process. VanAire literally moved every machine, except for one, over a four-week time period. Together, we were able to organize the floor plan into product families or 'cells'. Each of these cells allow similar product to stay within a smaller footprint enabling a single operator to simultaneously run multiple machines. This reorganization has significantly increased our throughput while increasing our quality and relieving unwarranted stress and pres-



ing customers with quality tomation Hardware



Quick response

When asked about being able to respond quickly to the demands in this industry, Lambert stated, "We expedite orders on a daily basis to meet urgent deadlines. Many times this involves engineering and manufacturing kits within the same day. Being able to provide high quality mounting hardware in a timely manner is necessary in our industry. The processes, skillsets and technology that VanAire has in-house enable us to consistently meet this customer need."

Educating the industry

"In addition to leadtimes, understanding other customer's needs is vital in ensuring that VanAire provides a mounting kit that meets the requirement of the application. Communicating with the customer and helping them understand how different applications can drastically affect the design." Lambert adds, "Detailed questions need to be asked during the quoting process to ensure that mounting kits meet the end user's requirements. Application factors that affect how one selects the proper valve and actuator often affect the lifespan of the kit. Temperature, both process and ambient;

cycle speed, estimated number of cycles, on/off or modulating and corrosion concerns, all affect the design of the kit.

Lambert explained that during the past year, VanAire, started to include a VanAire Engineering Standard (VES) in our quotes. He detailed, "This standard provides detailed info of the parameters that were used to design the mounting kit. Information includes: material type and grades to be used, the allowable temperature range, number of cycles, etc. Quotes can also include kit numbers and basic assembly drawings and bill of material of the kit. This information helps ensure that customers order kits that meet the demands of the application.

The VES are based around ISO-12490 and API-6DX requirements. These Industry requirements were released in 2011 and 2012, respectively, to ensure integrity of the entire valve assembly package, including the mounting kit. We are finding out that many of our customers are not familiar with them, especially the sections regarding the mounting kits requirements. We envision

that through communication at the quote stage, formal engineering standards, working with end-users, and connecting through media outlets that we will help educate the industry to be more mindful when selecting a mounting kit supplier."

Engineered for strength

A little known fact is that a leading cause of automated valve failures is directly tied back to a poor mounting kit. In fact, the company's newest mantra is 'Your reputation is on the line' because as Lambert explained, "...our customer's reputation IS on the line! If they sell a very expensive valve and actuator, but don't think twice about the bracket, their reputation is on the line because that valve may fail prematurely. Our customers know that VanAire can adhere to these standards and substantiating our designs with engineering documentation and material certifications. Having a valve fail prematurely due to an inadequate bracket can tarnish everyone's reputation very quickly. "Gone are the days where end users allow someone to just hack some tubing off and make into a bracket."

Chris Fabbri, Valve Automation Hardware Product Engineer clarified, "When people ask why VanAire makes its product a certain way we can reference the industry standard. VanAire Engineering Standards are now tied to ISO 12490 and API 6DX. It has really helped us to have these industry standards to support what we've been saying all these years about the critical role of mounting hardware." Lambert agreed and even cited case studies they have from places where VanAire didn't get the job the first time around but weeks or months later when the other products failed and a highly de-

pendable and well-engineered product was required, that's when VanAire got the call.

Goals for growth

When asked about goals for future growth of the company, Lambert, VanDeVusse and Miller agreed that the foundation has been set and are beginning to see things come to fruition. VanAire's 20 years of partnering with global Valve and Actuator Manufacturers and tier one suppliers has enabled them to structure their Design Engineering and Manufacturing Departments to effectively process orders from all of the world. Lambert said, "The reputation that VanAire has earned for Engineered Valve Automation Hardware and our ability to adhere to industry standards has not gone by unnoticed. Many customer specifications now require engineering documentation for mounting kits and specify VanAire Engineered Valve Automation Hardware." One of VanAire's goals is to continue to set the bar in this industry and continually strive to improve their products and customer satisfaction. VanAire projects significant growth over the next few years, despite the current market uncertainty. This growth will come through working closer with Core Customers in North America. They will also continue to work close with global companies and earn more global market share. VanAire is certainly poised for significant growth. Their restructuring and focus on improving internal processes has enabled them to gain capacity in order to handle this growth. Lambert concluded, "We want VanAire's reputation to spread beyond North America and take our place as the global leader for Engineered Valve Automation Hardware. As a company, we are becoming globally recognized and those are our intentions."



VANAIRE AT A GLANCE

History: Began operations in 1995

Number of employees: 76

Headquarters: 840 Clark Drive, Gladstone, Michigan 49837, USA

Product line: Engineered Valve Automation Hardware (EVAH)

Primary industries served: Oil and gas, energy, power and mining

This Spotlight article is paid for by VanAire. The views and opinions expressed in this article are those of the profiled company and do not reflect the position of Valve World Americas.

