

# Bringing Standardization to the Oil and Gas



The Bettis™ VOS-PAC™ components are designed, engineered, and guaranteed by Emerson.

ensure those issues are not problematic for other end users using Emerson products.

## One Point of Contact

“No one else has started to offer packages like this yet,” explained Herman. “Our advantage is that all the components are Emerson, and all different divisions of Emerson are working towards a similar goal!” With one Emerson solution, the company has become a one-stop shop for end users in the industry.

An integrated pneumatic actuation package includes air filter regulators, solenoid valves, quick exhaust valves, pilot valves, limit switches, and positioners, all in a modular control solution. “We really are a solutions provider,” Herman explained. “We are able to work with our customers on what they need for their business, and we have the resources for them to be able to complete their projects.” All components are designed, engineered, and guaranteed by Emerson.

Emerson’s high standard for the customer solution is due to its process that includes providing high-quality products without multiple suppliers and vendors. “We do not have to work across several companies,” said Herman. By not passing the project from engineering group to the next, Emerson is able to keep a constant relationship, avoiding production delays brought on by outside suppliers. “We find that end users prefer to work with fewer

Many projects in the oil and gas industry are facing challenges as they become increasingly complex and technologically demanding. In recent years, with the industry facing pressure to reduce development time and increase return on investment, standardization has become more customary.

Valve World Americas had the opportunity to speak with Senior Product Marketing Manager of Actuation Technologies for Emerson, Juliana Herman, to learn more about how the company is standardizing their projects, also making it easier for their customers to obtain the products they need.

By Brittani Schroeder and Sarah Bradley

Most of the projects found in the oil and gas industry are still considered “Engineered to Order” (ETO). In these cases, all valves, actuators, and controls are produced once an order has been placed. ETOs are a timely process, as the customer requires their projects to be properly quoted without the worry of delayed deliverables. The demand for customization is increasing every day, which does not help the already-lengthy quoting process, placing added scrutiny on the pressure of pricing. However, there has been a possible solution found for the issue at hand: standardization.

Emerson provides the pre-designed and preengineered actuation package solution, driving speed in the valve industry.

## Ninety Years of Work

Emerson’s portfolio of proven products now includes a modular, standardized VOS™ (Valve Operating System) strategically solving customer challenges, advancing efficiency in the valve industry. Emerson’s Bettis™ VOS-PAC™ is a package with an actuator and fully integrated modular controls, allowing large-scale fixed installations to provide faster commissioning while assuring the highest quality.

The package has been in the works for decades. “The Bettis brand has been around for over 90 years, and I think a package like this has been the goal for a very long time. We saw there was a lot of interest in having this kind of standard package, so we knew we could not pass on the opportunity to provide this for our customers,” said Herman. “We

have a skilled and experienced team dedicated to every product designed for a customer’s solution, and that includes the preengineered. They were tasked with finding the best actuator and control solution across all applications. It was a huge undertaking, but we had access to the information needed, so we were the ones properly suited to take on this job.”

## The Challenge

Designing and quoting a VOS takes time and resources. Typically, it can take up to eight weeks to provide drawings after the purchase order is received. The Bettis VOS-PAC took on this challenge and eliminated the need for detailed engineering, saving weeks of waiting time. With a preengineered, simplified, and standardized control package, Emerson is able to quote a multi-unit project immediately and have it completed and available within hours. The full solution, including drawings, can be made available instantly, with the Bettis 5-year warranty to back it.

## The 5-Year Warranty

The Bettis VOS-PAC includes a 5-year warranty. This industry-leading warranty covers everything from the actuator to the controls under one serial number.

The VOS-PAC is preengineered, so Emerson knows exactly what components are being used and what replacement parts will be necessary in the future. If there are problems that the end user experiences, the team can learn from those issues, updating manuals to



This Emerson actuation package is preset, pre-designed, and preengineered.

# Industry: Emerson's Bettis™ VOS-PAC™



Emerson's Bettis™ VOS-PAC™

vendors, and by creating this standardized package – which includes industry leading brands all in one package – we minimize it down to only one vendor.”

## The Quoting Stage

Standardization makes it possible to have an accurate design when it comes to quoting the project. It also makes costing and creating schedules more accurate. “Every time a new request came in, we spent a lot of time and energy quoting, and then more time engineering and reengineering the project, which also created delays in getting the final product to the end user,” Herman relayed. “We asked ourselves: how can we make this easier? How can we help our customers save time and money throughout this process?”

So, we developed a catalogue, and it allows us to go and quote the custom system almost immediately.”

“When you add in a general arrangement and schematic document package, you have a robust and comprehensive quote package that allows EPCs and end users to make quick decisions, driving speed in the project execution,” explained Herman.

Emerson also has an online store for their sales channel, which makes for a straightforward process to order the VOS-PAC. Unique part numbers and all the technical drawings can be downloaded from the online catalogue. The online store has the capability to provide instant and accurate pricing for the customer, so the end user knows the cost within minutes. “Letting our customers have access to everything online at any time is very helpful—not just for them, but for us as well,” said Herman.

## Available Documentation

“We spent a year going through all the different drawings to find what was needed in the market. We wanted to make the product as streamlined as possible,” Herman explained. “When you have that standard package in operation, you can

streamline maintenance because you know exactly what parts are present, and you know how to fix them.”

“In the oil and gas industry, it is really important to understand every asset because you need to know how much it weighs so that it will work on top of the

platform it is going to be placed on. Being able to give the specifications to our customers right at the beginning helps them plan out exactly what they want,” said Herman.

She also explained why the documentation is so important and compared it

to buying a new house. “So, you have bought a new house and there are appliances that you need to learn how to use. You need to see the manual for the dishwasher, the washing machine, the dryer, and the air conditioner. The same goes for actuators. If you were to walk up to an actuator in the field and you had to fix it, you would need to know about its parts and you would probably have to find each individual manual to get a comprehensive understanding of it.”

On a new Emerson VOS-PAC, a QR code can be scanned to bring up all the necessary documentation on a mobile device or tablet. “You get the necessary information for every component, and right away you know what you need to do to fix the actuator.” These scannable QR codes not only assure compliance with industry regulations, but also reduce facility safety concerns for the end user.

## Additional Advantages

There are many advantages to having a preengineered, cataloged, and fully tested VOS. These advantages are gained throughout the lifecycle of the product, further reducing the cost of ownership, shortening repair requirements and equipment downtime. Scalable in price, specifications, features, and functionality, the assemblies can be adjusted to meet any unique set of needs. Because of the product's standardization, it drives speed for the end user, saving up to six weeks in engineering time.

The VOS-PAC can be used in almost every industry including oil and gas, petrochemical, chemical, power, pulp and paper, food and beverage, HVAC, pharmaceutical, and water treatment. Customized to fit many different applications, Emerson's package can be utilized.



From strategic Emerson World Area Configuration Centers around the globe, Emerson engineers assemble, test, and deliver the customer's VOS system.

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