

Velan View

Issue 8

2014



**The JG Summit project: Velan's team
creates continuing success**

Also:

The new head of Velan ABV

Selling Velan's metal-seated ball valves

Business in Southeast Asia



4 Velan ABV's new leader

Paolo Ranieri comes to Velan ABV with a strong engineering background and a belief that the best teams are those given the freedom to create efficient systems that produce quality products.

8 Complex project opens door to the next level

A plant in the Philippines that presented a range of new challenges for Velan also strengthened a relationship Velan had with Daelim Industrial Co., Ltd. The result is more projects going forward.

12 Ivan Velan takes the reins at the Valve Manufacturers Association

Velan's Executive Vice President will be wearing an additional hat this year: He was recently elected to head up the top valve association in North America.

16 Selling is believing

According to Velan's North American Sales Manager Jens H. Mauritz, who is responsible for Velan's metal-seated ball valve line, the most effective sales tool is to know the strengths of the product you're selling.



20 Developing a broad base of knowledge: The Research Chair Program

Readers are updated on the exciting developments the research people at Velan share with the École Polytechnique de Montréal Multisectoral Industrial Research Chair.

24 When nuts and bolts make a difference

The size of a piece of equipment has nothing to do with how critical its function is to an operation. That reality is evident in the small parts that make up the hugely important Nord-Lock bolt and washer system.

26 Adrian Oon: A technical whiz with a love for his culture

As a global company, Velan must understand and respect how cultural differences can affect business. *Velan View* talks to the man who represents Velan in Southeast Asia.

29 A&M Industrial

A&M has made an incredible journey from a single hardware store to a national supply chain management company that also offers a full line of industrial services, including, its much-praised emergency response program.

Cover photography: Velan employees from Plant 4 in Granby, Quebec, who were part of the JG Summit Petrochemical Corporation's Naphtha Cracker Plant Project for Daelim (page 8).

From left to right: Mario Beaumier, Project Administrator; David Jones, Hydro Test; Emmanuel Léveillé, Shipping; Christian Roussel, Gate Valve Assembly; Sylvain Adam, Assembly Foreperson; Anne-Marie Charbonneau, Shipping Foreperson; Claude Beauvais, General Manager, Granby; Joseph De Melo, QA Manager; Marc Lacasse, Painter; and Jocelyn Roy, Shipping.

Photo credit: George Smid

Editor-in-Chief: Tracy Fairchild

Co-Editors: Judy Tibbs and Genilee Parente

Writers: Tracy Fairchild, Genilee Parente

Design and layout: Kathy Conklin

Photography: George Smid and Michael Zablotzky

Printed in Canada

Velan Worldwide Headquarters,

7007 Côte de Liesse, Montreal, QC H4T 1G2

Tel: +1 514 748 7743 Fax: +1 514 748 8635 www.velan.com

©2014 Velan Inc. All rights reserved.

The Velan name and logo are trademarks of Velan.

Other marks are the trademarks of their respective owners.

President's message:

A snapshot in time

Summer has finally come to Montreal after a long winter that seemed to last forever and bring even more snow than usual. Ours is a city of festivals, and during the summer we have the opportunity to relax as the days grow longer and warmer and enjoy a number of uniquely Montreal events, including our world-renowned International Jazz Festival and Just for Laughs Festival. These consistently outstanding annual events enliven Montreal every summer and bring hundreds of musical and comedy talents from around the world and thousands of visitors to our beautiful city.

As for what is happening in our valve industry world, in this edition of *Velan View*, we profile Paolo Ranieri, the new Managing Director/Chief Executive of Velan ABV. In the article on page 4, you can read more about the talent and leadership skills he brings to the table: We are very happy to welcome him on board.

On page 8 we highlight a challenging project in the Philippines for Daelim that presented us with many opportunities to learn and expand our capabilities. Happily, our success on this project has led to more orders for the future.

On the distribution front, we talk with A&M Supply founder and President Arnold Young and his son and current Executive Vice President, David Young. On page 29, they share their insights on the drive it takes to make a company thrive more than 60 years in the industrial distribution business.

We've always believed in staying on the forefront of technological research. On page 20, we give an update on our accomplishments as part of the National



Sciences and Engineering Research Council of Canada's Research Chair Program with l'École Polytechnique de Montréal.

We also profile Velan's Regional Sales Manager, Southeast Asia, Adrian Oon, and there is an interview with my brother Ivan on his vision as the first member of a Canadian-based company to be Chairman of the Valve Manufacturers' Association of America.

Last but not least, we speak with the team of Velan employees whose work supports Velan Sales Manager Jens Mauritz's mandate to expand the market penetration of our metal-seated ball valve in North America.

With his expertise and drive, he's already making positive advances for us. You'll find this article on page 16.

We hope you find this publication to be a useful compilation of interesting topics and people in our industry. If you have ideas about topics we should cover or people/companies we should profile, please let us know.

I wish all our readers good health, happiness, and success in all your endeavors.



Tom Velan
President and CEO

Velan ABV's new leader

is a believer in finding the best path forward

When you ask Paolo Ranieri, Managing Director/Chief Executive of Velan ABV S.p.A., why he believes so strongly that putting the right systems in place is the best route to success, he tells a story about meeting a Formula One race car driver.

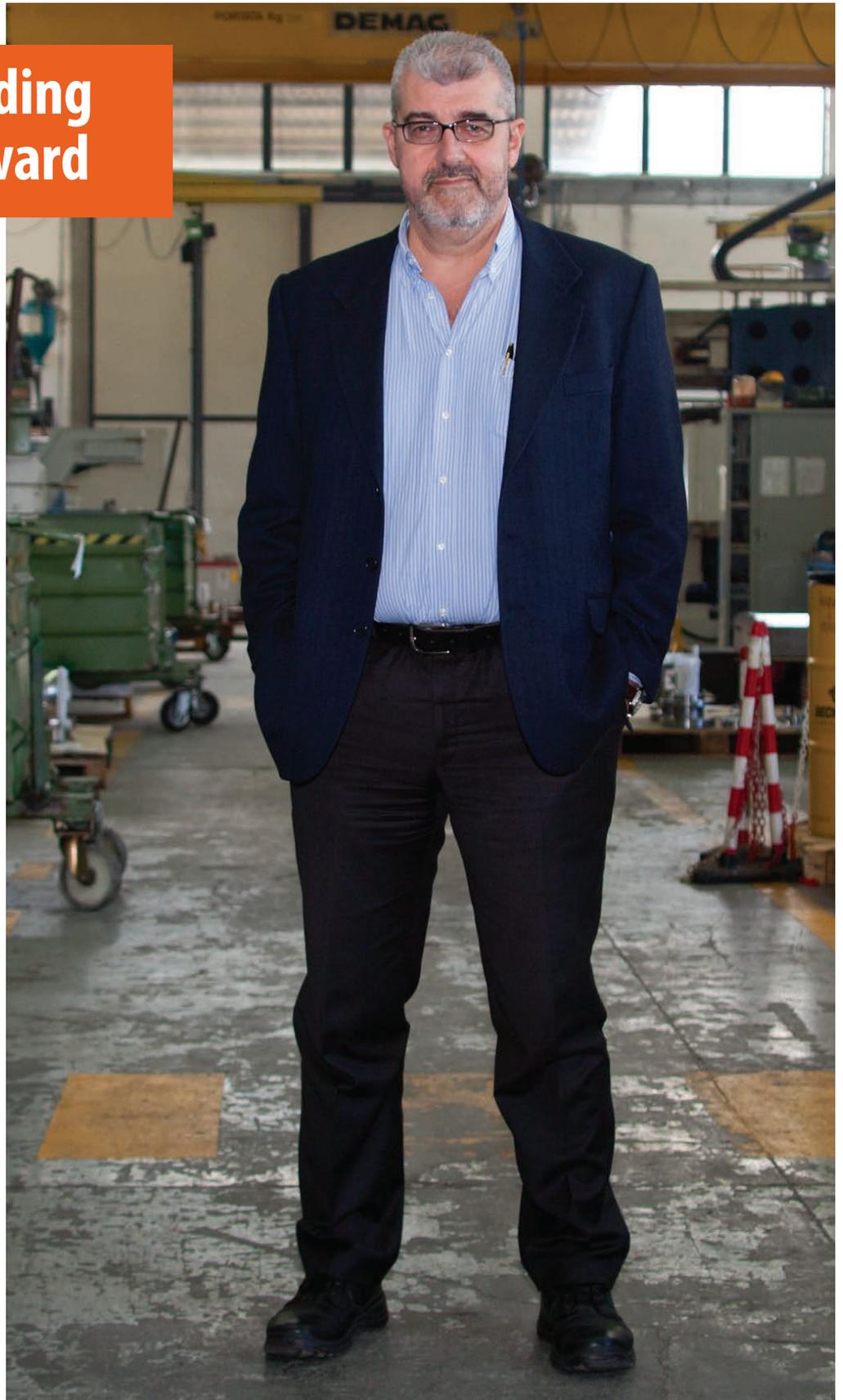
The former driver was teaching people to be safer and more efficient drivers. One of the tests given at the camp was a circuit race that closely monitored the performance of each car and driver.

“The trainer showed me data that was extremely interesting. It demonstrated that the winning car was not necessarily driven by the most aggressive driver or the fastest driver: It was the one that used the least amount of fuel. Consequently, the winning driver was the one who drove the car in the most efficient way,” Paolo explains.

“That is the essence of Lean: It's being first by being most efficient,” he adds.

A new leader for Velan ABV

After an extensive search for a new leader for Velan ABV S.p.A., located in Lucca, Italy, Paolo accepted the position in February, bringing with him an extensive background in both management expertise and technical knowledge. Paolo is a certified professional engineer with a degree in mechanical engineering.





Velan ABV's head office and Plant 1 manufacturing facilities



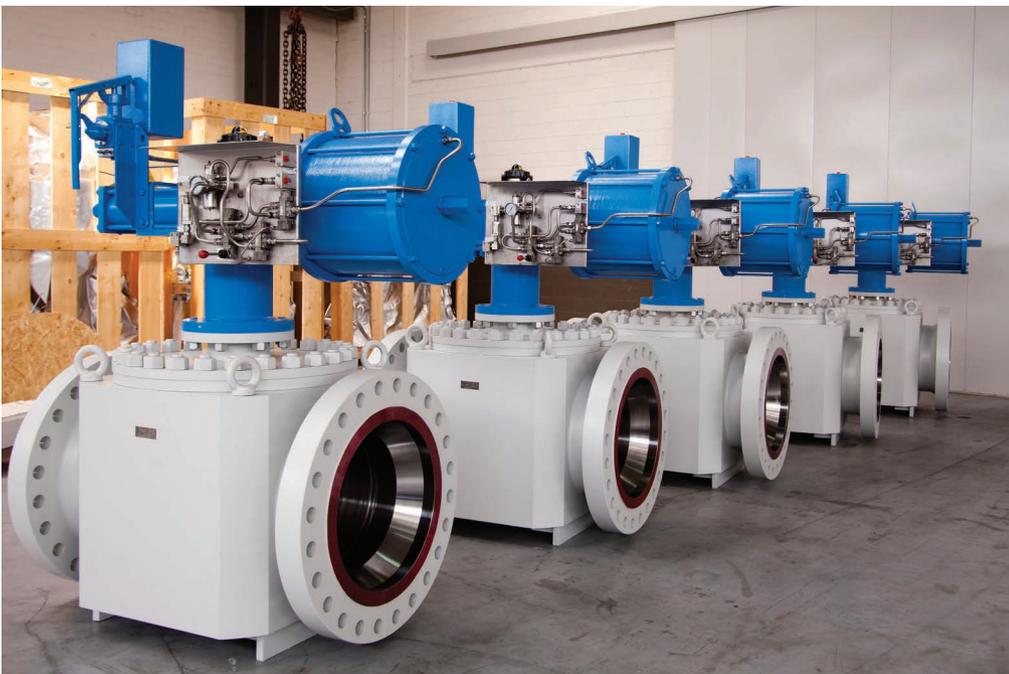
Velan ABV's Plant 2 assembly and testing facilities

His last position was as Plant Manager for another valve company where he oversaw 300 people in a division specializing in subsea valves. He spent a good portion of his career, however, at GE Oil & Gas. He began in 1986 in Research and Development (R&D) and worked his way up through the ranks.

“R&D was a good initiation to the manufacturing and valve worlds because it allowed me to experience a broad vision

of the technical aspects of industry before learning the management side,” he says.

He then began his climb, moving first through engineering positions until he was a project manager then moving up the ladder in various leadership positions. At GE, for example, he was Quality Assurance/Quality Control Manager, Chief Engineer of Design and R&D, and finally Product Manager. Along the way, he gained a great deal of



A shipment of newly manufactured valves produced in Velan ABV's plant in Lucca, Italy

“R&D was a good initiation to the manufacturing and valve worlds because it allowed me to experience a broad vision of the technical aspects of industry before learning the management side.”

— Paolo Ranieri, Managing Director/Chief Executive of Velan ABV S.p.A.

experience in health and safety practices. He went on to work for several other companies, most frequently focusing on quality control (QC) and efficient plant operations. Paolo got his green belt in Six Sigma and an executive black belt while on staff at GE.

“This was during a time when the industry was beginning to realize that quality is a vital part of running a plant. It’s not a background function, it’s a leading function,” he says.

“I view the importance of QC as being similar to how finance might be seen in a corporation: You have to be able to understand the numbers to know how you’re doing financially. You have to be able to measure the way your systems are functioning to know whether they are as efficient as they can be,” he adds.

Over the years, Paolo has seen an evolution in how companies value Lean operations.

“We used to define excellence by our products. Today, we look at the quality in terms of the systems that make those products,” he says.

While this approach has been used in the automotive, aerospace, and communications industries for years, it’s also become a fundamental focus in the world of industrial valve design and manufacturing. At Velan ABV, one of Paolo’s first efforts will be to put the right systems into place.

“When you show people their value to the company, you are showing them how what they do affects what all the other team members do. You build a consensus based on taking some risks to get where you want to go, but taking those risks together as a group.”

—Paolo Ranieri

Velan ABV's goals

Paolo says he has two main goals he's looking to achieve in his new position: to move more heavily into certain lucrative markets and to bolster employee communication.

The markets he's aiming for are those that require high-end products, Paolo says.

“Working with sophisticated products has two benefits for Velan ABV,” Paolo explains. “First, it makes money for the company, and secondly, it gives our staff the challenge of making the best valves. When you have that kind of challenge, you become a team,” he says.

Paolo's second goal is to open up communication within plant operations so that staff can work together more efficiently. To make the best products requires getting the entire plant on board, he says, and the best way to do that is to show staff exactly what contribution they are making to the revenue of the company.

“When you show people their value to the company, you are showing them how what they do affects what all the other team members do,” he says. “You build a consensus based on taking some risks to get where you want to go, but taking those risks together as a group.”

One of the end-user markets Paolo feels has great potential is deep sea development.

“Competition for many industries is very tough in our part of the world. The deep sea is a growing market with very specialized products,” he says. “In tackling



Part of the Velan ABV team (left to right, back row): Andrea Nencioni, Chief Financial Officer; Emanuele Masti, Human Resources Manager; Davide Pagella, Senior Project Manager; Francesco Pucci, Production Manager and Procurement; (front row) Marco Letari, Manager, Engineering Department; Paolo Ranieri, Managing Director/Chief Executive; and Damiano Roberti, IT Manager

this market, we are moving from the refinery and pipeline side to the production side by serving the floating production storage and offloading (FPSO) platforms,” he says. FPSO platforms need top-quality, high-pressure valves that stand up to saltwater as well as the more corrosive fluids and gases involved.

Paolo says one reason deep sea is the wave of the future is because it is seen as being more politically acceptable by many nations, who would rather see drilling far off shore as opposed to in their own backyards.

Velan ABV already has a reputation of producing sophisticated products, a



Inside Velan ABV's Plant 1 manufacturing facilities

reputation bolstered by formal relationships with several Italian university research departments. The direction for Velan ABV going forward will be to serve the deep sea and its other markets (oil and gas, power generation, geothermal, and liquefied natural gas) more efficiently.

“Like the world in general, the markets in which we move are getting faster and faster. One of the most important things we can do in the future is ensure we can deliver our quality on time,” he says.

Managing through empowerment

When it comes to management style, Paolo says he’s very much a believer in handing responsibilities over to his staff so they have the freedom to get to pre-determined goals.

“I work by consensus, which is much more effective in a team than forcing people to do what they don’t want to do. I hold them accountable, of course, but we make decisions as teams,” he says.

Sometimes you need to make a significant change in the way things are done—a change that some people might initially resist.

“But the next step in the process is to convince people why a certain direction is the right way to go,” he says. “The key here is to develop clear communications.”

He likens how that works to his time spent in the Italian navy in service to his country.

“The boat may be in port; the engineers not working for a while; some people on shore leave. But when the captain says, ‘this boat will be leaving at 8 a.m. tomorrow morning,’ you all pull together to make that happen,” he says.

He’s also very much a believer in finding the right systems and says the goal there should be to find ways to make processes work on their own.

“I joke with people that my eventual goal—a goal I can’t hope to reach of course—is to have nothing to do. I have this dream: I think that one day the systems will be working so perfectly and we will be so well organized, I don’t need to come into work,” he says. **||VV||**



Inside Velan ABV’s Plant 2 assembly and testing facilities

Paolo Ranieri: His aim outside the office

Paolo Ranieri carries a lot of weight on his shoulders and has for most of his career. So what helps him cope?

“I start my day on a motor bike,” he says.

Paolo has always had motorcycles and while he doesn’t race competitively, he uses that mode of transportation as often as he can.

“The reason I do is that it makes my whole day better. When I’m on a motor bike, I feel like I’m on holiday, so I approach my daily duties with a smile already on my face,” he says.

He’s also an avid baseball fan and player, a sport he says he has enjoyed for 30 years.

“I have often joked that I’m a baseball player first and an engineer second,” he says.

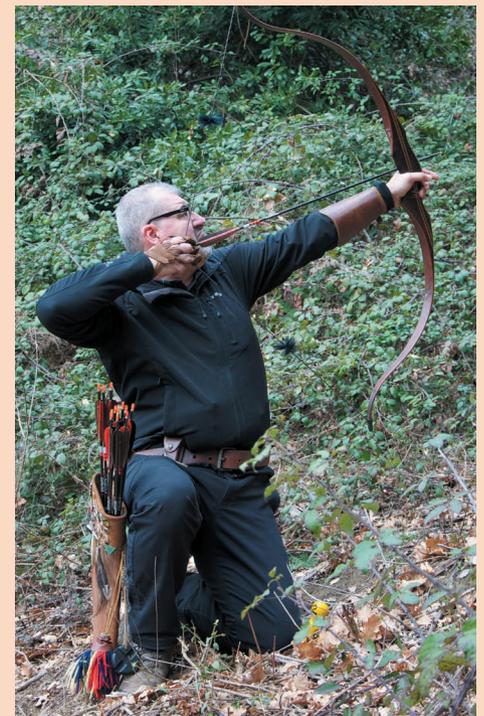
Still the sport is directly linked to his views on how a company should operate.

“Baseball is a game that focuses both on the individual and the team,” he says. “When you step up to the bat, you are alone. But to win the game, all the team members have to work together,” he says.

Paolo also enjoys exploring the great outdoors. “I first started learning about traditional archery and bow hunting 25 years ago. I practice as often as my busy

schedule permits: I love how it allows me to take long walks through the woods,” he says.

“And in the end,” he concludes, “isn’t everything about identifying, aiming for, and hitting your targets in life?”



Complex project

opens door to the next level



Photo credit: Daelim Industrial

In the world of projects that involve end users of valves, the road to success is paved with one main ingredient: keeping the customer happy. Many things can threaten to get in the way of that goal. But there is one surefire measurement of whether the destination has been reached: another project with the same client.

Such is the case with a particularly challenging job done for Daelim Industrial Co., Ltd., an engineering, procurement, and construction (EPC) contractor located in South Korea. The original project, which was to provide valve assemblies for a grassroots naphtha cracker plant in the Philippines, served as a gateway for an even larger

venture in Saudi Arabia. The scope consisted of 98 sets of air-operated gate and globe valve assemblies ranging in size from 1" to 24". The valve automation packages were designed for either fail-open or fail-closed operation with the use of spring-return cylinders or air volume tanks, thereby achieving specific stroke time requirements.

A learning experience

The naphtha cracker plant project was unusual in several ways, beginning with the product itself. Daelim tasked Velan with producing the largest pneumatic-actuated gate valves it has ever produced—up to 24" Class 300 valves. The valves were for the JG Summit Petrochemical

The Project

Project name: JG Summit Naphtha Cracker Plant

Project location: Batangas City, Philippines

End user: JG Summit Petrochemical Corp.

Cost of entire project: US\$700–800 million

Expected plant capacity: 320,000 metric tons (MT)/year of ethylene + 190,000 MT/year of propylene

The \$800-million JG Summit naphtha cracker plant broke ground in the Philippines in 2011 and plans to open its doors in 2014. The plant can process naphtha, a strong feedstock derived from distilling crude oil that is used to make ethylene and propylene. Products that are the end result include high-octane gasoline, fuel for camping stoves, and chemical solvents.

Such plants need very large gate valves to isolate the immense piping systems that keep the processes flowing. They need pneumatic control of those valves in areas of the cracker plant that require fast response, such as in the case of closing or opening emergency valves.

Corp. Naphtha Cracker Plant Project in the Philippines.

Stephane Meunier, Manager, International Projects, explains why the product was unusual and size was needed.

“We’ve produced larger gate valves than these before but not controlled by pneumatic actuators. Gate valves this large are usually actuated by electric motors, but these valves were for emergency shutdown purposes. An electric motor cannot perform quickly enough in an emergency, and these valves must be able to stroke to a fail-safe position in the event of an electrical or air supply failure,” he explains.

“Some of the biggest challenges with the project had to do with the sheer size of these pneumatic actuators,” Joe Calabrese, Director of Sales for East Asia, adds. “Their weight and size as well as the complexity of the associated controls were all new factors for us,” he says. “It soon became obvious, once the order was received, that we had underestimated the amount of work required to design, manufacture, and test the valve and actuator assemblies within the

tight schedule requirements. Fortunately, while this actuator technology is uncommon for large gate valves, it is quite standard for Velan quarter-turn products so we could draw on this knowledge and use it in this situation.”

The challenge had to be tackled company-wide and included a hefty 3,000 man-hours of work from company engineers, in addition to production in three of Velan’s plants (Plants 1, 3, and 4) which made and assembled different sizes of the valves.

This complexity was countered by the fact that everything was channeled through one point of contact: Stephane Meunier.

“This allowed seamless transition through engineering, purchasing, quality assurance/control, all the way through final assembly and shipment,” Stephane explains. “It also meant that when the inevitable bumps occurred along the way, those bumps had to be handled through close teamwork, including bringing engineering directly into the plants for brainstorming and troubleshooting,” he adds.

An engineering feat

For those on Velan’s engineering team, the JG Summit project provided one of the more challenging tasks of their careers.

“I was amazed myself when I looked at what went into the 3,000 hours,” says Guy Gaillardet, Design Manager. “We had 117 engineering change orders (ECOs). At one point, we had 13 people in engineering working on the project at the same time,” he says.

ECOs are tickets that start a request for engineering to look into an option on a product—different choices for what should be done to make a standard valve work in a particular situation.

“The valves themselves are standard products designed to API 602 and API 600, but the modifications that were required to make them suitable for the linear pneumatic cylinders and controls were anything but standard. Many of the cylinders that had to be mounted on the valves were huge and there was a wide range of cylinders for the

“Some of the biggest challenges with the project had to do with the sheer size of these pneumatic actuators.”

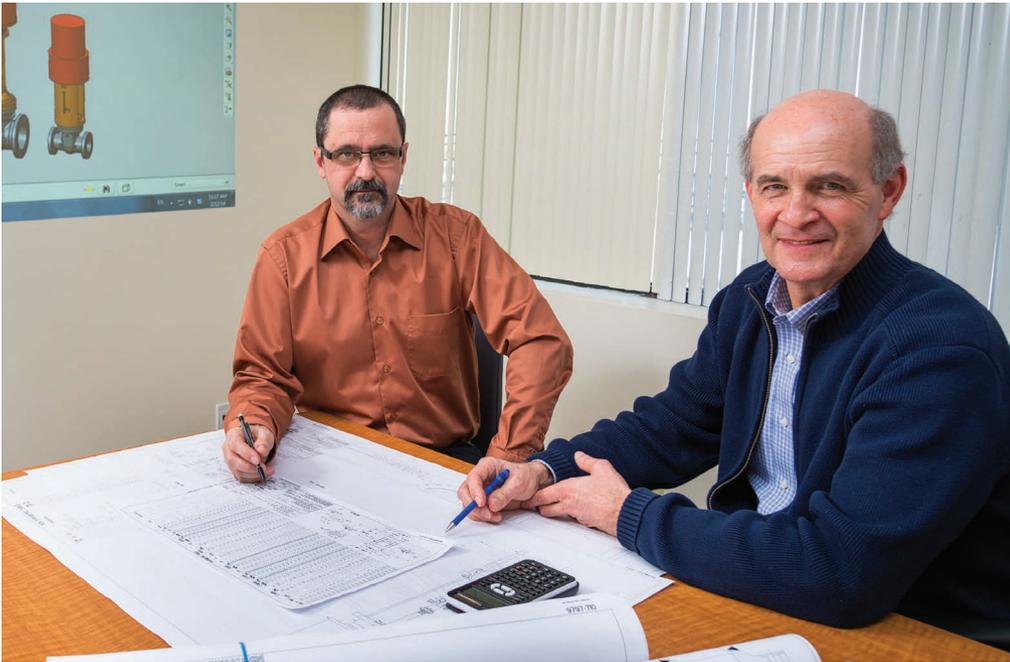
—Joe Calabrese, Director of Sales for East Asia

same valves with different switches, different access arrays, and different configurations,” Guy says.

Another measure of how far-reaching the challenges were for engineering was how many new types of valve assemblies came out of the work.



Stephane Meunier, Manager, International Projects, stands next to a 24" Class 300 gate valve destined for the Naphtha Cracker Plant project in the Philippines.



Yves Lauzé, Velan's Design Director, Multi-Turn Valves, with Design Manager Guy Gaillardet

“What engineering was able to accomplish, especially in such little time, was truly exceptional.”

—Stephane Meunier, Manager, International Projects

“We released 303 new drawings for parts and 131 new bills of material before the project was completed,” Yves Lauzé, Design Director, Multi-Turn Valves, explains. (Drawings and bills of materials are like new recipes and ingredients for a valve.)

The demands on staff and resources extended into Velan's production plants.

“We gave each of the plants, with its own sizes and types of valves to produce, its own set of new challenges,” Stephane explains.

For example, the Granby, Canada, facility manufactured the valves up to 16" while the Williston, U.S.A, facility handled the larger items up to 24".

In all, “there were at least 30 different combinations of valves and actuators, each requiring a slightly different mounting design. Add to this the fact that drawings provided by some actuator sub-suppliers

didn't quite match the product parameters, and you can see how complicated it became,” Stephane explains.

The size of the actuators also tested plant floor administration skills.

“When you have something that size for the first time, you have to figure out a means to handle the weight and a place to set what might be a two-ton valve assembly (in the

case of Plant 3). It all takes a lot of coordination,” Stephane says.

“Then when we got these assemblies into testing, we ran into yet more challenges. But each production team put forth tremendous effort, and in the end, delays in scheduling were not on Velan's production lines,” Stephane says.

Communication is key

The JG Summit project was important to Velan because it re-established a relationship with Daelim, a huge EPC company based in South Korea that is involved in a number of key energy projects around the world. Getting the contract in the first place can be credited to two factors: Velan's company representative in Korea (Sejon Trading Co. Ltd.) and the fact Velan made a big effort to get on the approved vendors list early in the proceedings for the JG Summit project.

“We could not have succeeded in getting the job in the first place or keeping the end user happy during the process without the help of our representative in Korea—Sejon Trading Co.,” Joe says.

“Sejon opened the door and kept the lines of communication with Daelim flowing. Sejon personnel developed a very good



A 6" Class 300 air-operated gate valve assembly installed in the naphtha cracker plant



Two 18" Class 300 air-operated gate valve assemblies installed in the naphtha cracker plant

working relationship with Daelim by providing constant updates and even visiting sub-suppliers along with Velan personnel to expedite delayed components," he adds.

Open lines of communication also were key internally.

"This truly became a team effort within Velan's ranks," Joe adds. "The air operators were largely delayed and this affected our completion dates, but for the most part, each of the Velan divisions involved assigned the necessary resources to get the project done," he adds.

The effort was also greatly helped by the company's own VDM (Velan Data Management) system.

"It would not have been possible to manage this project without a tool like this," Yves adds. "This system is a very powerful tool for taking in requests linked to sales

orders, then managing the work load of each designer," he says.

Stephane adds that: "What engineering was able to accomplish, especially in such little time, was truly exceptional."

The result is that, when it came time to bid on another project—the Yanbu Export Refinery Project in Saudi Arabia—Velan had a huge advantage: Daelim was already familiar with how the company operates.

"If you put these two projects together (JG Summit and Yanbu Export Refinery Project), you'd see that while we faced a lot of challenges in getting through the project, we came out winning in the end," Stephane says. "We continue to be very active with Daelim." **|VV|**



Global team effort

It is worth mentioning it would not have been possible to manage this project without the great behind-the-scenes teamwork by the Velan employees involved.

Shown above is Mario Beaumier, Velan's Project Administrator, who was instrumental in coordinating the technical effort in Plant 4.

Shown below is part of Velan's Plant 3 team (left to right): Roger Forgues, Production Manager, with Process Planners Michael Petry and Jason Oliver, and Assembly Supervisor Brad Steady.



Ivan Velan takes the reins

at the Valve Manufacturers Association



Executive Vice President Ivan Velan was elected Chairman of the Valve Manufacturers Association (VMA) at the association's 75th annual meeting last fall. He became the first leader of that group from a Canadian-based company.

He is also one of the only recent chairs to come from a company with such a strong family background. Because of his new position and his unique background, *VALVE Magazine*, the association's main publication, interviewed Ivan for the print and Web versions of the publication. Ivan told *VALVE Magazine* and VMA about the early days of the company, and how he got involved in the business. He also shared his views on the industry and his role as chairman. This article is based on what he said.

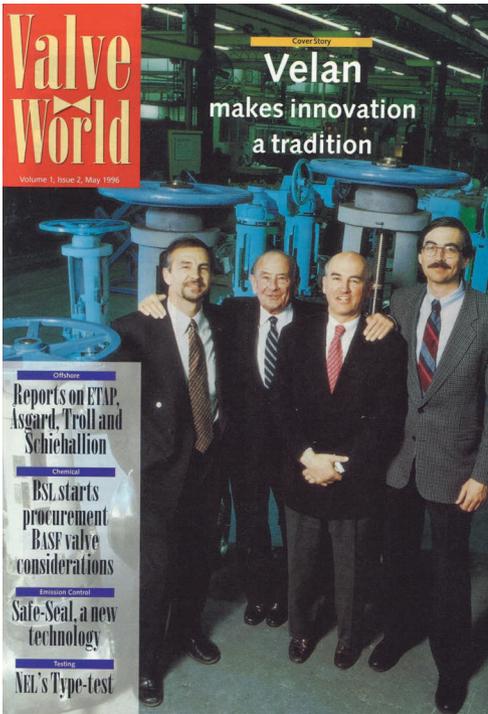
The family ties

As Ivan told VMA and as many *Velan View* readers know, A.K. Velan, who is Chairman, founded the company in 1950, and all three of A.K.'s sons are involved and hold stock in the business. Ivan's brother Tom is the CEO and President and his other brother Peter worked in the company for 35 years and continues on the Board of Directors. Two of the 12 third-generation Velans have joined the staff of the company and show interest in continuing to do so.

Ivan says he spent a fair share of time growing up listening to his father's tales at the dinner table about what was going on with the business, and he traveled to Europe with the family when A.K. was exploring global ties. But he says he had no early intentions of entering the world of valves.

By the time Ivan was grown and in college, Velan had sales of about \$10 million. His brother Peter had a mechanical engineering degree from McGill and was already working in the family business.

However, "I wanted to be a hockey player," Ivan says. "And while I excelled in the sport, I wasn't good enough to play pro. Besides, I wanted to keep my teeth," he jokes.



Velan was featured as the cover story in Valve World magazine in May 1996.

Instead of losing his teeth, he got a bachelor's degree from Loyola of Montreal, then went to the University of Michigan and obtained a master's in business administration, with plans to go into consumer marketing. By that time, he had married his high school sweetheart Penny, who grew up on the same street as him. When he was nearing graduation, several major food companies approached him with offers. However, so did his father and brother.

Why did he take the job?

He had dabbled in several areas of the Velan family business, including working on the shop floor in the summers, which he said gave him an appreciation of how difficult it is to be a machine operator and to work in machine shop conditions. Another summer experience planted the seed that eventually led to his career, however.

"When I had just finished third-year university, my father proposed that I go on an around-the-world business trip for six weeks during the summer of 1967 to appoint new distributors in export markets. I said, 'Well Dad, I don't really know that much about valves.'"

But he went anyhow and, at 22, traveled to 10 countries and brought home many orders.

"To my surprise I found the whole experience fascinating and exciting. And even though I still didn't intend to go into the family company, when the time came, I realized this was a business that offered me far more opportunity and challenge than the food industry. It was Peter who finally persuaded me to join in 1970," Ivan says.

Today, Ivan is responsible for sales in North America and is involved in most other areas of the business, with the exception of engineering design.

He served on the board of directors for Velan Inc. from the early 1970s until stepping aside in 2013 and making his seat available for his son Rob. Ivan was chairman of the board between 2003 and 2011.

His views on the industry

As Ivan told VMA, he has seen many changes in his 44 years in the valve business. He notes those changes by decade.

"In the 70s, North American manufacturers were servicing mostly North American customers and doing so using North American components," he says. Asia was just developing. Nuclear power was a major factor in power plant construction.

In the 80s, Ivan says the defining issue was an increasing capture of market share by quarter-turn valves, which had started as plain ball valves and evolved into butterfly and other quarter-turn variations.

"A host of new ideas came out about how to take advantage of the ease of operation and lower cost of actuation," Ivan says.

The 80s were also defined by increased emphasis on automation; the decline of nuclear because of the Three Mile Island incident in 1979 and Chernobyl in 1986; and the rise of Japanese competition, which resulted in anti-dumping actions by VMA and valve companies, he says. (Dumping is the trade practice of pricing products at unjustifiably lower prices for export sales compared to home market domestic sales.)



Ivan Velan presents a gift to outgoing VMA Chairman Mark Cordell at VMA's 75th Annual Meeting.

“VMA is well known in the valve industry, and we are at the forefront of some important developments. It’s an honor and challenge to serve as its leader during a time when so much is going on in the industry.”

—Ivan Velan, Executive Vice President, Velan

During the 90s, globalization of both manufacturers and end users came to the forefront of business.

“North American and European companies were seeing the writing on the wall, and manufacturers scrambled to move operations to places like China and India, meaning a shift in jobs and market emphasis,” he says.

By the 2000s, the industry had accelerated consolidation across both geographic and product lines; computers and enterprise resource planning systems had become an essential part of daily operations.

“Today, we are in an information age with so much available with a click or a swipe. We have smart actuators, chips put on valves that can store all kinds of information about the components in valves, and seemingly infinite data on all matters in general—stored, categorized and instantly available,” Ivan says.

“When you look at the pace of changes made in the last 20 years, you see that it’s undeniable there will be radical changes with tremendous effects going forward,” he adds.

Ivan says another significant change he’s seen in his 44 years in the valve industry is that there are many new levels of complexity involved in making a sale and running a company.

“In this day and age, doing business takes far more than a good valve design that is made the right way in a good machine shop,” he says.

“We have to think about fluctuating currency exchange rates, export controls, conflict minerals, foreign corrupt practices, safety integrity level (SIL) programs, codes of conduct, corporate social responsibility practices, fugitive emissions guidelines, enhanced qualification testing of valves, restrictions on country of origin for components and fully assembled valves, and increasingly long and complicated terms and conditions for contracts—all in an environment that is very litigious, especially in the U.S.

“Because of globalization, companies have to adapt to a wide range of valve standards that affect design and the ability to sell—from the Manufacturers Standardization Society to American Petroleum Institute to International Standards Organization to the different European country standards such as DIN in Germany, GOST in Russia, BSS in England, IBR in India, and so on,” he adds.

Heading up VMA

Mr. Velan’s main priority as new Chair of VMA will be to optimize the existing programs.

“VMA is well known in the valve industry, and we are at the forefront of some important developments. It’s an honor and challenge to serve as its leader during a time when so much is going on in the industry,” he says.

The association is a venue for networking and sharing stories, a voice for the valve industry to government bodies, and a conduit for information through its meetings and *VALVE Magazine*, he says. Most recently, it has taken on an initiative to meet an immediate need: helping to educate new employees being hired to replace aging employees at valve manufacturers and the industries they serve.

“Despite automation and globalization and all the complexities, this is still a people business. The industry needs to replace

those skilled individuals who are getting ready to retire,” he says. VMA has an educational arm of the association that runs Valves and Actuators Basics courses to teach those entering the industry as well as those that need a refresher about how valves and actuators work. The educational arm also has plans to expand and recently began an online program.

Another recent key effort is opening membership to the distributors. Ivan says his hope is that by fall there will be a dozen to two dozen distributors that are members of VMA—a goal that seems within reach as the association has signed up eight new companies to date, including several Velan distributors.

“Adding distributors is a logical step because they are an integral part of the supply chain,” says Ivan, referring to a point brought up at a recent VMA Leadership Conference. While in the past distributors were an extension of the valve manufacturers’ sales and marketing effort, they are now increasingly involved in the purchasing efforts of end users and engineering, procurement, construction (EPC) companies.

The other issue Ivan sees as important in the near future is that the international picture is showing signs of allowing production to move back to North American shores. Many valve users are realizing that initial cost savings from purchasing valves from low-cost countries does not translate into low, total long-term cost of ownership, Ivan points out.

“We are hoping that the historical trend that occurred with increasing Japanese competition and growth leading to the appreciation in the value of the yen will occur in places such as China and India leading to more onshoring than offshoring going forward. The tide may turn to bringing some jobs and production back to North America,” he says. **[VV]**



Ivan and Penny Velan's extended family

The personal side of Ivan

Ivan married his high school sweetheart Penny in May 1969 and together they have raised five children: Rob, Shane, and Corey, the three boys the couple had early in their marriage, who were joined a decade later by daughter Kristina, and son Andrew.

"I used to say: two families, same wife. It's funny because my wife taught grade three for several years at a young age. By the time our second round of children came, we were relating to the other parents because they were the people she taught," he says.



Ivan and his wife of over 44 years, Penny

The older three are now married and have given them 11 grandchildren. Needless to say, family gatherings are busy events!

To give back to the Montreal community where he has lived his whole life since his parents came to Canada, Ivan served for over 10 years on the Boards of Concordia University and Lower Canada College (LCC). He's currently on the Foundation Boards of the Montreal General Hospital and LCC.

But he makes sure to have time for travel, both for business and for the personal experience and pleasure. Because Ivan is retirement age with no plans to retire, he and Penny have reached an agreement, whereby she tolerates his long hours at work and then gets his full attention on travels. "I agree to go where she wants to go about seven weeks of the year. I have to grudgingly admit, she's taken me to some pretty interesting places," he says.

Among his favorite trips was Africa, where they saw the Serengeti game reserves and visited the famed mountain gorillas that Dian Fossey studied in Rwanda. They've also been to the Himalayas, Australia, South America, Southeast Asia, and many other locations.

"The only area we haven't been to is the Middle East. We're waiting until the time is right," Ivan adds.

Ivan is also an athlete who loves competitive sports such as racquet ball, hockey, tennis, football, and basketball, as well as skiing.

"I'm a believer that there are many benefits, both physical and mental, in keeping active," he says.



Ivan and his son Rob Velan, taken in 2011 at the Velan Sales Conference in Montebello, QC



Selling is believing

Part of the Power Ball valve support team (left to right): Farnaz Adli, Application Specialist; Luc Vernhes, Design Manager, Securaseal Ball Valves; Chris Oettel, Quotations Manager, Severe Service; Nicolas Lourdel, Plant 5 Product Development Process Manager; Paul Lee, Vice President, U.S. Sales (Eastern Division); Martin Caouette, Plant 5 Production Planner; and Jens H. Mauritz, Velan's North American Sales Manager for Metal-Seated Ball Valves

Although there is a mountain of advice out there aimed at telling marketing professionals how to do their job, effective selling comes down to one reality, according to Jens H. Mauritz, Velan's North American Sales Manager for Metal-Seated Ball Valves.

“You have to believe in your product,” Jens says. “If you don't believe in what you're selling, you're not being true to yourself and you're certainly not going to be convincing,” he adds.

On the other hand, “If you do believe in your product, and if you respect the intelligence of your customer, selling is simply a matter of explaining the benefits. Your customer will come to his or her own conclusions and see that those benefits apply to their needs,” Jens says.

There are a couple of caveats to that reality, however. The first is that you have to have a quality product to believe in, as well as one that has ample benefits to share. For Jens, that quality product is Velan's complete line of metal-seated ball valves, including the Securaseal metal-seated ball valve line and the power-specific Power Ball valve.

Jens has been responsible for promoting the benefits of the line for about a year, and he says that before he took the job at Velan, he qualified the Power Ball and Securaseal.



At Velan, we know what it takes to design and manufacture industry-leading valves that stand the test of time.

After all, we've been doing just that for over 60 years.

We offer a wide range of valves designed to meet any industrial application. So next time you're in the market for a high-pressure, high-temperature valve, you can rely on our Power Ball. It features a one-piece forged body and live-loaded full-size packing set as well as a unique direct mounting-pad that eases actuation.

When it comes to valves that offer low emissions, easy maintenance, and long and reliable service, Velan is the name to trust.

Velan. Quality that lasts.

+1 514 748 7743
www.velan.com

VELAN

Velan's Power Ball valve was the focus in this product advertisement.



Hydro testing of a Velan Power Ball valve

“When I accepted this position, I came not just because I had a lot of experience with metal-seated ball valves, but because I had done my due diligence. I saw, for example, what a gem Velan had in the Power Ball,” he explains.

Perfecting his skills

Like many people in the manufacturing representative profession, Jens has a combination of technical expertise and strong interpersonal skills. He initially studied business and economics before joining the army, which he said was an important stage in developing the personality side of his equation.

“I believe that every young man should go into basic training after high school. It develops personal attributes—primarily motivation, drive, and the desire to do more than you ever thought you could,” he says.

After the army, Jens went to work for a large mechanical contractor as a job engineer working directly under the project superintendent, a position he says prepared

him well for the technical side of the equation.

“Working on specific projects provided a solid education for the valve industry,” he explains, “because it gave me the total idea of how a process piping system operates, whether that system is in a refinery, a chemical plant, or a power plant.”

From there, he jumped from the construction aspect of the business to the supply side and worked in a series of positions selling valve products. Even though he’s worked for a few different valve companies, he says that in his 30 years in the business, “one of the things I feel fortunate about is that I haven’t had to make many professional moves.” For most of his career, including a seven-year stint running his own manufacturing representative firm, he was involved in selling engineered valve products.

Using those skills at Velan

Jens’ technical skills plus his enthusiasm for the Velan product line mean that he’s accomplished much in his year on board

at the company. He says that while putting together a sales strategy for the product line required long hours, the ingredients for a good strategy were easily accessible.

“One of my favorite phrases is: lasting quality by design, and Velan certainly has that as a backbone,” Jens explains.

“That really sticks with users because they know that with other manufacturers, they’re having to order replacement parts if not complete valves,” Jens adds. “The life of our product is long, and our testing with automation far exceeds any the competition offers.”

That’s especially important when trying to sell a valve that has to be reliable and has to operate under challenging conditions. Such valves are not something that come off the shelf, he points out.

“The valves in my product line are for severe service applications; there’s a lot more involved here than picking a product out of a catalog,” Jens explains. “You have to interact with design engineers, operations people, and maintenance personnel. The key is to be able to bring all the parties together and make sure that what you’re bringing to the table meets everyone’s requirements.”

It also means that there must be an internal team at Velan behind the product.

“If you do believe in that product, and if you respect the intelligence of your customer, selling is simply a matter of explaining the benefits. Your customer will come to his or her own conclusions and see that those benefits apply to their needs.”

—Jens H. Mauritz, Velan’s North American Sales Manager for Metal-Seated Ball Valves

“Without the support of these people, we could not get to the next level. All of the Velan team has to be committed to a project for it to be successfully executed.”

—Jens H. Mauritz

For example, “a good engineering and design team, as well as a top-notch planning staff, is critical to projects that involve the many valves made to order. If I did not have the technical knowledge of people like Luc Vernhes, the planning ability of people like Martin Caouette, we could not pull off these complicated projects. And then there’s the talent and skills of the production team for Velan—people like Pierre Lamarre, the Plant Manager in Plant 5. Finally, you have the inside support people who take care of all our quotes, people like Chris Oettel and Farnaz Adli.

“Without the support of these people, we could not get to the next level. All of the Velan team has to be committed to a project for it to be successfully executed,” he says.



Paul Lee with Jens H. Mauritz discussing the Power Ball stem design

The power of Power Ball

One of the areas he is personally looking to get to the next level is Velan’s Power Ball. Because the product had some initial design challenges, its engineering has been perfected beyond what anyone could have

foreseen in the beginning. Jens says sales of this particular valve are set to boom.

“End users are beginning to realize that these valves have incredible benefits, including durability by design and much less need for mounting hardware,” Jens says.

“The design eliminates a lot of the failures that end users are now seeing from our competition,” he says. That design includes features such as the unibody; the deeper, large stuffing box; and the bevel springs for pre-loading the packing. There’s also the benefit of being able to mount directly to the valve, which minimizes one of the major problems with these kinds of valves: hysteresis (the “sloppiness” that occurs when additional transitions such as couplings are added, which tend to wear and create alignment issues).

He feels just as positive about the Securaseal valves, which he says have a design that parallels the very top-of-the-line metal-seated ball valves made for the toughest applications in the world.

“While our competition offers a few standard designs, Velan’s Securaseal line has

A more efficient way to get power

One of the reasons Jens says that valves like the Power Ball are set to take off in terms of sales is because the world of energy generation is rapidly changing as more and more gas-fired power plants are being built. Especially in the United States and Canada, power plants are moving away from the older, larger sub- and super-critical units—most of which are coal fired and increasingly affected by strict government regulations.

The most common type of power plant now under construction in North America and elsewhere today is called Combined Cycle Power Plant (CCPP), Jens says. Such plants are called “combined” because they use the exhaust heat of the combustion from the gas turbine that is run through a Heat Recovery Steam Generator (HRSG) to produce high-pressure steam. This steam is then sent to a steam turbine to add additional megawatt output.

“Not only is it a much more efficient, cleaner way to generate electricity, it’s also much easier to take these combined cycle plants up and down in a very short period of time so that as electrical demands are required, output can be increased,” Jens explains.

Velan has been supplying superior valving through design and quality to this type and other plants for many years.

“Our metal-seated ball valve offering is only one of many product groups that are used in power plants,” he says, and Velan supplies a wide range of those product types.

“We are moving forward with distribution focused on the power industry and look to improve and increase our position in this market over the near and long term,” he says.



Part of Velan's Power Ball valve team: Steven Falconi, Assembler, and Edgar Rolando Coronado, Hydro Tester, Plant 5

a lot of seating designs tailored to specific applications in different industries and with different media requirements," he says.

The result is not only a broader range, but also cost-effective choices, he adds.

One of the industries where Velan Securaseal has made a major impact is in

the mining industry, Jens says, where Velan's high-pressure acid leaching (HPAL) valves are popular.

"These are highly engineered valves made of titanium that show the company's technical savvy, manufacturing capabilities, and ability to work with end users on engineered solutions to valve requirements," he says.

Those traits have made the valves also popular in refining, chemicals, and power, he adds.

For both of these products, as well as the rest of the Velan line, Jens has a work model he lives by that he says makes his job easy.

"It's really very simple: I want to make a difference in all I do. I want to beat expectations. And I want to have fun! Because if you're not enjoying what you're doing and if you don't feel that you can truly stand behind the products you represent, then it's time for a change." **[VV]**



Velan's Power Ball valve product catalog

At home with Jens

When you ask Jens what he brings to the table for Velan, he doesn't hesitate before saying "just my own personal integrity. There isn't one particular accomplishment in my career that I'd point to as a peak moment. I believe I always meet or exceed my own goals."

That drive has spilled over into his personal life in the form of passion for what he pursues. He lists his family as first priority (three kids and a wife who he says is a phenomenal cook). But he also loves reading nonfiction books about international political and historical issues and playing golf.

And while he has much passion for his hobbies, he doesn't expect perfection from himself in those areas, just to be able to bring his innate sense of humor into the picture. For example, he names his golf handicap as "the club I hold in my hand. I love golf but when I play I am very happy that I have a day job."

He also brings his persistence into the personal side of his life.

Jens, who was born in Berlin, Germany, but came early in life to Canada and now lives in Houston, Texas, is married to Suzy, who is from Brazil. They've been married eight years and together twice as many.

"It took me 50 trips to Rio de Janeiro from San Francisco, where I was living at the time, to get her to marry me," he explains. "It was well worth it!"



Developing a broad base of knowledge:

The Research Chair Program



Some of the individuals who participated in the École Polytechnique de Montréal's Chair Program

Velan's involvement in the École Polytechnique de Montréal (EPM)'s Multisectoral Industrial Research Chair in Coatings and Surface Engineering is approaching its second anniversary, and those who have participated say the collaborative spirit that has existed during that time has further intensified and produced tangible, measureable benefits that will be felt for a long time.

“**T**hrough the Chair Program, we have created a synergy with other companies and other research experts that has resulted in a great cross-pollination of ideas, the likes of which we have not experienced before. The result is that we are not only coming up with some concrete benefits, we are opening up the floor to advancements in materials and coatings that will stretch far into the future,” says Gil Perez, Vice President of Engineering.

Ludvik Martinu, a professor at EPM and Head of the Research Chair Program, explains how that advancement works:

“Take for example, galling. For the valve industry, we have gone beyond assessing the highs and lows of performance of the materials to two new levels of effort: First, we are designing new methodologies for the determination of the failure mechanisms under different harsh working conditions. That's possible because we are collaborating on better understanding the effects of environment, including thermal, mechanical, and corrosion, that generally acts in synergy. In addition, categorizing the different materials for valve applications and creating a concise bank of information about

the performance of materials will help us to expand toward new coating technological possibilities,” he explains.

“Second, we are interacting in ways that haven't occurred before, which means our breadth of knowledge is greatly expanding overall, opening opportunities for new design approaches,” he adds.

The Chair Program

Velan is joined by six other non-competing companies for the Chair Program, which is supported by the Natural Science and Engineering Research Council of

Canada. These partners, which include Hydro-Quebec, Pratt & Whitney Canada, Essilor, JDSU, Guardian Industries, and the Canadian Space Agency, are working with EPM's research staff on projects that involve testing limits and developing new processes and materials systems suitable for protective coatings.

For Velan, "Our valves face some of the toughest conditions out there in the world of industrial applications," says Luc Vernhes, Design Manager, Securaseal Ball Valves. "Because of this, we need to understand the physics in a multi-layer type of coating and how those layers affect each other mutually," he adds.

Although developing better products is the end objective for Velan, participation in the Chair also has the goal of increasing the company's level of expertise. The projects tackled by the Chair Program are both generic (e.g., developing sustainable material and coating combinations) and company-specific. The Research Chair Program of Polytechnique also studies and shares with research departments at other universities.

"The breadth of knowledge and expertise that goes into the studies, the cooperation and exchange of information, as well as the development of new methods and surface engineering approaches are the most exciting and promising aspects of the Chair Program," Ludvik says. Besides Ludvik as Chairholder, the team at Polytechnique specifically working with Velan includes Professors Jolanta Klemberg-Sapieha and Myriam Brochu, Postdoctoral Fellows Etienne Bousser and Thomas Schmitt, and PhD student Yuxiao Wu.

Velan's top projects and what's being done in each area include:

Hardface coatings: The Chair Program is looking at bonding and performance of cobalt chrome (CoCr) alloy overlay on F91 substrate, an important project for Velan. With a PhD in metallurgy, Nabil Tarfa, Vice President, Materials & Process Technologies, is supervising this key project. Nabil says that, "The target is to better understand the complex aging mechanism taking place at

the interface between the hard-facing CoCr alloy overlay and the F91 base material when exposed to high temperatures and extreme applied pressures for an extended time."

Through such testing, "We are looking at how our valves could resist even when they are used beyond their design intent. It's a commitment to protect customers by making valves so they can resist even the most extreme conditions," he says.

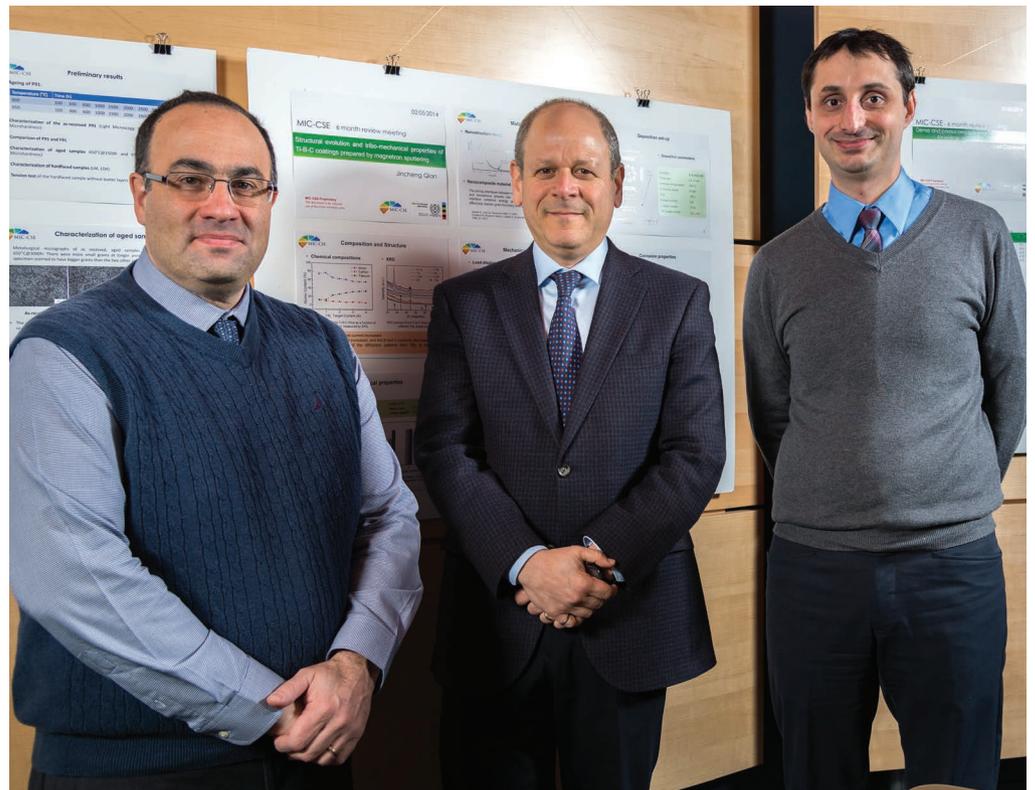
So far, a comprehensive and extremely detailed experimental plan has been defined by the research team. According to Ludvik, "microstructural characterization of the base material, and the development of novel methodologies for the testing of mechanical properties, especially the fabrication of a traction test coupon to test the strength of the hardfacing interface using an original weld configuration has been designed, developed, and implemented by the Materials and Process Technologies Group at Velan." Nabil adds, "The next step will be to manufacture multiple specimens representing different technological options that will be tested in

"The breadth of knowledge and expertise that goes into the studies, the cooperation and exchange of information, as well as the development of new methods and surface engineering approaches are the most exciting and promising aspects of the Chair Program."

—Ludvik Martinu, Professor and Head of the Research Chair Program, at EPM

a simulated condition—one that reproduces the service conditions for the valves."

"These real working conditions are what matters most in a testing situation because you want to share results internally or perhaps with end-user engineering companies



Some of the Velan employees involved in the Chair Program (left to right): Vahe Najarian, Velan's Corporate Manager, Research and Development; Gil Perez, Vice President of Engineering; Luc Vernhes, Design Manager, Securaseal Ball Valves

“The ultimate goal of this process is to come up with a welding procedure that will eliminate or at least greatly reduce aging, thereby extending the in-service life of the valve.”

—Nabil Tarfa, Vice President, Materials and Process Technologies, Velan

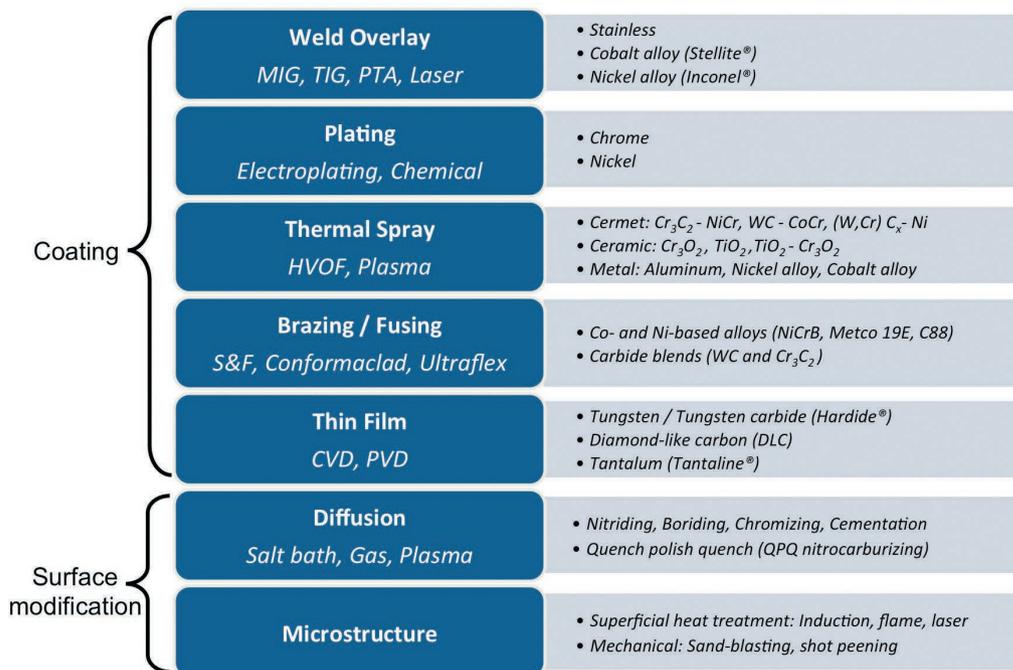
to show what is really happening in the field and what the responsibility of the manufacturer and the responsibility of the end users might be,” Nabil explains.

Results of the testing will be published periodically.

“The ultimate goal of this process is to come up with a welding procedure that will eliminate or at least greatly reduce aging, thereby extending the in-service life of the valve,” he adds.

Tribological behavior of material

couples: Vahe Najarian, Velan’s Corporate Manager, Research and Development, is



The list of surface treatment technologies that are currently being developed by the Research Chair

spearheading this area of research. Vahe explains that, “Tribological behavior is the science and engineering of interacting surfaces in relative motion. It involves studying principles in friction, lubrication, and wear as well as how temperatures and pressures affect these principles.”

So far, a new high-load tribometer (the machine used for this kind of testing) has been designed by the team at Polytechnique and it is currently being built.

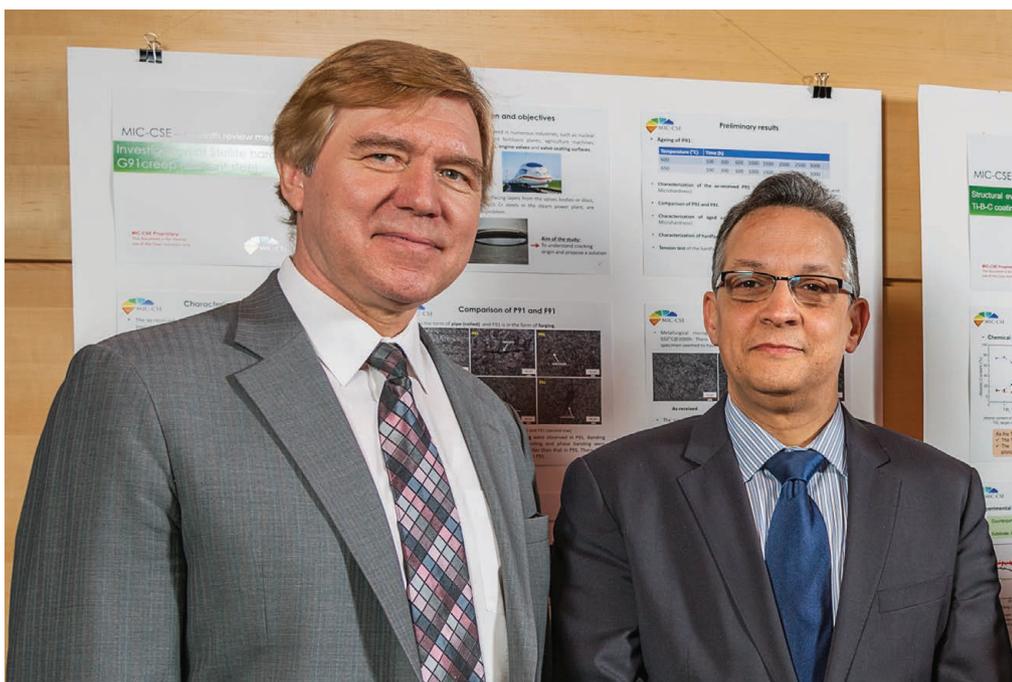
“We’re aiming to have this new tribometer finished this year,” Vahe says. “This will enable us to test various material combinations under extremely high contact pressures, so we can determine the maximum permissible contact pressure for each combination (also known as the threshold galling pressure).”

The tribometer also will give extremely accurate measurements of all test parameters, including coefficient of friction, speed, and acceleration.

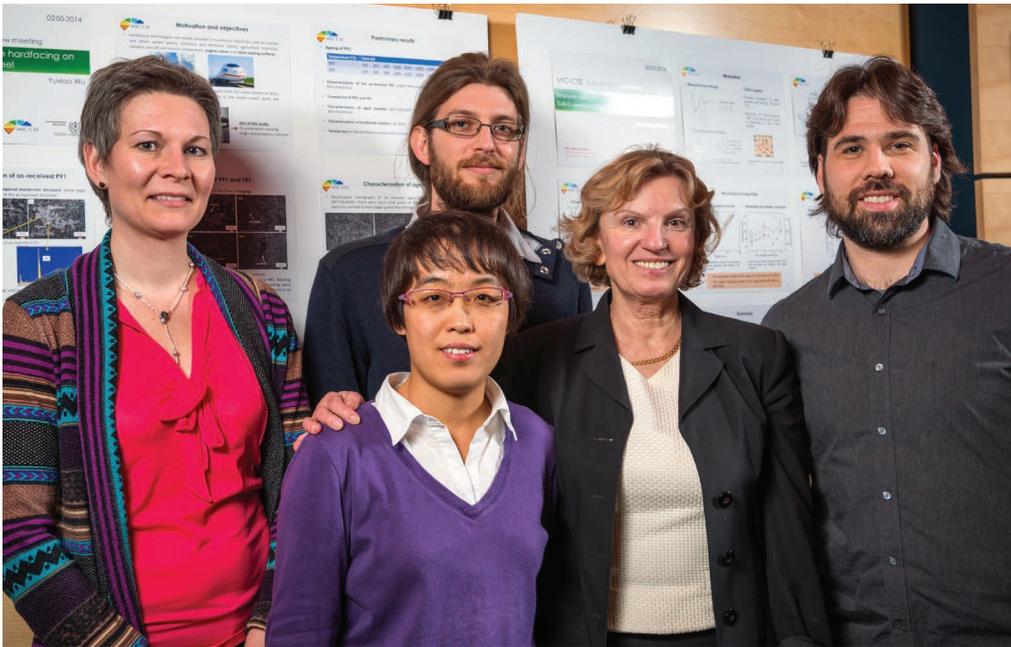
Multi-layer hybrid graded coatings:

Within the Research Chair Program, the first steps toward developing novel combinations of overlay layers with thin films have been made. Luc Vernhes, Velan’s Design Manager, Securaseal Ball Valves, is in charge of this area of research and development, an area designed to demonstrate the synergy between hardfacing materials and nano-structured films.

“In this study, we want to characterize graded coating systems composed of two



Left to right: Ludvik Martinu, Professor and Head of the Research Chair Program at EPM, with Nabil Tarfa, Vice President, Materials and Process Technologies, Velan



Part of the EPM team involved in the Chair Program (left to right): Myriam Brochu, Professor, EPM; Yuxiao Wu, Ph.D. candidate, EPM; Thomas Schmitt, Post-Doctoral Fellow, EPM; Jolanta Sapielha, Professor, EPM; Etienne Bousser, Post-Doctoral Fellow, EPM.

parts: 1) a thin top layer that provides superior sliding wear properties and 2) a hardfacing interlayer that reduces stresses between the top layer and the soft base material. The hardfacing interlayer minimizes stresses and eliminates the risk of cracking the thin hard top layer (the so-called “eggshell-effect”), and therefore increases the load-carrying capacity of the coating system,” Luc says. “While we’re in the early days of the research for this project, some multi-layer, hybrid-graded coating systems have already demonstrated sliding wear and mechanical performances that greatly exceed those of the standalone surface treatments.”

In addition, specific hybrid nanostructured, plasma-deposited coating systems are showing excellent corrosion protection during potentiodynamic polarization testing (a specialized way laboratories test for corrosion).

Meeting of the minds

Although these are some of the top tests occurring, the benefits of participation go way beyond the specific results to include learning from the Chair participants

involved. One of the important means of learning is through the various collaborative efforts, and one of the main ways this collaboration has occurred is through regular physical meetings of the participants. Each year, the Chair partners and members hold an annual meeting for the Research Chair Program that alternates with twice-yearly review meetings.

During the most-recent review meeting in February 2014, participants shared progress made on their respective projects. According to Luc, “This allows our Velan research team to see how other companies are organizing research as well as shows us what types of projects are attractive to those other parties. Through this, we get further inspired in our own efforts, and we can often use their findings to advance our own.”

Velan also has held direct meetings with some of the other partners.

“We have met with Pratt and Whitney Canada and Hydro Quebec to discuss challenges related to hard protective coating used in harsh environments,” Luc says. Because these meetings take place at the participating companies’ facilities, participants have an opportunity to get a

“While we’re in the early days of the research for this project, some multi-layer, hybrid-graded coating systems have already demonstrated sliding wear and mechanical performances that greatly exceed those of the standalone surface treatments.”

—Luc Vernhes, Design Manager, Securaseal Ball Valves, Velan

first-hand idea of the equipment used by each R&D group.

“While we’re in the early days of the research for this project, some multi-layer, hybrid-graded coating systems have already demonstrated sliding wear and mechanical performances that greatly exceed those of the standalone surface treatments,” says Luc. **||VV||**

Velan gets its own materials testing facility

To further build on the research Velan is involved with through Polytechnique and other cooperative ventures, Velan is about to get its own materials laboratory.

“This will be a state-of-the-art facility that will have the latest innovative equipment, methodology and techniques,” says Nabil Tarfa, Vice President, Materials and Process Technologies. This facility, which will be up and running in Q2 of 2014, will be dedicated to the investigation and the characterizations of a wide range of materials, including ferrous and non-ferrous alloys, as well as non-metallic materials such as ceramic polymers and composites.

“In today’s marketplace, we are selling as much to the engineers as to the CEOs of customer companies. If you want to perform successfully, you must have an in-depth knowledge of materials and processes. One must be technologically strong and achieve tangible, proven results,” Nabil adds.



When nuts and bolts make a difference

Sometimes the tiniest parts on a piece of equipment can have a critical impact on how that equipment will perform. And when the equipment is in a field where safety is a top priority, that tiny part suddenly becomes vital.

So it is with a bolt and washer system that Velan uses in assembling the valves it markets to the nuclear industry. The system, which is made by Nord-Lock, is used to secure Velan's bolted joints.

"Bolted joints are a key element in the design of our nuclear valves. They must ensure not only the integrity of the parts under pressure, but also guarantee operability of motor-operated valves when they are submitted to various loadings," says Jean-Luc Mazel, General Manager for Velan S.A.S., Lyon, France.

The main parameters to be considered are the fluid running in the systems and the external loads, such as mechanical vibrations or seismic loads.

"Effects and solutions can be amplified by the design of the systems and by the implementation of supporting devices for piping and valves," Jean-Luc explains.

The reason the bolt and washer are so important is that any vibration at all in a nuclear application can have disastrous effects. One of the main problems with bolts is that they loosen over time, whether it's



Left to right: Damien Thomas, Field Applications Engineer, South-Europe, Nord-Lock Group in the Nord-Lock Technical Centre in Lyon and Xavier Confort, Technical Manager, Velan France

from movement or from materials settling into place. Nord-Lock's unique design uses serrated edges on the washer that secure the bolt into place.

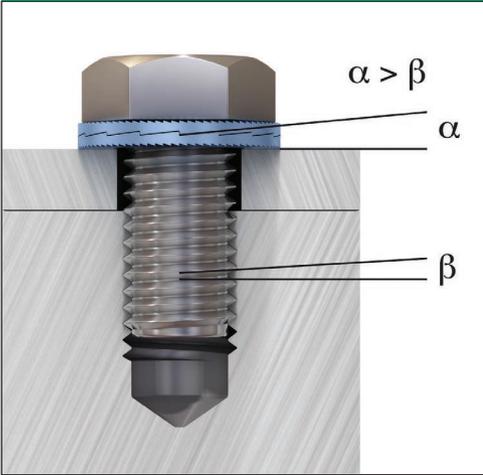
"Once that bolt is tightened, it can't come loose. Nord-Lock's washers ensure perfect locking of the bolted joint both for purposes of durability and in performing under external pressure or in emergency situations," Jean-Luc says.

"This is especially critical when you're putting the equipment in a location that might experience seismic activity, a point brought home to the world by the Fukushima accident," Jean-Luc says.

Velan's nuclear involvement

Using the right parts is critical to Velan's operations. The company supplies classified valves to about 350 nuclear reactors around

The Nord-Lock wedge-locking technology



the world. In fact, the world's very first nuclear power plants in the U.S. used Velan valves.

"Since just one nuclear plant needs about 20,000 valves for the nuclear island and the conventional island, the industry is an important one for Velan," Jean-Luc says.

Because of its long history in the field, Velan and Velan S.A.S. are recognized as major players in providing those valves.

"We have always tried to develop the right products for this very demanding market. As such, we focus on new technologies,

high-quality production, and R&D. That means that we pay attention to even the smallest details, such as washers and bolts, in our effort to produce a quality product," Jean-Luc says.

A proud heritage

Nord-Lock is an example of a company that has perfected a specialized product line so well that it has become a global giant. Nord-Lock was formed over 30 years ago and now has production sites in two European countries (Switzerland and Sweden) as well as in Pennsylvania in the U.S.; its sales force spans the globe with subsidiaries in Europe, the U.S., and Asia.

The nuts and bolts and related products Nord-Lock produces are used in a wide range of industries, from energy generation such as oil and gas platforms and wind turbines, to shipbuilding and other manufacturing, mining, and transportation segments. The products produced by the company include washers and bolts. They also offer custom-designed bolting solutions that can withstand temperatures ranging from -270°C (-454°F) to 700°C (1,292°F).

In 2011, Nord-Lock made two significant acquisitions, Superbolt Inc. and P&S

"Ensuring we maintain the utmost standards of safety and quality are essential factors in the nuclear industry. Nord-Lock and Velan work together to ensure we provide the maximum satisfaction to our common customers."

—Damien Thomas
Field Applications Engineer,
South-Europe, Nord-Lock Group

Vorspannsysteme AG. This brought together two of the most innovative and trusted bolt securing technologies in the world.

"Ensuring we maintain the utmost standards of safety and quality are essential factors in the nuclear industry. Nord-Lock and Velan work together to ensure we provide the maximum satisfaction to our common customers," adds Damien Thomas, Field Applications Engineer, South-Europe, Nord-Lock Group. **[VV]**



Introducing Jean-Luc Mazel

Jean-Luc Mazel is the General Manager for Velan S.A.S., the French affiliate of Velan Inc.; he was previously the Industrial Director and then Engineering Manager of the company. Jean-Luc holds a Master's degree in mechanical engineering from the Ecole Nationale d'Ingénieur (France).

Jean-Luc has considerable experience in the design and manufacturing of valves for heavy-duty applications and in the field of nuclear and cryogenic valves. He started his career in 1988.

He is married to Emanuèle, a teacher of social sciences. They have two children, Quentin and Anna. Both Emanuèle and Jean-Luc love going on days-long bike trips to discover new areas and new people. Their daughter Anna is fascinated by whales, and they have traveled as far as from the remote Tadoussac area of Quebec, Canada, to the Azores Islands to see them.

Jean Luc has worked in the valve industry for over 24 years, and specializes in mechanical engineering. You can reach Jean Luc at +33 478616714 or email him at jlmazel@velan.fr.

Jean-Luc is shown in this photo to the left, during a bicycle trip in France.

Adrian Oon:

A technical whiz with a love for his culture

There are many traits that make a good sales representative for the valve industry—a gregarious personality, thorough product knowledge, and the ability to communicate are three of the most important. Where the representative is based in the world has a lot to do with how valuable each of those traits are. Adrian Oon Hup Chye, Regional Sales Manager, Southeast Asia, has all three.



Adrian Oon Hup Chye, Regional Sales Manager, Southeast Asia, at the groundbreaking ceremony of Nghi Son Refinery and Petrochemical Complex in Vietnam

“Although I’m a friendly person and this is a sales job, I would not attribute my love of what I do just to being a ‘people person,’” Adrian says. For him, the passion of the job is in identifying technical solutions.

“There is always something going on in this industry; something new and exciting to find out,” he says. That makes it a good job for someone who loves technology.

The base of his knowledge

Adrian’s love of the technical side of things, his involvement with the industrial world, and his professionalism are part of who he is. He was born in Kuala Lumpur, Malaysia, the son of two civil servants. Adrian received a diploma in Engineering Studies at the INTI College, Malaysia, then went on to get a Masters of Engineering degree at the University of Leeds in the United Kingdom. He studied and enjoyed fluid dynamics and completed his research paper in the area of tribology (the science and engineering of surfaces in motion).



Two Velan representatives celebrated this year's Chinese New Year with the KS Flow Control team. Pictured here left to right are (front row): Audrey Phua, Ramlah Abdullah, Reni Isac, Wendy Tan, and Angela Yu (KS Flow). Back row: Mohamad Aminuddin (KS Flow), Gino Loggia (Velan), Kelvin Toh, Ruwan Gunarathne, Lim Ai Lin, Eric S. Anog (KS Flow), and Adrian Oon (Velan).

“Having the opportunity to be exposed to topics such as fluid viscosity and flow dynamics allowed me to have a better understanding of how a valve behaves when subjected to flow,” he says.

His first job was as a sales engineer for a valve company in Malaysia, but he went over to the sales and administration side to become a sales manager responsible for expanding control valve sales for the company in Singapore and Malaysia before Velan drew him into its folds.

The combination of technical know-how and management skills is particularly important in Southeast Asia because he doesn't deal often with end users. His job is to communicate and advocate for Velan with several large distributors and a wide expanse of agents that may represent a number of products. His job is to show them the long-term picture, he says.

“My responsibility is to establish rapport with the multiple agents there are in my part of the world and get those agents to understand that brand establishment

and introducing a product range into an unfamiliar market requires an investment of patience and perseverance,” he says.

“Having knowledge of not only how valves work but how they can be packaged with actuators for various services allows me to show that solutions that combine new technologies in the best manner are the most cost-effective solution in the end,” he says.

Because that step is so key to success in Asia, communication is vital, he adds. His territory is expansive, covering Singapore, Indonesia, Malaysia, Thailand, Vietnam, and Myanmar, each of which has its own unique cultures and business environments.

“Language barriers exist across all the countries in this market area, which is why a good working relationship with agents and distributors is key to building a strong presence for Velan in the region,” he says.

“It's a continually evolving process—both manufacturer and agents may have identical goals but the path chosen to obtain them may differ from time to time.”

“Having knowledge of not only how valves work, but how they can be packaged with actuators for various services, allows me to show that solutions that combine new technologies in the best manner are the most cost-effective solution in the end.”

—Adrian Oon Hup Chye, Regional Sales Manager, Southeast Asia

The local touch

Dealing with agents and distributors provides a manufacturing company the advantage of communicating through local languages and customs, which is vital “because in general, business is often done at the community level” in Asia, Adrian says.

Gino Loggia, Director, International Sales, notes that, “One of Adrian's strengths is his knowledge of how it all works. He knows who the main customers are in a market area and what their needs entail. You add that to his strong knowledge of the technicalities of how valves work and you have a winning combination.”

The end-user industries into which products in Southeast Asia are sold are diverse, with a strong emphasis in oil and gas, as well as power.

As far as power, “Velan is already a recognized leader in areas such as steam isolation valves, and its products are well-accepted in the power generation industry,” Adrian says.

That makes showing people the long-term value of the equation less difficult.

“Velan valves have a reputation for quality and durability with competitive pricing. The final product saves the user money throughout the product life cycle by reducing maintenance costs,” he says.

In the petrochemical industry, Velan valves are used in numerous applications.

“Velan has been involved continually with the customer, not only ensuring that after-service support is provided timely and accurately, but ensuring open communication channels are available to assist the customer when clarification is sought.”

—Adrian Oon Hup Chye

“Our metal-seated ball valves have the potential to be used in demanding applications where long-lasting durability and tightness is required,” he says.

He adds that, as plant owners continue to add downstream units, applications such as catalyst handling and sulfur recovery will be areas where Velan can add value to its customers.

Velan’s extensive experience in coker ball valve applications and the development of quality metal-seated ball valves for that industry continues to be seen as an area of opportunity for the company, Adrian says. In the Petronas refinery in Melaka, Malaysia, for example, Velan is a proud partner and vendor for construction of a new coker unit.

“Velan has been involved continually with the customer, which ensures that after-service support is provided on time and keeps open communication channels available to assist the customer when clarification is needed,” he adds.

As far as competing in the marketplace in Southeast Asia, Adrian says a major recent challenge is the number of new arrivals.

“There is stiff competition from emerging valve brands. The smaller end users who have less experience are always tempted to exchange long-term running costs for a reduction in initial purchase price,” he says.

“Explaining to users that initial purchase cost is seldom the major contributor to

life-time costs is sometimes a real challenge in this area of the world,” he adds.

On the go

Because the area he covers is widespread and crosses many waters, Adrian spends an average of two to three weeks per month on the go, but he doesn’t see that as a major challenge.

He got married in 2012 to Yvette Lim, who is a supply chain executive fulfilling orders for a Fortune 500 company in the chemical industry, and while it’s hard to leave her behind, she understands.

“She supports my role and the frequent need for travel. And she hopes to tag along once in a while,” he says.

Meanwhile, he views exposure to new lands and new cultures as a benefit for an urban man (he and his wife live in the city of Singapore), instead of a disadvantage.

“I guess living in a concrete city has taught me to better appreciate open pastures, green hills, and the sun rising and setting over different horizons,” Adrian says.

He also says that he’s fortunate to live and travel in an area of the world rich in possibilities because of the “multi-racial, multi-language countries with a variety of ethnic groups.” The mixes provide the area with a “unique blend of culture and history,” he says.

For example, in Malaysia, “our local cuisines are blended from the various ethnic groups such as Malay, Chinese, and Indian. We’re also across the border from Indonesia and Thailand. It makes for great cuisine!” he says.

All of this adds to his enjoyment of travel for the job.

“I’m always interested in exploring new places and new cultures with new people. Sometimes things such as new foods sound better in the description than when you actually taste them. But you don’t know until you try,” he says. **[VV]**

Being a “ham”

Adrian doesn’t have much time to pursue his hobbies these days. He’s busy helping Velan build up its presence in Southeast Asia, which means he’s not only spending many hours at the office, but he’s also on the go covering his extensive territory.

His hobby used to be hiking, and he says he still tries to get out periodically to enjoy the outdoors.

“However, an unfortunate incident resulting from an overly zealous approach to a cliff resulted in injuries that have left me wiser, but still raring to go,” he says. He also picked up amateur binocular astronomy three years ago and is learning what goes where in the night sky.

There’s one hobby he’s had, however, for most of his life and he still pursues it when time permits: amateur ham radio operator. He inherited the passion from his father who used to work in radio transmission for the military. Adrian himself has become certified in Malaysia and is working to be licensed in Singapore.

“Amateur radio is a hobby that you can put down for a period of time, then pick it up again,” he explains.

However, the reason he loves it so much is that while it involves technology, the pace of evolution of that technology is slow enough that he can put the hobby on hold for a while and come back to it when there’s time.

“It allows me to tinker with electronics and set-ups of equipment. You need a transceiver, antennas, wire, and a whole lot of other gobbledygook that most people probably have no desire to know about! But for me, it’s fun,” he says.



A&M Industrial

From single store to major provider of expertise



Above left: Arnold Young, President of A&M Industrial, with his son David Young, Executive Vice President, and above right: A&M Industrial's team



When Arnold Young, President of A&M Industrial, started a small hardware store back in 1954, he had the right entrepreneurial spirit. His go-getter attitude accelerated the growth of his business as it transitioned from retailer to hardware and equipment supplier to manufacturing companies in the booming corridor of New Jersey/New York.

Little did he know that the family-owned business he began would grow into a leading regional and national supply chain management company offering a complete line of industrial products and services—include a wide range of Velan valves.

Because the world was a different place in the 1950s, he also couldn't have foreseen the reputation the company developed as a leading emergency responder in the energy field. The only factor he may have been able to predict was that the company would remain a hands-on operation despite its growth.

"One of the most rewarding aspects of my 60-year journey with this company is that we've managed our growth. We've done so by using our intelligence and street smarts to determine which direction is the right direction. The most important aspect of this business remains one-on-one contact with our customers," Arnold says.

He likens A&M's success to a good marriage.

"Just as in a marriage, you learn to never say 'no'—to act in an affirmative manner. That positive way of thinking and doing resonates throughout our company, just as it resonates in a strong family," he adds.

Arnold's son David Young, Executive Vice President of A&M Industrial, describes the hands-on, can-do attitude another way.

"Before he started the company, my dad was in the U.S. Marines during the Korean War," David explains. "One of the lessons he learned from serving is that, regardless of what you go on to do in your life, you always remain a rifleman—someone on the front lines that has to know how to shoot a gun," David says.

"Here at A&M we teach our associates that everybody is a salesperson for the company first no matter what else they do. We are first and foremost a sales organization," David explains.

“My dad realizes this is not a black and white business. There are many gray areas and it takes leaders and personnel who understand those areas to understand what a customer truly needs.”

—David Young, Executive Vice President, A&M Industrial

The growing years

Today, A&M Industrial has over 100 employees operating out of a 160,000-sq-ft distribution center in Cranbury, New Jersey and headquarters in Rahway, New Jersey. The company opened its pipes, valves, and fittings line in 1987, which now falls under the engineered products division.

Over the years, as some manufacturing migrated southward and across the seas, the company’s clientele has expanded to include major power-related companies as well as specialized industries such as petrochemical, mechanical contracting, construction, chemical processing, and transportation. Today, it sells to more than 1,000 manufacturers and offers products and services to some of the major powerhouse energy providers in the area.

The company has grown through a combination of growth within product categories and by taking on new types of ventures. The consistency has always been proficiency.

“As our company has grown, we’ve expanded into many different market categories,” David says. “While the largest portion centers around valves and piping products, our overall expansion has closely followed our growth in expertise.”

His father Arnold adds that, “One of the reasons I’ve always loved this industry is that you are really in the business of solving someone’s problems. You need knowledge to be able to do that and you need to know how to think on your feet.”

Instead of jumping into entirely new products and services, the company expands by acquisition, which broadens that level of knowledge. For example, A&M purchased several different safety distributors and as a result, developed experience in personal protective equipment, which then became one of its product lines.

“In another case, we received a large contract that required a huge quantity of hose assemblies. We were buying them in quantity and realized it made more sense to bring this in house, so we developed skills in hose fabrication and opened up a separate division that caters to that particular market,” he adds.

David, who has been with the company his father started for 30 years, has overseen much of that growth. He graduated from New York University with a degree in business and worked on Wall Street for several years before deciding he didn’t want to travel the fast-growth track of a huge corporation.

David says that A&M’s advancements came not from the business books, but from the attitude of both his father and the staffing teams put together by A&M to lead each new venture as it happened.

“My dad realizes this is not a black and white business,” David explains. “There are many gray areas and it takes leaders and personnel who understand those areas to understand what a customer truly needs,” he adds.

To provide the kind of personal, value-based service that addresses the gray areas, the company stopped looking at itself as merely a distributor a long time ago and started to see itself as a provider of solutions.

Quality products such as Velan valves are part of those solutions, Arnold points out.

“We take a lot of pride in our manufacturers, including Velan, a company that is greatly respected both within our own walls and in the industry at large,” he says. “Over the years, Velan valves have proven to be key in helping us address customer needs.”

However, the right products are only part of the picture.

“As the world of selling has evolved to the Internet, it’s amazing how readily available any product is today—even Amazon has opened up a commercial supply division,” David explains. “On top of that, you have the big box stores and the large catalog companies as competition. All of this has required anyone who sells to take a good hard look at what they do and the value they provide. What A&M has concluded is that we are selling technical knowledge,” he says.

Emergency response

One of the most visible areas of expertise for A&M in recent years has been as a provider of emergency response. The company has been involved in a number of crises including 9/11, the 2007 midtown Manhattan steam explosion, and 2012’s Hurricane Sandy.

A&M’s emergency response program is actually an outgrowth of a venture A&M Industrial pioneered about 15 years ago called cross-docking. That program involved partnering with an end-user client to create a transparent, all-electronic means of cutting through the problems created by a crisis to get that client exactly what was needed in the least amount of time possible.

As the program evolved, it has grown from about 200 products to include 5,000 needed engineered components, including top-entry ball valves and API 6D trunnion-mounted gas transmission valves. The company also offers the specialized services, such as assessment of damages and creation of engineered equipment, needed during a crisis.

Kevin Rosenthal, Executive Director of Business Development for A&M Industrial, who heads up the team in charge of emergency response, calls this area of business “one of the most technologically and serviceability-oriented systems in the energy field.”

Every crisis from manhole cover explosion to transformer fire to the all-encompassing problems that occurred during 9/11 carries its own set of challenges, he says.

Yet no matter how well prepared, the key is often flexibility, “because for a majority of the situations, a great deal of what we do is literally shoot from the hip. As proactive as we try to be in this field, it’s often the ability to be extremely quick and reactive to emerging and undiscovered needs that enables the best emergency response,” Kevin says.

Hurricane Sandy provided a double challenge because the company and its staff were located right in the middle of what was happening.

“Our whole region was without power for about two weeks,” David explains, and when power was restored, it was intermittent. “We had no computer systems, no phones, no lights, or heat. Yet people came to work every day, operating with cell phone service when it was available to communicate with key vendors and those in need,” he says.

“Then there was the humanitarian aspect. Not only did some of our own employees have major damage to homes, but our communities were devastated—whole blocks were wiped out,” David adds. “My wife Monica, who also works for the company, stepped in to coordinate some of the employees’ humanitarian efforts.”

Meanwhile, the greatest problem for many clients was the storm surges from the Atlantic Ocean, which quickly flooded many businesses and plants in the area.

“Even a relative novice to the industry knows that salt water and electrical equipment do not get along,” Kevin explains. “The meeting of the two truly created havoc along the seaboard for our energy clients as hundreds and hundreds of exposed actuators were adversely affected.”

A&M sent teams of people out to refineries and other plants to both help with the clean-up efforts (provide needed safety equipment and warm clothing, tents and sleeping bags for workers), but also to help assess damage.

“Some of this assessment we did in the field; other equipment we brought back to our shop. It was a tremendous challenge just evaluating what was salvageable and what needed to be replaced,” David said. Then came locating specific equipment needed

and dealing with vendors who offered the right products and could get them there quickly.

It took about two months before A&M itself was back to full capacity, and that area of the country is still feeling the effects. But for A&M, the ability to respond led to cemented relationships, as well as much praise.

“You don’t think in terms of good will when the disaster is occurring, but it’s a positive byproduct,” David says. “When you can come through for a purchasing agent or buyer or maintenance supervisor who is on the phone and desperate, that client sees exactly what you can do and how far you’ll go to serve a customer.”

Looking ahead

A&M received a lot of positive publicity and thanks following Hurricane Sandy, and David says emergency response will remain an invaluable and growing part of the company business.

“A lot of the products we sell, including valves, orient us to the critical industries such as power generation, utilities, and government infrastructure. All of these industries are highly reliant on stability and consistency and if you’re serving

those markets, you have to have internal capability and the right products to respond,” he says.

But it’s only one of the many services the company offers that make it unique, he adds.

For the future, the company is looking for growth both geographically and in terms of product offerings while the emphasis will remain on providing expertise.

“A&M Industrial’s success is attributable to the ‘work-hard-play-hard’ corporate culture started by Arnie,” Kevin says. “The resulting can-do attitude of our staff has driven the company to unprecedented heights in a highly competitive field, and it will take us into the future as we find new areas where our skills are needed.”

Arnold adds that, “the biggest change I’ve seen in this industry over the years is that big businesses have gobbled up small businesses. We are still a smaller business, growing by acquisition. But we have something we don’t intend to ever lose: a broad and loyal customer base.”

David also says that, “To be the best today requires being able to understand the pain points and specific needs of clients’ applications, then to be able to produce products and build service around fulfilling those needs.” **|VV|**



David Young with Kevin Rosenthal, Executive Director of Business Development



Meet Paolo Ranieri, Managing Director and Chief Executive of Velan ABV. A mechanical engineer and ball valve expert, Paolo has an extensive technical and management background. When it comes to leadership, Paolo is a big believer in handing responsibilities over to his staff, giving them the freedom to get to pre-determined goals.

What you might not know about Paolo is that he rides a motor bike to work most days. The drive puts a smile on his face even before he walks in the door.

Velan: We're more than just valves.

Velan. Quality that lasts.

+1 514 748 7743
www.velan.com

VELAN