

Velan View



Issue 5

Fall 2012

The rich history of A.K. Velan's steam trap

Also:

Successful steam trap sellers
James D. Acers Company

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manufactures the steam traps

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Cover photograph: Anacortes Refineries on Anacortes Island, Washington State, U.S., with Mount Baker looming behind them. Velan has supplied a wide range of low-emission, environmentally safe valves to these refineries over the years.

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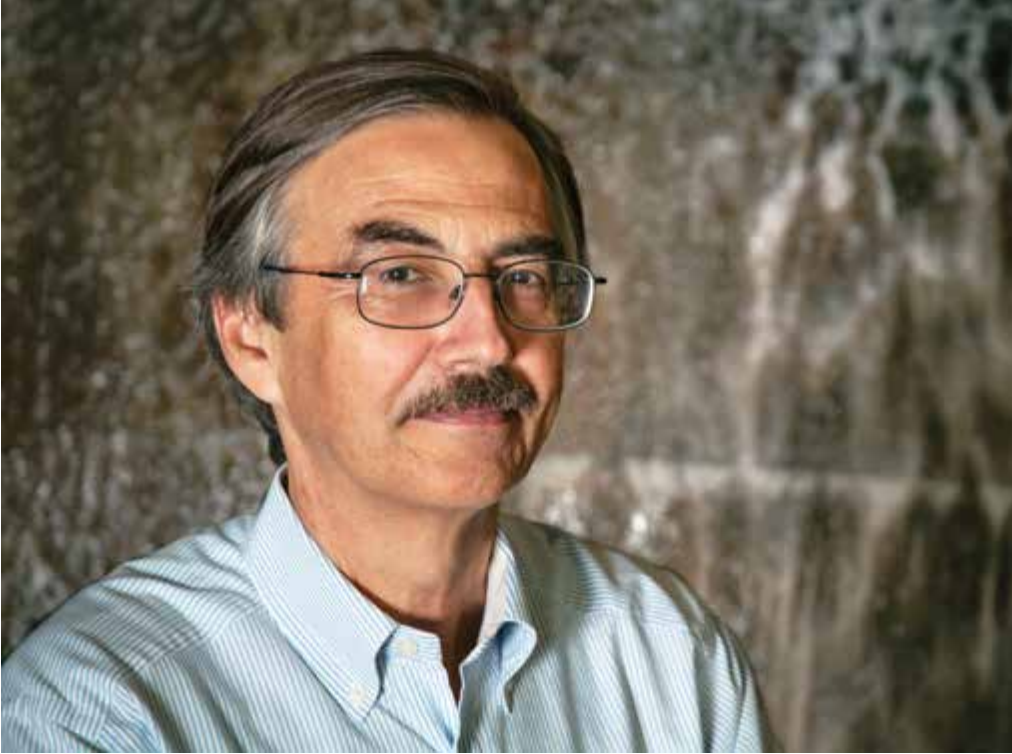
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President's message:

Back to basics



This year is a very challenging one for us. The good news is that we have experienced very strong demand for our products and we have had high order bookings. However, despite a significant increase in our sales, we still have very long lead times for some of our product lines. Our long lead times are creating problems for our long-term customers as end users, engineering companies, and distributors are all used to working with much shorter lead times. Also, we booked many complex project orders that are challenging to bring to fruition. The extensive requirements, witness and hold points, NDT, and voluminous documentation have been a real challenge to all our people.

We are devoting a lot of effort to solve these issues so we can improve our output and get back to having a lower backlog and the lead times that our customers need. To do so, we are investing in our global production

capacity and this includes \$13 million in our North American plants for machinery, robotic welding, and test fixtures. We have also started working with one of the top U.S. lean Six Sigma consultants to accelerate our TPI (Total Process Improvement) program.

Bottom line: We are determined make the necessary improvements and investments to increase output and achieve a better balance between backlog, bookings, and sales.

In this issue of the *Velan View*, we profile two of our long-term valve distributors and the people leading the companies: Larry Feld at Sunbelt Supply Co. and Dave Smith and Bryn Murray at Canada's Meridian.

At times like these, it is interesting to look back at our long legacy and take pride in how far we've come. Back in 1949, my father had his first vision of what would become Velan's first-ever patent: The Universal steam trap. In this issue, you'll find an interview with A.K. in which he describes those early days.

He also shares his stories of later innovations and how he developed a worldwide marketing and distribution network.

We also spotlight the U.K. operations where the steam traps continue to be designed and manufactured as well as James D. Acers Company, our Master Distributors for traps and Piping Kings in North and South America.

Bob Kelly, our Master Black Belt who is one of the key leaders of our lean TPI program agreed to share his story with us, as did Chiman Patel, one of our long term servicemen. And we also celebrate our new National Sciences and Engineering Research Council's (NSERC) Research Chair Program with l'École Polytechnique de Montréal.

We will again be one of the sponsors of the Valve World Exhibition in Dusseldorf in November this year. I hope to see some of you there.

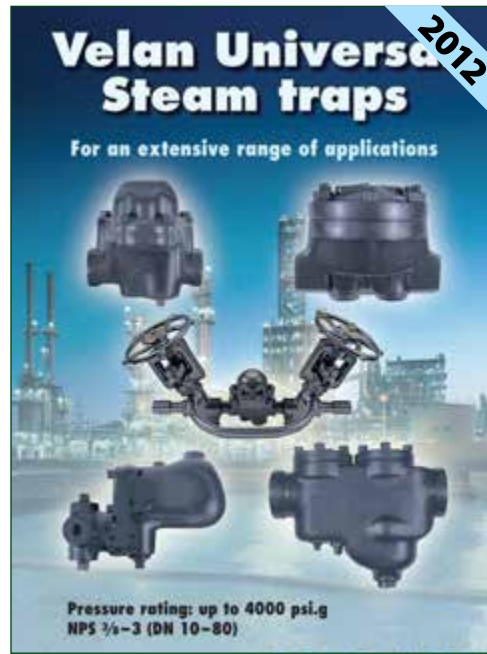
As we near the end of this year, I wish you health and happiness as always and success in all your endeavors.

A handwritten signature in blue ink, appearing to read 'T. Velan', with a long horizontal flourish extending to the right.

Tom Velan
President and CEO

In the words of an inventor

A.K. Velan talks steam traps, then and now



Velan has a unique and rich history. It is a family business started more than 60 years ago by A.K. Velan, an immigrant to Canada from communist Czechoslovakia. But even those who know the company's history might not realize that the original invention that started the company in 1950—the Velan Universal steam trap—is still going strong. In fact, the original invention was so advanced that it has needed very few improvements over the years to keep up with ever-evolving applications. *Velan View* interviewed founder A.K. Velan to find out the background behind his inventions.

VV: Can you tell us what brought about the “eureka” moment that produced the original steam trap invention?

A.K.: I studied engineering at the university in Brno, the capital of Moravia, Czechoslovakia, from 1935 to 1939. In the university's power station, there was a steam turbine that produced electricity. Students were given an opportunity to visit and analyze the steam turbine, and we saw the problems that they had with steam traps leaking steam. Those problems remained in my memory.

When I escaped communist Czechoslovakia in 1949, I came to Switzerland and stayed there for five months. During that time, I invented the Velan Universal steam trap, a unit that would combine, in one seat and ball disc, the function of an air vent, condensate discharge, and check valve. The unit would close tight on steam and would also have a strainer to contain corrosive material from the piping system. The steam trap would be operated by a bimetallic element moving parallel to the saturated steam curve for the entire steam pressure range.

So, while I was in Switzerland, I came up with a preliminary design for my idea, made a prototype, and tested it at the University of Zurich, which had a steam boiler and service equipment. It worked very well and, after refining the design a bit according to



Velan Inc.'s Founder and Chairman of the Board, A.K. Velan.

my testing results, I created and printed a catalog in five languages: English, French, Dutch, Danish, and German. The English catalog already had the statement “America’s favorite” on its cover because I planned to come to Montreal, which I had first visited in 1947, and market the steam trap aggressively in the U.S. The catalog included competitive advantages, desirable features, and other key benefits of my new invention.

VV: How did you establish the sales organization once you immigrated to Canada?

A.K.: Once I got to Montreal, I got a list of distributors in Canada and the United States. I rented the second floor of a family-owned factory on Jeanne-Mance Street in Montreal, where I started to produce the steam traps. The building still exists.

Later, I met a Swiss-Canadian, Mr. Kuoni, who was the owner of a plant in Marieville, Quebec, that produced pumps, and I asked him to manufacture the steam traps and assemble them. We came to an agreement and we started production there. Since they didn’t have a testing facility, I began testing them at Montreal’s famed McGill University, in a boiler room. I packed those that passed the test in my garage and shipped them to customers in Canada and the United States by courier.

After an intensive six-week trip to the United States, I returned with orders for 42,000 steam traps and contacts with sales agents and distributors in every capital city of every state.

VV: Why did you choose to pursue bimetallic elements in your invention?

A.K.: I wanted to have steam traps that would cover a large range of steam pressures, such as 1 to 200 psi, 1 to 600 psi, 1 to 1500 psi, and 1 to 2500 psi. That’s why my first patent was called the Velan Universal Steam Trap. The big challenge in its design was that the bimetallic element that moved the stem/ball disc from the open to closed position had to follow the saturated steam curve, which is one of the main features of my invention.

I knew about bimetallic materials from my studies at the university. A bimetallic plate consists of two metals, one with a higher thermal expansion than the other. The two metals are put together by a special bonding process. When subjected to changes in temperature, this difference in expansion causes the bonded plate to bend. This bimetal also resists corrosion in the most severe alkaline conditions (12 pH) and acids (2 pH).

In the Velan steam trap, we developed a patented multi-segmented construction so the temperature-responsive element follows the saturated steam curve as closely as possible. The individual segments are mounted spaced apart on a holder and they react at predetermined pressures and temperatures, adding more pulling force when the steam pressure increases to close the trap extremely tight.

At low pressure, only the first segment is active. This is a most satisfactory solution to a steam trapping problem, since an ideal trap must not only be able to differentiate between steam (a gas) and water (a liquid),

it must also be able to react to the temperature of steam and discharge condensate below saturated temperature. It must also be able to close tightly on both saturated and superheated steam.

The Velan steam trap reacts instantly with superheated steam and closes the valve even tighter as the bimetallic element develops additional closing force. This is how we established that the steam trap would work and not leak from 1 psi up to 600 psi. Later, we raised the pressure limits up to 1,500 psi and then 2,500 psi for thermal and nuclear power stations and the U.S. Navy.

VV: What other innovations did you give the Velan steam trap?

A.K.: Each steam trap has an integral strainer, as the steam lines are usually not in stainless steel and small particles of rust inevitably get into the steam trap, which can prevent tight closure.

In addition, the steam trap acts as an air vent. This is obviously an important feature as the lines are full of air during shutdowns and must be discharged to allow the steam to get back. So when the system is cool, the valve discs can move freely and the pressure pushes the ball and the air is discharged.

VV: How did you establish Velan as a steam trap supplier to the U. S. Navy?

A.K.: In the early 1950s, I sent my original steam trap catalog to Newport News Shipbuilding, which was then the largest privately owned shipyard in the United States.



They were building fossil fuel aircraft carriers at the time for the U.S. Navy. They invited me to visit them in Virginia and bring along my steam traps for them to inspect.

At the time, the Navy only used bucket steam traps, which have a small hole that discharges air and leaks steam, and thermodynamic steam traps, which leak steam every time they open. Newport News recommended we get our steam traps tested in the U.S. Navy labs in Annapolis, Maryland, where they were rigorously tested for approximately a year.

This is how we got into the U.S. Navy. Since then, we have also succeeded in installing our steam traps on a wide range of NATO ships, including the French Navy.

Also during this time, Newport News Shipbuilding recommended I appoint Harvey Williams, the grandfather of David Williams, the current President of Hawkins-Hamilton, to represent our steam traps. We continue to work with them today.

VV: Why did you invent the Velan monovalve float bimetallic steam traps?

A.K.: We had many customers who required steam traps that discharged condensate at saturated steam temperatures.

Given this demand, I invented a new steam trap in which the bimetallic element is a function of the saturated steam curve and its sensitivity to the temperature change ensures that there is an immediate reaction to both steam and condensate for the entire pressure range.

At saturated steam temperatures, the valve is closed as on any standard bimetallic steam trap. However, any condensate buildup—even at saturated steam temperatures—is discharged at the same rate. As it reaches the trap, the float becomes buoyant and opens the valve mechanically.

Consequently, it performs a four-purpose function: it has a ball/disc stem to vent air, drain condensate, and close tight on the steam. In addition, the main valve acts as a check valve, thereby preventing back flow.

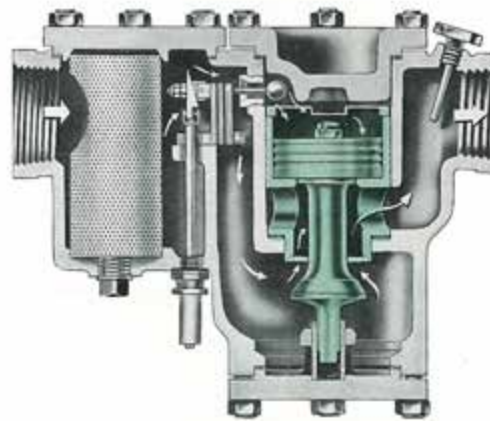


An early ad campaign promoting the monovalve float-bimetallic steam trap.

VV: And after that?

A.K.: In the mid 1950s we also invented a steam trap with an enormous capacity. This was a piston-operated steam trap for Newport News Shipbuilding that was adapted to Navy specifications and could discharge 250,000 pounds of condensate per hour for its ships’ steam catapult that launched airplanes. At the time, such a steam trap did not exist.

My idea was to take a very large body and a piston-operated disc. On the top of the line



Detail from a Velan catalog published in 1961 showing the piston-operated steam trap.

where the piston is, I installed a bimetallic element operating as a pilot valve. When water came in, the pressure went through the line and pushed the 4" piston (which was larger than the 2" seat) down and discharged the condensate. When steam came in, the bimetallic element shut off the pressure above the piston and the steam pushed the disc that was on the bottom of the seat, connected with the piston, and closed it tight. This was our first piston-operated steam trap, and it is still used around the world.

VV: How did this idea then become designed and manufactured?

A.K.: Our general manager of operations, Monsieur Duplessis, moved into Plant 1 on Ward Avenue in Montreal and managed the tool room. When I had this idea of a piston-operated steam trap, I explained it to him and told him that Newport News needed the new design urgently. Within six weeks, we designed it, tested it, and brought it to the Newport News shipyard where they put it through extensive testing. So this became the third type of steam trap that we designed and patented.

VV: How did you market your steam traps worldwide?

A.K.: In 1954, I made a trip from Canada to the U.K. by ship with my wife and my two older sons, Ivan and Peter, as well as our Cadillac. My third son, Tom, who is now President and CEO of the company, was only two years old at the time so he was too young for the trip. We landed in England and traveled to London.

Before my trip I had sent my steam trap catalogs to various distributors and agents in England, Ireland, and many other countries who dealt with similar equipment. I got several replies expressing interest in meeting me. So I arranged with the Canadian Embassy to have a small office in the Canada House, in London, where I could meet with British companies that were interested in handling the steam traps.

The first meeting was with Mr. H.W. Waudby, General Manager of British Steam Specialities Ltd. (BSS) in Leicester—one of the largest distributors of industrial valves, steam traps, and other equipment. In a discussion with him, he agreed to place an order for 8,000 steam traps, provided that I give BSS an exclusive distribution for Great Britain. We agreed and shook hands.

A few days later I went to see him at his offices in Leicester, and he had prepared the order for the steam traps.

I then traveled on with my family, to Norway by ship. There, we visited several companies and I selected one I wanted to act as our distributor. So, backed by the fact that I had an agreement with BSS, which was well-known in Europe, I got an order for 2,000 steam traps from our new agent in Norway.

From Norway we drove to Sweden through the mountainous area between the two countries, and we arrived at Stockholm and initiated the discussion with our proposed agent in Sweden. We received an order for 4,000 steam traps from them. My wife and children remained in Stockholm for a few days and then travelled back by ship to the U.K. and then back to Montreal. I continued on to Finland and set up an agent there and received a stock order for 1,500 steam traps.

Then I traveled by plane to the Middle East, India, Taiwan, and Singapore, before ending up in Japan. In Japan, I visited Mitsubishi in Hiroshima where they were producing steam turbines and signed an agreement with them for steam traps. This was my first trip to the Far East and I returned to Canada having established distributors in almost every country I'd visited.

Two years later, in 1956, I repeated the trip, again with my family. This time Tom accompanied us: He was four years old. We revisited BSS in the U.K. I then went on alone to Iran, where I established a distributor, a Dutch company with an office in the country. We already had installations of steam traps and Piping Kings in an Iranian oil refinery.

From there I continued to the Far East and, in Japan, I signed a distribution agreement with Mitsubishi in Tokyo. On this trip, I had brought along my new Piping King, which has a steam trap with two special valves on either side and a bypass. Mitsubishi was very interested in the Piping King; the company had a huge shipyard in Nagasaki where it built oil tankers, and the company placed a large order for Piping Kings for all of its ships. So we were then

supplying steam traps, valves, and Piping Kings to Mitsubishi.

In later years, I traveled through Africa and South America to establish distributors there as well. That's how I managed to establish our distribution network around the world, starting in the early days.

VV: Anything else exciting on the horizon for the Velan steam trap line?

A.K.: Yes, we have created another variety of the Velan Piping King. They are being used in the modernization of a new combined cycle power plant in California that features state-of-the-art technologies and uses less water and reduces greenhouse gas emissions by 31%.

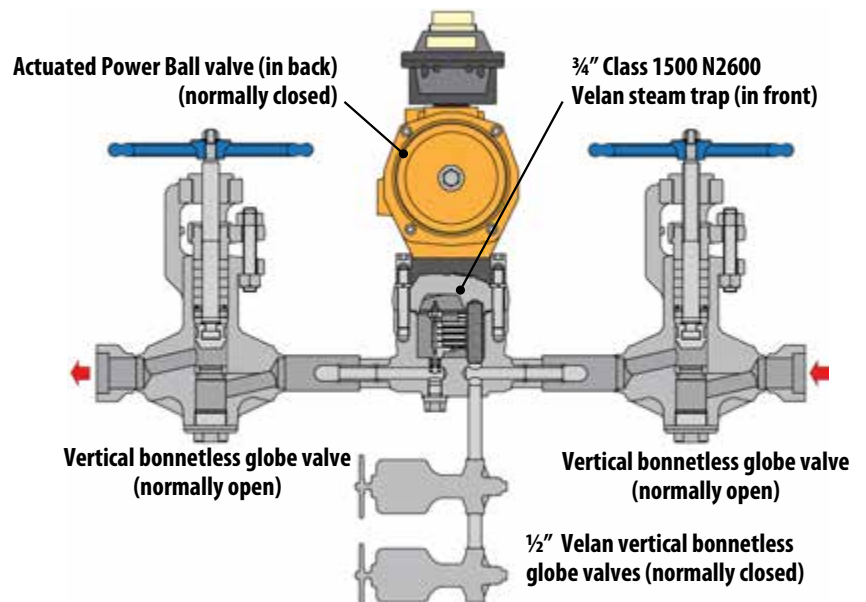
Twenty-six Piping Kings are installed in 26 locations in the heat recovery turbine system to bypass, during startups and shutdowns, the Velan ¾" 1500 class N2600, high-pressure steam traps and speed up the venting operation (discharging air from the piping systems).

During the power plant operation, the Velan 2" air-actuated Power Ball valve is closed while the two 2" 1500 class valves are open. During startups and shutdowns, the 2" Velan Power Ball valve is open to speed up the discharge of air from the piping systems.

Velan's Power Ball and Piping King combo



The new Piping King configuration installed in the combined cycle power plant in California.



VV: So the steam trap is still highly operational in today's modern applications. Any other success stories?

A.K.: Just over a year ago, we were added to the AML (approved manufacturers list) of a leading U.S. oil and gas industry company. This came after one year of testing our steam trap in services where other manufacturers' bucket traps and thermodynamic steam traps lasted only three months and were also losing a lot of steam.

On their AML Change Request form, signed on June 22, 2011, by no fewer than seven engineers, they stated that their refinery wanted to add Velan steam traps

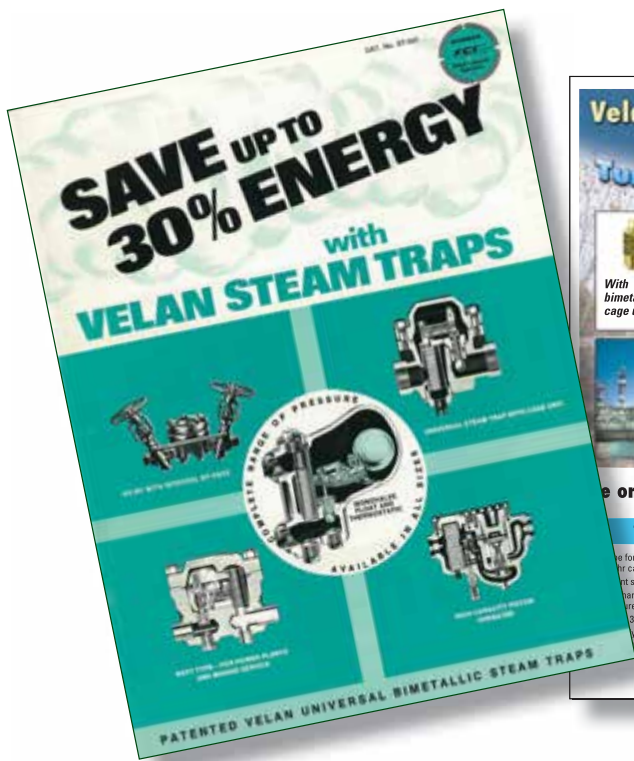
to the Houston inventory system. They had been given a number of Velan traps for free, to be installed in some difficult applications. They also mentioned that the Velan steam trap could be used throughout 75% of the plant, thereby reducing the amount of traps and parts they had to keep in their stores.

The company's engineers further recommended that Velan steam traps be added to the MSA (master sales agreement) that they already had with Velan.

In terms of our cost/benefit analysis of our steam traps versus other manufacturers', in my early steam trap catalog from 1951, I compared the total lifecycle costs of our

steam traps versus other kinds. In my analysis, I proved that the total cost of Velan steam traps is four times less than inverted bucket traps and eight times less than thermodynamic traps. The same statistics from 1951 are true today, and we proved it in the tests in the refinery!

Today, two years after our steam traps were installed in the large refinery, they are still operating successfully and not losing any steam. This is why, after 60 years, our original steam trap design is still an industry favorite. **[VV]**



Super capacity piston-operated steam trap



Float bimetallic steam trap

The benefits of the Velan steam trap were first published in Velan's Steam trap catalog in 1951 and are still true today.



Universal steam trap with cage unit



HP/HT steam trap for steam power plants and marine service



The James D. Acers Company's President Mike Acers, VP Terry Acers, and Sales Manager Dustin Sieben.

James D. Acers Company

Have steam traps, will travel

When you're marketing a product that has been around as long as the Velan steam trap—one that works so well it has changed very little over the years—you need a distribution team backing it up that knows exactly why that product is as good as it is.

Such is the case with the James D. Acers Company, a 30-year-old firm that handles North and South American distribution, sales, and marketing for the steam traps that Velan manufactures in the United Kingdom.

“What few people realize is that the product A.K. Velan invented over 60 years ago remains unique in its ability to solve the major problems associated with conventional

steam traps today,” says Terry Acers, VP, one of two brothers who now run the distribution company. “Most facilities are using steam traps that were designed 40 to 50 years before A.K.’s product first came to market in 1950.”

In such a case, the challenge for the distributor is to find new ways to communicate these benefits to the market.

For example, “We conducted a number of sizable plant retrofits in the 1990s demonstrating that large-scale use of the Velan steam trap will lower overall plant steam consumption in a dramatic way,” he says. “Since then, we have conducted extensive testing in our laboratory that has quantified these savings in a way that engineers can understand and use to justify their decision

“The challenge we face is convincing people that the potential benefits of using the Velan steam trap outweigh the perceived risks of trying something different.”

—Terry Acers

to move away from conventional technologies and toward Velan.”

The Acers Company

The James of the James D. Acers Company is the father of Mike and his brother Terry. James founded the company in 1981 after spending his early career as a heavy equipment salesman. Much of what James sold was to power plants, so when he struck out on his own, it was a natural fit that he sell steam-related equipment. His wife, Karen, was also involved from the beginning as the company’s accounting department. Being a registered nurse, “Karen was ideally suited to stop the bleeding when customers were slow to pay,” jokes James. In 2003 James and Karen retired and their sons took over, though according to Terry, “The business is still the major topic of conversation at all family gatherings.”

Although Acers signed the Velan steam trap master distributor contract in 2004, they have been selling the product for over 20 years.

In the 1990s Acers provided technical and engineering support for the steam trap line. “We provided sales management and technical support for a number of Velan’s steam trap distributors and major engineering-construction firms,” Mike Acers, President, says. “This put us in a position of understanding the market, the strengths of the Velan product, and how to build sales tools that would help other distributors market and sell the product in North America,” he adds.



Mike Acers testing Velan steam traps at a refinery. The traps came through with flying colors.

How to sell a steam trap

“When we graduated from college and started working for our father over 20 years ago,” says Terry, “our training program was little more than a box of catalogs, some cutaway samples, and a stack of business cards.” But the boys learned early on that it takes more to sell industrial products than a clean shirt and a smile on your face. “Our father always emphasized to us that you have to make your customers look good in the eyes of their superiors in order to be successful. To do that means you need to have a strong value statement for the products you sell, combined with an ability to back up those claims with hard data on how much money you are saving them,” Terry adds. The Velan steam trap fits nicely into this sales philosophy. According to Mike, “Velan provides significant cost savings to our customers in a way that can be easily measured, both in terms of lower operating cost and longer service life than our competitors.”

This philosophy of commitment to high-quality service and expertise has been the backbone of the James D. Acers Company,

starting with their father and now extending to the brothers.

“Steam traps as a class of product are peculiar in that very few people understand them well—even the people who specify, operate, and maintain them. The result is that most plants replace original equipment in kind even when their problems with steam traps are profound,” says Terry. “The challenge we face is convincing people that the potential benefits of using the Velan steam trap outweigh the perceived risks of trying something different.” After all, nobody was ever fired for simply replacing a failed trap with the same make and model original to the plant.

Acers strives to communicate these benefits in several ways.

The first is by offering on-site services to evaluate the current operating condition of all traps in the plant.

“We test their equipment and provide specific recommendations for how they can improve system efficiency,” Terry explains. Besides the fact this testing/recommendation is a business on its own, “It’s an excellent way to learn the complete processes our clients deal with on a day-to-day basis.”



The entire Acers family on vacation in June 2012 in northern California.

The other way is by being able to provide credible data to back up claims. The company's headquarters in Cloquet, Minnesota, has its own high-pressure steam testing facility, where the company has been able to collect data on the efficiency of the Velan product for many years. The reports this testing produced have been so well received that the company has built a similar facility at its Houston distributor's headquarters to meet the needs of nearby chemical company clients.

"We collaborated on some testing with the energy managers from a large global chemical company and were able to validate the results of our original testing conducted in Minnesota," Terry says. "What we did was to look at conventional steam traps operating in plant conditions and establish a base-line cost of operation for those technologies. Then we compared that to what the Velan steam trap offers." The results were very impressive. Mike adds, "based upon the normal operating cost of thermodynamic type traps, the Velan steam trap can provide a reduction in cost of around \$1,000 per year per trap."

Mike Acers' log cabin

You just never know what you might find on eBay. Here's the story: After acquiring a lake lot of their own next to the family cabin on a northern Minnesota Lake, Mike and Jody Acers thought they might just sit on it for a while to think about what they see as their legacy for their kids. However, plans changed when Tad Taivaloja of North Country Log Homes put one of his creations up for sale on eBay. "When we looked at the log shell Tad designed, it was full of possibilities," adds Mike. It wasn't long before there was a lofted, one bedroom cabin nestled amongst the white cedars and red pines in Minnesota's arrowhead. "Tad's design is unique," continues Mike, "he uses the Finnish-Cope style that collapses log upon log to create an un-penetrable seal that requires no chinking or sealing. It's a traditional technique that Tad learned from his family in the Upper Peninsula of Michigan."

From there, the building grew and a sauna house was also added. "We pretty much let Tad run with it. He just knew what we would like: Being the true craftsman that he is, he enjoyed the process as much as we enjoyed seeing it take shape."

If you were to ask the Acers' to describe their piece of God's country they would call it a celebration of traditional craftsmanship, with some welcome modern amenities. Their lake-side home features a bookcase made of 150 year-old wood salvaged from the bottom of the St. Louis River, and tree knots and burl embellishments throughout the cabin. It is very much a nod to a quieter time of focusing on family, taking things slower, and communing with nature. "We have beds hidden everywhere around here, so we are able to easily accommodate the many friends and family who visit. We deer hunt up here too, and have been known to host as many as ten giggling fifteen-year-old girls (Emily's friends) and as many rowdy twelve-year-old boys (Andy's friends) at a time for fishing, tubing, bonfires, and wiffle-ball games. We wouldn't have it any other way."



Mike Acers and family in front of the cabin.

One of the things people do in northern Minnesota during the long winter is play ice hockey. When people come up to the lake in the winter they are amazed to see the Olympic-sized ice rink Mike makes on the lake. "It's a blast to see how fast you can flood the rink with a 150 gpm pump when it is -20°F," says Mike. "We have a big tournament during the Christmas break and everyone has a great time."

Mike credits Jody for the many creature comforts of the place. "She pays a lot of attention to detail, and is always coming up with patchwork quilts, family photos and heirlooms, and vintage tableware. She also grew a pretty sizable perennial and wild flower garden between the two buildings, so there is very little lawn to mow. This place has a lot of old-school charm thanks to her."



“Based upon the normal operating cost of thermodynamic type traps, the Velan steam trap can provide a reduction in cost of around \$1,000 per year per trap.”

—Mike Acers

These savings have motivated many customers to overcome their fear of change and adopt Velan as their steam trap of choice.

Another sales tool Acers pulls out frequently is customization.

“We’ve been very successful in selling the Velan steam trap not only in its original form, but also modified to suit a company’s specific needs. Velan can supply steam traps prefabricated with isolation valves in many configurations. For example, we’ve worked with some power plant customers to supply fabricated units combining the Velan Power Ball valve, which is excellent for vent and drain service, with the steam trap in a single unit. This customization offers a decrease in field fabrication costs along with an increase in reliability because all the components of the assembly are tested by Velan at the factory before shipment,” Terry explains.



Mike Acers, Terry Acers, Martin Fernandes, and Dustin Sieben riding a ferry en route to the Velan Sales Conference 2011 at Château Montebello, Quebec.

“For facilities that only shut down once every couple of years, you need to make sure that everything works when you turn on the steam. If it doesn’t, it might be a long time before you have the chance to fix it.”

Where to sell a steam trap

What started as a small regional distribution company in the Midwest has blossomed into an organization that crosses several international borders.

According to Mike, “The focus of our business is to build a viable sales and distribution network for what is a world-class product that very few people even know exists.” The way they do this is very simple. Says Mike, “We show up.” Acers maintains a very busy travel schedule for their outside sales managers. “Last year, between me, my brother, and Dustin Sieben (who works on sales with us), we spent over 60 weeks on the road visiting our distributors and end users.” And those

Terry Acers: Have canoe will travel

Terry Acers has spent almost as much time sitting in a canoe as he has on airplanes in search of steam trap orders. His interest in canoeing began as a child on his grandparents’ lake, and throughout several decades has taken him to some remote and beautiful places in North America. For instance, Terry and his wife Trisha spent their honeymoon canoeing on a river in Canada’s Northwest Territories in 2000. That trip lasted a month, and ended on the shores of the Arctic Ocean, with a floatplane carrying them back to civilization.

Terry suggests that canoeing has probably been cited more than any other recreational activity in divorce proceedings, thus earning canoes the title of “divorce barge” in some circles. However, the same has not proven true for the Acers. Says Terry, “When a float plane drops you off 300 miles from the nearest road there is no way out other than down



Terry Acers on a river in Canada’s Northwest Territories.

the river. If you can survive that together, you will probably have a long and happy marriage.” Terry and Trisha celebrated their 13th anniversary this past October with a day spent in their canoe.

Nowadays, Terry and his family spend much of their time paddling waterways closer to home. In addition to weekly outings on their local rivers, Terry, his wife, and their three children make an annual canoe pilgrimage to the wilderness separating Minnesota and Ontario. The area boasts several million acres of undeveloped wilderness with more interconnected waterways than dry land, and no cell phone towers for 30 miles. “Canoe tripping with small children can be a challenge,” says Acers. Especially when bad weather, long portages, and swarms of mosquitos try hard to take the fun out of it. “But we have been doing this together since our children were in diapers, so everyone is used to camping and paddling for a week.” Terry and his wife recently inspected the family trip journal and realized that their trips are getting easier. “We noticed that once the kids were weaned, we were able to cover a lot more miles.”

distributors are increasing in number every year. “Last year,” Mike says, “we worked with over 90 distributors and agents in 10 countries in the Americas.” Acers counts among their exclusive distributors companies such as Puffer-Sweiven in South Texas, Hughes-Primeau Controls in Ohio, Meridian Specialties in Western Canada, and Feital-Fittinnox in Brazil, to name a few.

“The reason our distributors have had success with this product is two-fold,” Mike explains. “First: The product works as advertised. When people try the Velan steam trap and monitor it, they find that it will provide the lowest total cost of ownership in the market. Second is our insistence on a detailed business plan. Twenty years of selling steam traps into a wide variety of markets has helped us sharpen our focus on where we can see the fastest growth in specific market segments.

“Every distributor is given a localized business plan as to where Velan steam traps can be sold based upon their current customer base,” Mike adds. “The salesmen are brought into the discussion to create realistic goals. Regular visits from our team are then planned and carried out. The plan is then reviewed on an annual basis and altered if needed.”

The Acers/Velan team—why it works

Over the past 10 years as the Acers Company has grown, Velan U.K. has been supporting them in more ways than one. “When dealing with some factory people from other companies in the U.K., the phone is shut off at 5 pm (11 am Central Standard Time) and customer’s questions have to wait until the next day. With Martin Fernandes, Velan U.K.’s Sales Manager, Velan U.K. Products, that is not the case. First off, we’ve been working together for years now: He was named product manager when we were given our Master Distributor status. And from day one, we both realized that for this relationship to work, we were going to have to go out of our way to support one another. Martin’s efforts and support have made our success

possible; in fact, without him in the Product Manager role, I doubt we would be where we are today,” says Mike.

The leadership at the top has also allowed the Acers/Velan team to thrive. Over the past 10 years, Velan U.K. has had a few different managing directors, each of whom has brought a different talent and leadership style that has helped grow the steam trap line to where it is today. The current Managing Director, Stefan Wingerath, has done an excellent job of increasing growth, while maintaining production and quality levels. He has been very involved during that time, recently visiting Acers in Minnesota, and then traveling with them down to Houston, Texas, to visit the regional distributor, Puffer-Sweiven.

Over the years, the Acers team has visited the factory on numerous occasions for training and meetings. “The fact that we all depend upon each other has built some wonderful relationships,” says Terry. “Acers brings product ideas from the field and Velan U.K. evaluates potential product development. We have been successful in creating a couple of new products that have better positioned us in the steam trap market,” adds Mike.

“Perhaps the best reason I can give for why this relationship works as well as it does comes down to the people. Velan U.K. has a very loyal workforce. We attribute the retention of staff over the past 10 years as a testament to the Velan management model. We look at the people who work at Velan U.K. as family. We depend on them for our livelihood, and we strive to help them manufacture the best product possible through our field experience. As time has passed, many of the same people have stayed with both companies and a genuine bond has been formed. We celebrate when someone has a new addition to his/her family, and we mourn when someone leaves. It’s a crazy thing called life, and we really enjoy spending it with the people at Velan U.K.,” says Mike. **[VV]**



Dustin Sieben in action.

"Luctor Et Emergo—Struggle and Emerge"

Dustin Sieben is a proud Albertan who was born in Lloydminster. He grew up as most Canadian boys do, chasing the dream of being a professional hockey player, playing youth hockey throughout Alberta. He left home at the age of 14 to go to Wilcox, Saskatchewan, to pursue his dream of hockey and attended the Athol Murray College of Notre Dame. It was there that he shared a line with Rene Bourque, who now plays with the Montreal Canadiens.

After Notre Dame he moved on to play a few years of junior hockey, eventually bringing him to Duluth, Minnesota, to play hockey at The College of St. Scholastica. This is where he met his wife Laura Lief. A new job opportunity for his wife moved them to Cloquet, Minnesota, in early 2008. During the summer men’s league that year at the Cloquet Country Club, he was paired up with Mike Acers for a round of golf. Mike was looking for a new outside salesman and they discussed the possibilities of a career change from finance to steam trap sales. Dustin’s family in Alberta made their living in the oil industry and his curiosity led him to accept a job with the James D. Acers Company in the fall of 2008. Even though at the time he didn’t know what a steam trap was he was ready for a new challenge in his life.

He has enjoyed his time ever since, meeting great people throughout North America. In 2011 Dustin and Laura welcomed a daughter, Brynlee Grace, into their family. He still enjoys being active in youth hockey and trying to figure out how to catch Minnesota walleyes. But most importantly he enjoys spending time with his family.

He still lives by what he was taught at a young age at Notre Dame: “Luctor Et Emergo—Struggle and Emerge.”



Martin Fernandez, Sales Manager, Velan U.K. Products, and Karl Laas, Sales Manager.

The steam trap picks up speed

Velan U.K.

If there is any place within Velan where Aesop’s quote, “slow and steady wins the race,” applies, it’s the Velan U.K. division. That’s because the division’s main product is the company’s first and most steadfast product: the steam trap. It has varied little during its long history because the original design was so good. But it’s not just the design that is winning the race: It’s the people that work at Velan U.K.

“We are very good at making what we make so we stick with it and focus on increasing the numbers we sell,” says Martin Fernandez, Sales Manager, Velan U.K. Products. The division also has a reputation for employees of long duration. For example, Sudhir Jaycee, General Manager, Production; Chandrakant Chavda, Design Manager; Karl

Laas, Sales Manager; and Bob Morris, QA Manager, have a combined service tenure of over 134 years.

Meanwhile, the slow of “slow and steady” is changing. The traps are selling well and coming out the door at faster and faster speeds. The division has gone through a two-year Total Process Improvement (TPI) drive

that increased both the efficiency and output of the production line.

“Since we implemented our “Lean” program, we have transformed our process, creating a one-piece flow throughout our plant while also increasing the safety and cleanliness of the working environment,” Sudhir says.

A long history

Velan U.K. has been around longer than almost any other division in the company. It was formed in August 1954 by A.K. Velan, the company founder, to begin producing his new invention—the bimetallic steam trap.

The plant is situated on an industrial estate in the heart of England in Leicester, an area rich in people of different cultures. From the early 1950s to the 1980s, Leicester's engineering and textiles industries boomed and many newcomers to the country went into the workforce.

In the 1960s, the area saw an influx of immigrants from East Africa followed by many from the Indian subcontinent. Today there are many new arrivals from Eastern European countries.

"These various cultures have been a large part of Velan's history in the U.K. and this trend continues today. We have a diverse work force, which has served us well over the years," Martin says.

The division produces both steam traps and Velan bonnetless valves. Despite the fact that few changes have occurred to these products themselves over the years, sales have grown consistently and picked up speed in the last few years.

"A collaborative effort by our agents/distributors as well as our sales teams has brought a steady rise in sales with many major customers now trying our traps because of the tangible evidence of how much a Velan bimetallic trap will save a plant in energy and money," Martin says.

For example, laboratory tests have shown that swapping 1,000 thermodynamic traps for 1,000 Velan steam traps can result in savings of up to \$1m per year at a refinery or petrochemical facility.

"When you consider most plants can have an average of 3,000 to 5,000 traps onsite, that equates to a significant savings of energy and an enormous boost to a plant's plans for reducing its carbon footprint," Martin points out.

Two sides to success

The popularity of the steam traps is the division's greatest joy, but also its greatest challenge.

"Achieving our sales targets becomes more demanding as projects and deliveries get tighter," Sudhir explains. To meet that challenge, "we introduced a strategy to maximize productive hours so we can plan ahead for shop floor loading," he adds. TPI is part of that strategy.

As in many other well-established companies, the longevity of managers and employees at Velan U.K. also has its challenges.

"The loyalty of some of our senior managers, who have been there since the mid- to late-70s, is evidence of their dedication and commitment to Velan and the products we make," Martin says.

However, "We have a number of people coming up for retirement and one of our other challenges will be finding the right people to fill their shoes," Sudhir says.

In today's environment, where good engineers are harder to find, "We have to find good coaches and train them as they come up through the ranks," Sudhir says.



Sudhir Jaycee, General Manager, Production.

"When you consider most plants can have an average of 3,000 to 5,000 traps onsite, that equates to a significant savings of energy and an enormous boost to a plant's plans for reducing its carbon footprint."

—Martin Fernandez

Getting lean

Turning the production line into a leaner venture greatly alleviated the challenges created by increased sales orders and is solidifying Velan U.K.'s relationships with its employees.

"We needed to increase production capacity, encourage work ethics, and make the workplace as safe and sustainable as we could, both to build profits and to keep employees happy," Sudhir says.

The process began in about 2009 when Rob Velan became President of Velan U.K. operations and spearheaded the introduction of the principles of TPI.

"This was to make everyone understand the why, what, and when of TPI. We also created four specific groups within the larger team that would eventually take ownership of the TPI initiatives we wanted to put in place," Sudhir says.

After additional training and assistance from Bob Kelly, Process Improvement Coordinator for Velan in Williston, Vermont, the U.K. office created a plan of action for restructuring the shop floor and building the one-piece flow.

Impressive results

"During the transformation, there was a 17% increase in overall efficiency in the production processes and a reduction of 30% in how long it took us to actively respond to customer requests," Sudhir says.

A 12-week lead for standard contracts was reduced to eight weeks and results



Velan U.K.'s production team from left to right. Front row: Andy Lay, Ali Kapasi, Bankim Patel, Kishor Patel, Jay Patel, and Reg Kataria. Middle row: Mohan Patel, Bipin Mistry, Mick Bignall, and Surjit Singh. Back row: Barry Swanwick, Dave King, Paul Bray, and Richard Smith.

have continued to build and pick up speed. During the first quarter of this year, for example, units produced increased by more than 40%, Sudhir points out.

Building the business

Martin adds that the division is on target to increase business by 10% to 15% per year for the next five to seven years. One of the reasons is that the steam traps do so well in high-pressure and supercritical steam applications, and requests for such equipment now come from all over the world. For example, in Iceland, the Velan steam trap was part of a trial for a geothermal plant where the steam was so corrosive and aggressive that most of the equipment in the tests clogged or failed because internal components disintegrated from the steam's severity.

"The Velan trap, however, outlasted most of the equipment, and the seats and valve assemblies within the trap showed no signs of wear or damage," Martin says.

Velan steam traps also perform well in other high-pressure and supercritical steam

applications. In fact, since 2004 the majority of supercritical power plants constructed in Korea have used the Velan bimetallic design. "In almost a decade we have not received any complaints of failures with the traps operating constantly at elevated pressures of up to 276 bar (4000 psi). This just goes to show that Mr. Velan's original design has not only stood the test of time but, with very little changes over the years, has in fact stepped up to cope with pressures way beyond those in the 1950s when the trap was first introduced," he adds.

That's pretty impressive for a product that's been around for over 60 years.

"The steam trap line is a technical sell, and our agents and distributors are very astute and committed in their promotion of the product. But then, the product has all the attributes that you associate with a Velan product—it is easy to install, it works very well, it lasts, and it saves the customer money," Martin concludes. **[VV]**

Did you know?

- Located in the East Midlands of England, Leicester is the county town of Leicestershire.
- The name "Leicester" is thought to derive from the words "castra of the Ligore," meaning camp of the dwellers on the (river) Legro.
- Leicester is one of the oldest cities in England and was the center of the bishopric from roughly 670 A.D., which lent it standing as a city. It lost its city status during the Eleventh century as a power struggle was waged between the church and the aristocracy; it only regained its city status over 900 years later in 1919.
- Ancient Roman pavements and baths remain in Leicester from its early settlement as Ratae Corieltavorum, a Roman military outpost in a region inhabited by the Celtic Corieltavi tribe.
- Through the Early Modern period, Leicester continued to grow as a market town, and it boomed during the Industrial Revolution.
- In the 19th century, a newly constructed rail and canal network was routed through the area, which further boosted industrial growth. Leicester became a major economic center boasting many manufacturers.
- Today, the city has a large ethnic minority population, particularly of South Asian origin, a product of immigration to the United Kingdom since World War II.
- In the 2011 census, the population of the Leicester unitary authority was 329,900, the highest in the region, making Leicester the tenth most populous settlement in the United Kingdom and the U.K.'s fourteenth largest urban area.



Haymarket Memorial Clock Tower in Leicester.

Taking it to the bank

Sunbelt Supply

It seems appropriate that when you ask Charlie Pogue, Velan's VP, U.S. Sales (Western Division), why the relationship between Velan and of its largest distributor, Sunbelt Supply, works so well, he answers: "It's because we deal with people like Larry, who is as honest as it gets. When he says something, you can take it to the bank."

The Larry that Charlie refers to is Larry Feld, President of Sunbelt Supply Co., who has been at the helm of the company throughout its steady rise to super-size. The company, which has 34 years of industry expertise, currently has 15 locations in seven states and Canada.

An additional reason the above quote is appropriate, however, has to do with one of Larry's great passions in life: collecting antique mechanical banks. He bought his first bank at age 9 and now has one of the premier collections. He enjoys traveling to conventions and auctions around the country to mingle with fellow collectors and perhaps find an addition to place on his shelf.

"My lovely wife puts up with me and my passion for this hobby. She kids me that she has to shop at Target so I can afford to go on collecting," Larry jokes.

That down-to-earth attitude, mixed with humor as well as honesty, paints a pretty good picture of who Larry is and what sort of determination he and his former co-partner Brent Scheps used to build a company that now holds one of the largest inventories of valves in North America.

A company is born

The history of Sunbelt illustrates what happens when two good minds blend ideas, dedicate themselves to starting a business, then learn how to fine-tune and focus the business, add the right kinds of quality people, and make the right business decisions over the years.



Ivan Velan, Velan's Executive VP; Charlie Pogue, Velan's VP, U.S. Sales (Western Division); and Larry Feld, President of Sunbelt.

“You have to build a trusting relationship with vendors, associates and customers, which has always been and will always be very important to us.”

—Larry Feld

Larry and Brent met in high school and became fast friends who wanted to make money together. “We initially discussed the possibility of opening up a hot dog stand in Houston,” Larry says, but the boys discovered that city ordinances at the time prohibited such a venture.

Both went on to college, graduating from the University of Texas with marketing degrees. The idea of running a business together stayed with them. When Brent graduated, Larry had completed his first year of law school, and they decided to go into business together, with Larry working part time until he got his law degree. Though Larry finished law school and got his license, he never practiced law except, as he jokes, to keep Brent out of trouble!

In 1978, Larry and Brent founded their first distribution company, Feld & Scheps, which shortly became Middle Enterprises because of its location on Middle Street in Houston and because “we were brokering goods as ‘middle men,’” Larry says. After conducting their first look at the need to fine-tune what they offered and “after receiving mail addressed to ‘Mental Enterprises,’” Middle Enterprises became Sunbelt Supply & Tool Co., Inc., Larry explains with his typical mix of humor and candor.

The two initially invested just \$1,000 each, but quickly made the company a success. Sales were \$100,000 the first year, \$300,000 the second year, and \$1 million by the third year. This year Larry expects Sunbelt’s sales to reach approximately \$300 million.

But initially they were not in the valve business. They started out primarily brokering fasteners, marine fittings, manila rope



Back in the day (left to right): Paul Rangel (current Sunbelt VP), Brent Scheps, and Larry Feld.

and builders hardware. “We even sold tennis shoes, barbecue grills, and tube socks. In fact, I wooed my girlfriend at the time by giving her ‘gifts of the trade,’” he jokes. “It must have worked out because we’ve now been married for 32 years,” he adds.

Later they inventoried industrial supplies, including metric tools, Makita power tools, gloves, fittings, Go-Jo hand cleaner, and finally bronze and iron valves. Most of their sales were to ship chandlers and ship-repair yards.

After a few years, however, “we decided to focus on one main product group and selected valves,” he explains.

Growth from that point was exponential. The company opened its first branch in New Orleans in 1985; was awarded its first MRO contract (Union Carbide) in 1986; purchased a giant cast steel inventory from NIBCO (much of which was Velan-manufactured valves) in 1989; became an Employee Stock Option Plan company by the late 1980s; and sold the company to Hughes Supply in December of 1996.

Most recently, the company came under the umbrella of the Shale-Inland Holdings, LLC, which acquired the IPVF group from HD Supply earlier this year.

“We are very much looking forward now to continuing the expansion of our business under the new leadership of CEO Craig Bouchard and our new Private Equity owners, TowerBrook Capital Partners and The Stephens Group,” Larry says.

What’s changed over the years

Like Sunbelt itself, the world of distribution was much smaller in the early days—the manufacturers were smaller, the distributors didn’t have as broad or large a reach, and the customers themselves were smaller too, Larry said.

“Before computers, we received orders from the ships via telex and kept inventory on a Kardex system,” Larry says. Hardly any distributors had specialty valves and many MRO contracts were not handled at the corporate level, but rather at local levels. Indeed, much has changed over the years. However, “what remains the same is that our day-to-day business is still based on people dealing with people,” Larry said.

To be successful in that people business, he adds. “You have to build a trusting relationship with vendors, associates, and customers, which has always been and will always be very important to us,” Larry says.

The other ingredients are “to hire and keep the best people in the industry,” and “to give our associates the inventory and other resources needed for them to provide superior service to our customers,” Larry says.

Relationships

The idea that the business is only as strong as its people, their relationships, and their knowledge is “precisely the reason the partnership between Velan and Sunbelt works so well,” Charlie says.

“Larry is one of the smartest people I know,” he explains, “and he has staff with the technical know-how that’s critical to success in our industry,” he adds.

Sunbelt began its relationship with Velan when Velan offered Sunbelt one product line—API 602 small, forged valves in 1994. The distribution company picked up most of the other Velan product lines in the mid to late 90s and has since grown to be the largest distributor of Velan valves with almost every product line in its inventory. Sunbelt’s growth has occurred right alongside Velan’s own development, and “we’ve always had a good, open relationship. We take advantage of each other’s strengths,” Charlie says.

Larry adds that: “Over time, Sunbelt and Velan have forged a powerful and sometimes challenging relationship, both as a company and between individuals. When we disagree, we still respect each other’s decisions because we know we’re being honest in our endeavors to resolve conflicts and make the right decisions.”

The reason it works so well is that: “I have the utmost respect for the Velan family and the way they conduct business,” he adds.

As far as Larry is concerned, that kind of close relationship and integrity is the very reason for being in the valve profession in the first place.

“I like striving to be the best at what we do. I enjoy growing Sunbelt and interacting with people in the industry. I am very loyal to our employees, and the company we have created together,” he says.

And even though one of his obsessions is antique banks, “it’s only a pastime. My real passion in life is spending time with my family—especially my wife, children, and our most recent addition, our nine-month-old granddaughter,” he says. **[VV]**



A word from Executive VP Ivan Velan

“Velan has tried to build strong, cordial relationships with many distributors around the world and the one we have with Sunbelt has been special for several reasons. First, Sunbelt quickly became and has remained, to date, our largest customer, and we are their largest valve supplier.

“Second, Sunbelt has made a commitment to most of our product lines and has a philosophy of providing service to their customers by carrying large stocks of valves. And, as is true with Velan, Sunbelt focuses on valves as their primary business.

“Third, and perhaps somewhat unusual in the valve business where distributor and manufacturer goals are not always aligned, we have learned to trust each other and to create win-win situations. Both companies have prospered without doing so at the expense of the other. Sunbelt and Velan were latecomers to an industry dominated by large companies that were well established over many years. As a result we had to carve out a significant market share, and we were able to help one another do so.

“Larry has done a remarkable and noteworthy job in finding a way to blend the goals and objectives of Sunbelt’s customers with those of Sunbelt and Sunbelt’s suppliers to provide the kind of equilibrium that works well for all concerned.”



Houston and District employees with 20 years service or over (from left to right): Paul Rangel, Jay Dumesnil, Cary Venable, Erasmo Ortiz, Larry Feld, Jimmy Francis, Leo Strouse, and Reggie Moshay. Seated left to right: Jean Urban, Cindy Hendricks, Kim Scheps, and Edgar Steward.

The value of long-term relationships in sales



Bill Patrick, Velan Regional Manager – Western Canada; Bryn Murray, Meridian’s General Manager; Dave Smith, Senior Technical Sales, Meridian; and Leo Shewchuk, Velan Regional Sales Manager – Western Canada.

One of Velan's greatest sources of pride is that the company has been around for more than six decades. That longevity means Velan has formed many long-term relationships—with end-user customers, with other members of the valve community, with its own distributors, and sometimes with individuals such as Dave Smith, Senior Technical Sales, Meridian, who has been selling Velan valves since the 1970s. Meridian itself has more than a decade-long relationship with Velan and is a past winner of the Joe Casey Distributor Award. The Award is given to organizations who have achieved a long-term successful business relationship with Velan. But Dave's history with Velan stretches back even further.

According to Bill Patrick, Velan Regional Manager, Western Canada, Dave's blood flows Velan blue.

Dave joined the Meridian team in 2003. But before that, he worked 25 years for Lytle Engineered Specialties, which at one time was the exclusive Velan distributor in Canada.

As could be expected, Dave has seen a world of changes in his many years of meeting with clients and helping them find application solutions. But his two basic philosophies for selling have not changed.

"First of all, I like to treat people the way I want to be treated when I go to buy something myself. That affects everything I do. And second of all, I make sure I'm selling quality products," Dave says.



Bryn Murray and Dave Smith, Meridian.

Distribution over the years

Dave and Meridian have both been around long enough to witness tremendous changes in the way distribution occurs in Canada, including Velan's own network.

Leo Shewchuk, Regional Sales Manager, Western division for Velan, explains, "Here at Velan, we started with a territory with only one distributor selling mostly cast and forged steel products. Today, we have a complex distribution network with four key players in Western Canada, each one with their own specialties and unique abilities."

As far as Meridian goes, Paul Dion, Velan's VP of Sales, Canada, says the distributor is unique. "The company started as a local partner-owned distribution house and has grown to become the largest Velan distributor in Canada. It has a very large customer base and covers that base with technically experienced outside salespeople, like Dave, as well as inside salespeople."

The company and its sales force have had ongoing success at managing the biggest end-user project requirements as well as MRO contracts, "all the while staying true to the core values that gave Meridian its start in the valve industry," Paul adds.

Bryn Murray, Meridian's General Manager, adds, "Meridian is a Wolseley Industrial Group company, and leverages the scale and

capabilities of its parent company, while maintaining its focus on local customer requirements.

"Our efforts to build a strong, technically knowledgeable team position us differently from other suppliers in the Canadian market."

Bryn says that Meridian's ongoing effort to support and develop its technical team is key to what the company does for its customers, associates, and partners.

"Our senior technical team, including Dave, has extensive application experience garnered from time spent in the field," Bryn says.

That's why the team's valve of choice is both feature and benefit rich, he says.

"We couldn't ask for a better partner than Velan as they continue to manufacture valves that provide unmatched value for the applications and industries we serve in Canada," Bryn says.

"But there's more to the joint success of the companies than offering a top-notch product," he explains.

"Meridian actively engages its manufacturer base to support its teams' training requirements, and Velan employs the best in the industry," says Bryn. "We are fortunate to work with the very capable team that Velan employs in Canada."



Dave Smith, Meridian.

Dave's history with Velan

At the time Dave joined Lytle Engineering (in 1973), valves were seeing increased business in the western part of Canada because of projects such as the Co-op Refinery Upgrader, a major expansion made to add value to the heavy oil of the region.

Dave's first territory stretched from Thunder Bay in the province of Ontario to Saskatchewan—a pretty wide swath when you consider that's well over 1,300 kilometers (820 miles) as the crow flies.

"In that whole area, there wasn't as much valve action as there was in Alberta alone," Dave explains. "However, the potential was great and many companies were investing."

Dave was moved from his native Winnipeg to Saskatchewan to open up offices in the region as activity picked up. He was there from 1982 to 1989.

With an area that large, Dave was constantly on the go—120 nights on the road his very first year as he opened up Saskatchewan for the company. He says he kept sane by reading (biographies, mysteries, and technical manuals being his favorites), watching sports on television ("Go Winnipeg Blue Bombers and the Jets!"), and often, thanks to "the kindness of people I met on the job

during the day who would invite me to join them for after-hours socializing," the kind of shared activities that help build strong business relationships."

The business that sprang from the upgrader project at Co-op Refinery started to wind down towards the end of the 1980s, the same time that Lytle Engineering was bought by Westburne. The company moved Dave from Saskatchewan to Edmonton, Alberta, where he was given the prime sales territory of Northern Alberta. Westburne itself was then bought by a multi-national energy industry supply company and his product line and customer base widened even further. He remained with that company until the opportunity with Meridian arose, an opportunity that returned him to his base product line.

"Selling valves is my background and that's what I wanted to continue to focus on as I moved over to Meridian," he says.

An expert in the making

One of the traits that people praise Dave and Meridian's staff for is broad knowledge of the many industries where valves are used. For Dave, that knowledge stretches far back in his career. Before Lytle, he worked as store manager for a welding equipment company that sold to industrial applications. He also worked for an industrial contractor.

"I have always had an interest in industrial applications," he says. "I have also had the benefit of dealing with many different types of industries—pulp and paper, mining, nuclear, oil and gas, and more," he says.

Part of the reason his knowledge is so broad and deep is that he came up through the ranks of selling during a different era.

"I entered the industry at a time when you'd make a presentation, then afterward you might say to the client, 'okay, so how does your operation here run?' He would usually say, 'come on, let's go for a walk and I'll show you how it happens,'" he explains.

"The customers have been my trainers and teachers," he adds.

Things are much different today.

"At one time companies like Meridian,

which sells a specialty product, could make cold calls and potential customers would ask for our industry advice. For example, they might ask about the Meridian products but also ask about related products and where to find them," he says.

Today, it doesn't happen quite that way.

Instead, "people go onto the computer to find the initial information they need and to determine where a manufacturer is located," he says.

Dave adds that today's salespeople also face a different world on site since 9/11 happened. "There is security everywhere, even in the office buildings. In many places you have to have a signed document just to get in to see someone. The days of cold calling are gone," he says.

On the flip side, Dave says communications are so much faster that everything in the process can be sped up. "Who has a telex or even a fax these days? Everything is email and scans. Now, instead of the customer having to wait for us to drop off the information they're looking for, we can instantly send them a technical brochure and then follow up with a personal call as needed," he explains.

The Velan connection

Because Dave's exposure to the Velan product stretches back to his initial days at Lytle, he's also been around as Velan grew.

By the 1980s, a major breakthrough for Velan was occurring in the area Dave covered as the y-pattern and pressure seal valves began what has since been a long and successful steam valve program in Western Canada. During this era, Velan had almost every maintenance, repair, operations contract for cast and forged steel valves in the region.

In the early years, "I remember doing many seminars on the road with Mike Zivic (former VP of Sales for Canada from 1985 to 2003). Even though Mike was based in Montreal, he was always available to come out and do onsite training with us, wherever we might be. Since then there's been a real

expansion in the industry here, and we now have two local Velan guys in Alberta, Bill and Leo, and as a team we've been carrying on the tradition for the last 27 years," Dave adds.

Recently, Dave and current Velan contact Peter Brkich, Quotations Manager, Severe Service, and Product Manager of Metal-Seated Ball Valves, worked on a project for an energy company in Alberta that was looking at the possibilities for using metal-seated ball valves at a SAGD site. SAGD (steam-assisted gravity drainage), is an enhanced oil recovery technology used to produce heavy crude oil and bitumen. It is an advanced form of steam stimulation in which a pair of horizontal wells are drilled into the oil reservoir, one a few meters above the other. High-pressure steam is then continuously injected into the upper wellbore to heat the oil and reduce its viscosity, causing the heated oil to drain into the lower wellbore, where it is pumped out.

"Peter, Leo, and I worked together on the site; there was a lot of good collaboration on the project. We have very complementary areas of expertise," Dave says. "And even though we work for two different companies, we absolutely share the same goals on the job."

"Peter gave a great seminar on the metal-seated ball valves, then there was much back and forth between manufacturer, supplier, and client to iron out the details. We also worked closely with Velan's Luc Vernhes on engineering challenges—and there were a few given the sheer size of the valves and the project itself. I always knew I could pick up a phone and get answers to tough questions right away," he adds.

This particular project faced not only the challenges of the high-pressure steam requirements, but also challenges caused by the sheer size and placement of some valves.

"One recent case, for example, involved putting 12" valves (one weighed 10 tons) in a difficult place—a piping rack. There are lots of pipes and walkways in very tight quarters, and we needed the expertise to determine not only how to put them in place, but also

how to support them once they were there," Dave explains.

However, Dave sees projects like this one as a potential place for more Velan business down the road.

"One of the factors we've been talking about is the longer delivery times for pressure seal valves due to the unprecedented increase in demand for this iconic Velan product. So now the future is also looking bright for metal-seated ball valves in severe applications in Northern Alberta," Dave says.

People skills

Besides his broad expertise, commitment to Velan's products, and long history of connecting with company employees, Dave possesses another skill that has served him well over the years—his ability to deal with different personalities and to listen to what they need. These skills stretch back before he even entered the valve world.

"At one time when I was very young and newly out of school, I briefly played with the idea of running a carnival business, being part of something where you'd travel to all these small towns on the prairies and entertain people. It's much the same as traveling sales—to be successful, you have to learn to understand the process and give people what they need, or in this case what they want," he says. "I always thought it would be a really neat job!"

Even though that venture never came to fruition, Dave's people skills have only been strengthened over the course of his career.

"People are what it's all about in the world of sales. You have to understand the many different types of personalities and understand their realities, including the politics. But mostly, you need to know how to recognize their needs—which in most end-user industries is how to make the process as efficient as possible," he says. **[VV]**



Paul Dion, Velan's VP of Sales, Canada, stands beside a 16" metal-seated ball valve complete with a 22' Rotork actuator, the largest actuator built by the company. The valve is ready for shipment to Meridian and is intended for use in a SAGD application in northern Alberta, Canada.

A new level of collaboration

Velan takes an Industrial Research Chair at École Polytechnique



Velan has had a strong relationship with the research staff at Montreal's famed École Polytechnique de Montréal (EPM) for more than a decade. But recently, the company took that relationship a step further by accepting an invitation to join the university's Industrial Chair, supported by the Natural Sciences and Engineering Research Council (NSERC) of Canada's Research Chair Program and by six other industrial partners.

“This program offers Velan a chance to raise our research and development to a higher level,” says Gil Perez, VP, Engineering, at Velan. “And it also offers a tremendous opportunity for collaboration with people who have overlapping interests as well as the opportunity for cross pollination of ideas.”

The Research Chair Program

Velan had the privilege of participating in the foundation of the NSERC Multisectorial Industrial Research Chair in Coatings and Surface Engineering (MIC-CSE) program in 2012, which was possibly the best way to continue the previous successful collaboration with Polytechnique. The idea to participate initially came from Luc Vernhes, Velan's

Left to right: Velan's Gil Perez, VP, Engineering; Vahe Najarian, Corporate Manager, Research and Development; and Luc Vernhes, Design Manager, Securaseal™ Ball Valves; with Research Professor, Jolanta Klemberg-Sapieha of the Department of Engineering Physics at the École Polytechnique.



Left to right: Gil Perez, Velan; Étienne Bousser, doctoral student; Jolanta Klemberg-Sapieha, Professor; Vahe Najarian, Velan; Marwan Azzi, Professor; Ludvik Martinu, Professor and former Head of the Department of Engineering Physics; and Luc Vernhes, Velan.

Design Manager, Securaseal™ Ball Valves, who has worked on a number of research programs in cooperation with universities. Later, the entire Velan research team made the decision to dedicate resources to the program with blessing and encouragement from A.K. Velan, as well as from Ludvik Martinu, Professor and former Head of the Department of Engineering Physics. Ludvik has been preparing this Chair initiative at EPM for several years, in collaboration with his colleague Jolanta Klemberg-Sapieha, Research Professor within the same department. Ludvik and Jolanta have a long history of collaboration with industry; their joint projects with Velan alone span back more than 10 years.

EPM's Research Chair Program brings together seven non-competing industry partners to work together with the university's research staff on specific issues. Velan's involvement is based on its strong interest and ongoing research and development in the fields of materials engineering and product performance—in which protective coatings play a significant role.

"We are looking at the physical behavior of surfaces and how those surfaces can protect the layers beneath them," Gil explains. "We need to better understand how our valves will react when exposed to various conditions and media," he added, "especially since they're used in some of

the toughest industrial applications on the planet."

The Chair Program involves both generic projects such as the development of new "green," non-polluting coating fabrication technologies, new nanostructured materials, and also the mechanisms of wear, galling, erosion, and other challenges, as well as partner-specific initiatives. Velan has identified several specific projects: Tribological behavior (the science and engineering of interacting surfaces in relative motion and thus the principles of friction, lubrication, and wear) at high-temperature and high-pressure; combination of thick/thin coatings (multi-layer/graded coatings); optimization of bonding and performance of hardface

“The program gives us access not just to our partners, but to the staff at the university and to their facilities. When you work with some of the best minds in the field of applied research, the whole becomes greater than the sum of its parts.”

—Gil Perez

coatings; and performance related to adhesion and degradation between packing materials and metals at high velocities. For each project, a series of milestones and key performance indicators will be defined to evaluate the progress and success.

The other partners in the protective coatings endeavor are Hydro-Quebec and Pratt & Whitney Canada, while four other companies will work together on related aspects of surfaces, namely optical coatings (Essilor, JDSU, Guardian Industries, and the Canadian Space Agency). Needless to say, the coating systems explored by the latter industries also face significant challenges with respect to the mechanical and tribological performance, and to environmental stability.

One of the most important benefits of participation in the Chair is the fact that, while each of the partners has practical projects to tackle, the interaction that occurs between the partners, as well as between the partners and the university research staff, brings fresh perspective to the research itself.

According to Ludvik: “One of the most exciting aspects about this second largest NSERC Industrial Chair in Canada is its unique multi-sectorial character, namely the collaboration that occurs between disparate industry partners, as well as the collaboration our university has with other universities and industries. Everybody represents a specific field of application; and when you put these thinkers together,

you create tremendous synergy. We are all working on common problems and how to solve them, but instead of taking a solitary approach, we work together, which creates a great potential for faster development.”

That synergy has the research staff at Velan energized and invigorated, according to Gil. “When we had our kick-off meeting last June, we sat around the room chatting with these people we’d never met before; and before you knew it, we were talking specifics such as metallurgies, types of coatings, specific technologies. Pretty quickly the room was buzzing with enthusiasm. It’s a spontaneous and natural way to exchange ideas.”

The benefits for Velan

In many ways, joining the Chair formalizes and expands R&D programs the company has already started with the university. For example, the company will work with Polytechnique on developing its coating matrix that lists the specific characteristics of different coatings and how they may be applied. It will also continue its work with nanostructured materials for severe service equipment, in collaboration with the National Research Council of Canada, as well as testing a host of other coating systems and thin films.

As an example, two years ago Velan—in collaboration with Ludvik and Jolanta—qualified a tungsten/tungsten-carbide coating applied by chemical vapor deposition as an alternative to hard chrome plating for metal-seated ball valves. Since that time, other applications were found for this great material, which is now being used to enhance the performance of other product lines.

More recently, in 2012, material selection for Velan’s Power Ball valve was also upgraded based on testing and qualifications performed in collaboration with EPM. What joining the Chair Program does as well is give the R&D team a broader perspective in their studies, funding to conduct ever-more-extensive research, and exposure to a knowledge base that is much wider and deeper.

“The program gives us access not just to our partners, but to the staff at the university and to their facilities. When you work with some of the best minds in the field of applied research, the whole becomes greater than the sum of its parts,” Gil explains.

Participation also gives Velan the opportunity to view its own research program in a more structured way, which was one of the main reasons the decision was made to participate.

“We saw an opportunity through this five-year agreement to develop our company R&D into a more advanced and more formalized program,” Gil says. “We won’t be doing a lot of theoretical research, which is very long term. But we will be doing research with the objective of putting what we find into our products in a short- to medium-term time frame,” he explains.

The benefits for industry

What the Chair Program does for industry in general is spread the wealth of research brainpower and raise the bar in how Canadian technology is developed.

“We developed the EPM’s Chair Program for two reasons,” Ludvik explains. “One is because we believe this is our role as a university: We promote and further basic understanding, transfer it toward applied engineering, and explore avenues in how it can bring immediate benefits to industry. The other reason, and this is equally important, is to educate a young generation of people who will eventually be hired by this industry.”

Meanwhile, “the government supports our efforts because they want to invest money in the future of industry in Canada,” he adds.

The players

The three main contacts from Velan who will be dealing with the Chair Research Program are Gil, Vahe Najarian (Corporate Manager, Research and Development), and Luc. However, participation will stretch much further into the company as research moves along: According to Gil, other players will include Velan’s Mirek Hubacek (Director

of Design, Quarter-turn, Dual Plate Check Valves), Rejean Rene (Corporate Welding Engineer), and Nicolas Lourdel (Testing and Development Jr. Engineer).

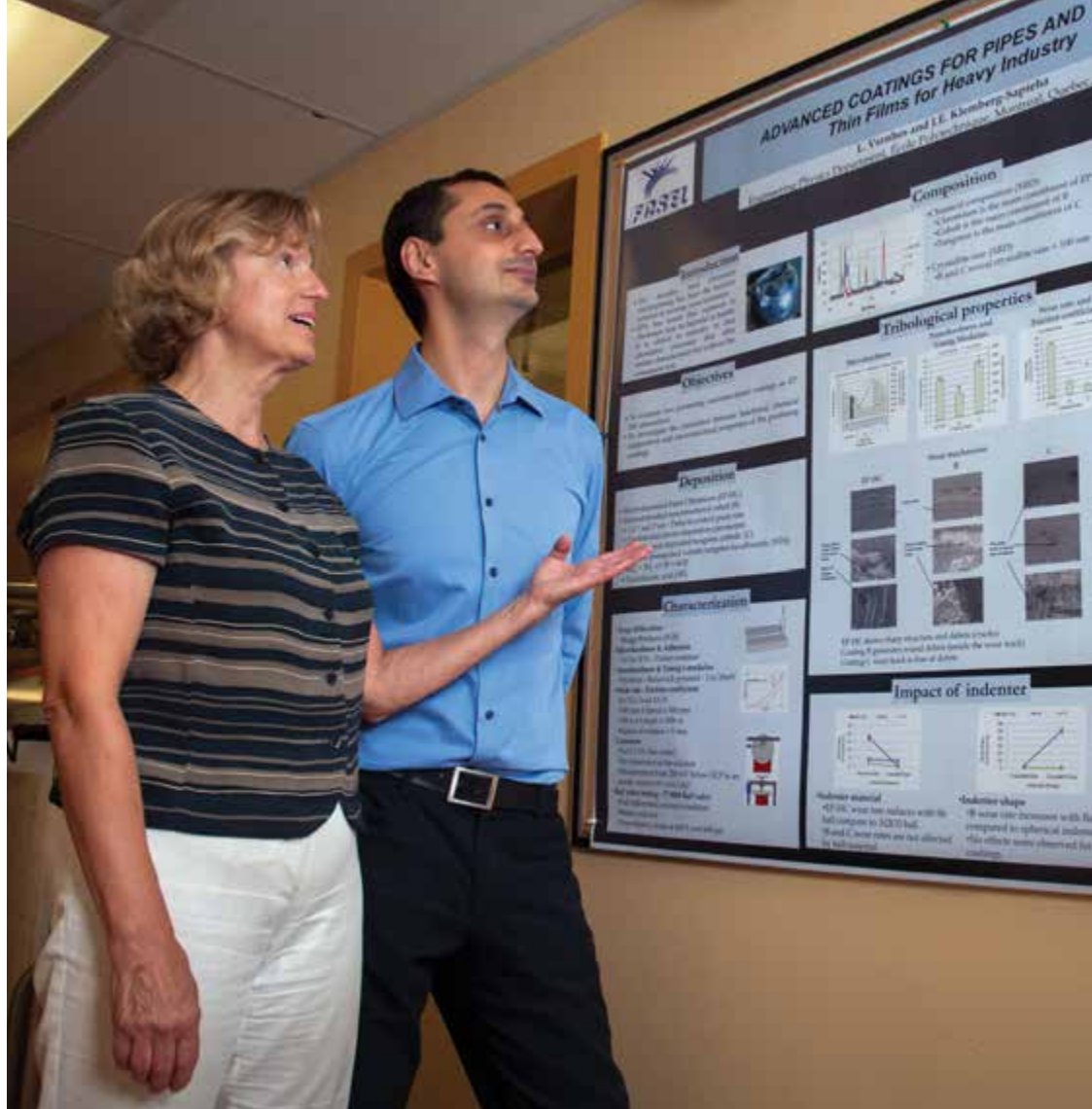
At École Polytechnique, besides Ludvik (Chairholder) and Jolanta (Principal Chair Collaborator), the primary contact person and project manager will be Étienne Bousser (currently completing his Ph.D. thesis), in charge of the three current protective coating projects.

“Ludvik and Jolanta have worked with Velan for well over a decade on various projects, most recently how HVOF Cr³C²-NiCr ages at high temperatures,” says Luc. “But this connection goes even deeper and other projects have also been explored.”

“Like A.K. Velan, Ludvik is originally from Czechoslovakia and has been involved in the Montreal Czech community for many years. Also, A.K. shares Ludvik’s great love of all things related to physics,” Luc says. For Ludvik, that passion stretches far back to his early days.

“There are many ways to contribute to progress; for me, physics and technology seemed to be well-suited to making a real impact,” he explains. Ludvik had a good reason to believe that way: His wife and his family were all engineers. This brought about a strong stimulation for Ludvik’s Bachelor’s, Master’s, and Ph.D. studies in applied physics at Charles University in Prague and later his joining the Engineering Physics Department of École Polytechnique in Montreal in 1988. To underline the research team’s multi-disciplinary nature, Jolanta, originally from Poland, completed her Bachelor and Master’s degrees in chemical engineering and Ph.D. degree in materials engineering at the Technical University of Lodz. She joined Polytechnique in 1978.

Ludvik says that: “What I’ve come to believe is that, from a university point of view, if you want to make an impact on the advancement of technology and the technology-driven society, you have to establish a healthy equilibrium between the basic and applied research and the industrial



Collaborating at work: Professor, Jolanta Klemberg-Sapieha and Luc Vernhes, Velan, discuss their research on hard chrome replacement.

collaboration. What I like most about what I’ve done in my field is that I’ve been able to work with young people: I could influence them and prepare them for their careers.”

As far as the specific field of surface engineering, it has played an essential role in most of his work.

“If you look around you, you realize that we interact with solid matter constantly, and all of that matter has surfaces. It is fascinating work to modify that surface and try to control it in a way that adds value to what is beneath it,” he says.

Going forward

The Research Chair Program is still too new to Velan for the company to have established its quantitative milestones for measuring

success. The company plans to meet with project manager Étienne every three months to review progress and plan the next steps on specific projects.

However, there is a second measurement of success that is already being felt.

“There is a momentum that builds from collaborating with the quality of people in the network that make up this Chair Program. That’s the intangible aspect of this research program. However, it’s also one of the most exciting aspects. It’s why, when you’re sitting in a room of experts, talking about problems and solutions, you suddenly have a light bulb go off and you say, ‘Oh yeah, that’s why I showed up in the first place,’” Gil says. **|VV|**



Bob Kelly

It's all about continuous process improvement

When Bob Kelly, Process Improvement Coordinator, talks about Total Process Improvement (TPI), he refers to the mantra: “The product must never stop.” What it means is that TPI creates a constant flow for a product, a flow that gets better and better with time.

A glimpse into Bob’s life shows that even before TPI became an acronym and Bob began implementing it at Velan, he was following the principle himself.

Always moving toward betterment

Bob explains that “The product must never stop” is a new way of looking at the world of manufacturing.

“In 1955, the high drivers of manufacturing costs were worker salaries and payments on machine tools,” he explains.

Often those two factors accounted for over half of all costs. As a result, managers back then lived by the mantra: “The machines

must never stop”—the most efficient shops were those that produced products in batch, Bob says.

Today, however, “touch labor can be as low as 10%–15% depending on the industry and facility, and overhead costs are a much bigger part of the cost equation,” he explains. So, too, is the cost of raw materials. As a result, inventory has become a major expense.

The new mantra: “The product must never stop” means that, instead of keeping the machines themselves running, “we need to get the materials ordered, run through the shop and invoiced as quickly as possible,” he explains.

To do that requires creating processes that continually get better instead of batches of product to be sold from shelves.

In other words, “The product must never stop” is the lean way of looking at things.

“We need to see work done not as separate functions, but as a series of flow that can be measured not by monthly reports, but in real time so that all workers have a view of the production flow. The main reason why ‘lean’ works is that this flow of production is easy to monitor and improve,” he explains. That means that quality becomes an exponential factor: the processes are always getting better.

How it applies to people

As with lean, career paths can also be a matter of constant improvement. Bob, who has worked for Velan for 29 years, came to his first position with the company after growing up in Detroit and holding many different jobs in the aerospace, tool and die, testing, and quality assurance industries.

“Detroit was a good place to learn skills,” he says, “but the bottom fell out in the early 1980s.” With unemployment at 25% in that city, his peers were leaving for states such as Texas, Arizona, or California where new opportunities abounded. But Bob had other plans.

“I am originally from Connecticut and my love for the natural beauty of the mountains of New England brought me back,” he explains. He settled in Vermont and after a short stint at odd jobs, he answered an ad for Velan.

The ad was for a machinist, but he was offered a job as a dimensional inspector—a position that involved measuring valve parts for the proper amount of precision to ensure that the valve assembly fit together and operated properly. Within a few years, he was promoted to Quality Control Manager. He took it upon himself, then, to join the American Society of Quality (ASQ), and his personal process of continual improvement started picking up speed. ASQ offers various levels of certification in different subject

The future... coming soon to a Velan plant near you

Management has a wealth of managerial accounting metrics at their disposal that can indicate the general health of an organization. Monthly reports, quarterly reports, and of course year-end data of all sorts exist to help managers analyze the current state of affairs and then make plans to continually improve their operations. The problem is that all of these reports are information that comes from the past, not the present. Some have likened the situation to driving a car by looking in the rear view mirror. You know where you were but not necessarily where you are, to say nothing about where you may be heading.

The goal of modern “Lean” management systems is to create a continuous flow of product all the way from order entry to invoicing. Once this flow is set up, there

are many visual management techniques available to be implemented that allow the workers in the flow to identify the rate of flow. As the flow becomes visible to all key parties, the workers tend to self-regulate the flow and the process reaches a point of stability that promotes consistency.

Velan is currently exploring the idea of implementing computerized systems that will allow everybody to view the actual flow of product in real-time on a computer screen. Instead of identifying and analyzing problems that occurred last month or last year, the management team will be able to solve problems that are occurring right now. Furthermore, all that time used to spend looking in the rear view mirror can then be used looking into better ways to run the operation in the future.



Four rules for continuous flow

1. Production must be viewed as a continuous flow from order entry to invoicing, and management must develop a system designed to maximize and monitor this flow.
2. The production flow must be monitored in real-time all along the stream of production. Everyone involved with hands-on production should have visual tools available that clearly demonstrate the status of the flow.
3. All activities within the flow must be made to operate at the same speed as the flow. Nothing or no one is so special that they may cause a delay in product delivery.
4. Everyone involved in the flow should fully understand the system and work on a daily basis to identify ways to continually improve the system.

“I have the privilege of working with some of the best-trained and highly motivated people around. Together we have cleaned up the shop, improved the air quality, made a safer workplace, improved the general efficiencies, and we are on our way to making Plant 3 a more efficient and competitive plant.”

—Bob Kelly

areas through a constantly updated document called the “Body of Knowledge” that goes as high as Six Sigma Black Belt certifications. His first certification was as a Quality Auditor and by the time he reached Certified Engineer, he was a natural fit to get into the Total Quality Management program that the company started under the leadership of Rana Bose in the early 90s.

That was around the time he also made another decision: He wanted to put his knowledge of valve manufacturing to use working for production.

“I felt I could have a greater impact on improving the quality of the product and its process if I was working in production,” so he applied for a transfer into production management. He helped the company begin the process of implementing BaaN, an enterprise resource management system. Bob helped redesign processes such as the company’s spare parts program to fit into that system.

By the time Velan was in the depths of implementing its TPI program, Bob was a natural fit for the job. In 2006, he also began the process of getting his Black Belt by attending an intensive training program (one week a month for four months) through Virginia Polytechnic Institute and State University (Virginia Tech). After receiving that level of certification, he began an online

program through Villanova and received his Master Black Belt in 2010.

Getting buy-in

According to Bob, in general terms, people tend to do what they feel is in their own best self-interest. “To get workers to cooperate at the highest levels, it is management’s responsibility to align the interests of the workers with the interests of the company. To do this we need clear, concise communication from the president down to the newest entry-level employee,” he explains. “When employees feel that the company promotes their best interests they will tend to reciprocate and promote the best interests of the company. At the plant level, when workers see positive results, they begin to see that the actions of

management match the words of management. Then employees are more likely to share the relevant information that management needs if it is to become more efficient and so compete better in the global marketplace.” Bob adds that “this feeling is rooted in universal human psychology.”

In 2009, Bob traveled to the United Kingdom and to Portugal to help develop the lean transformation plans for these European plants. “I found that the people there were knowledgeable and highly motivated to improve the efficiency of the operations. They realized that management was spear-heading the initiative and investing in the future of these plants, which promoted buy-in from the employees to the proposed changes. Without management



The great outdoors

When you ask Bob Kelly what his interests outside Velan are, he says simply: being outside. He moved to Vermont because he loves the great outdoors and the mountainous regions and he takes full advantage of what’s there.

“My wife, Maxine, and I snowboard, snowshoe, garden, and hike with the dogs. We have ski hills, trails, rivers, waterfalls, all sorts of beautiful scenery around us,” he says. His wife is a Canadian citizen, born in Montreal, who speaks fluent French, so the couple frequently visits that region as well.

However, he finds it hard to leave his home state behind. “Coming from Detroit, I find that Vermont truly is a paradise and the more time I can spend outside in paradise the better,” Bob says.



From left: Velan's General Manager of Plant 5, Pierre Lamarre; COO, Stephen Cherlet; and Bob Kelly.

support, everything would have been more difficult and we would never have achieved the same results.

“Another example of radical change exists in our Vermont plant, where we modified the production process of our 3” and 4” pressure seal valves from a multi-operational process to a ‘one-operation process’ going from five separate operations to what will be one single line (once an inert gas furnace for post-weld heat-treat is put in place).”

Such a “one and done” operation, as Bob puts it, cuts the actual machine time in half and allows the use of visual management tools (VMT). These visual aids can be as simple as lines painted on the floor indicating

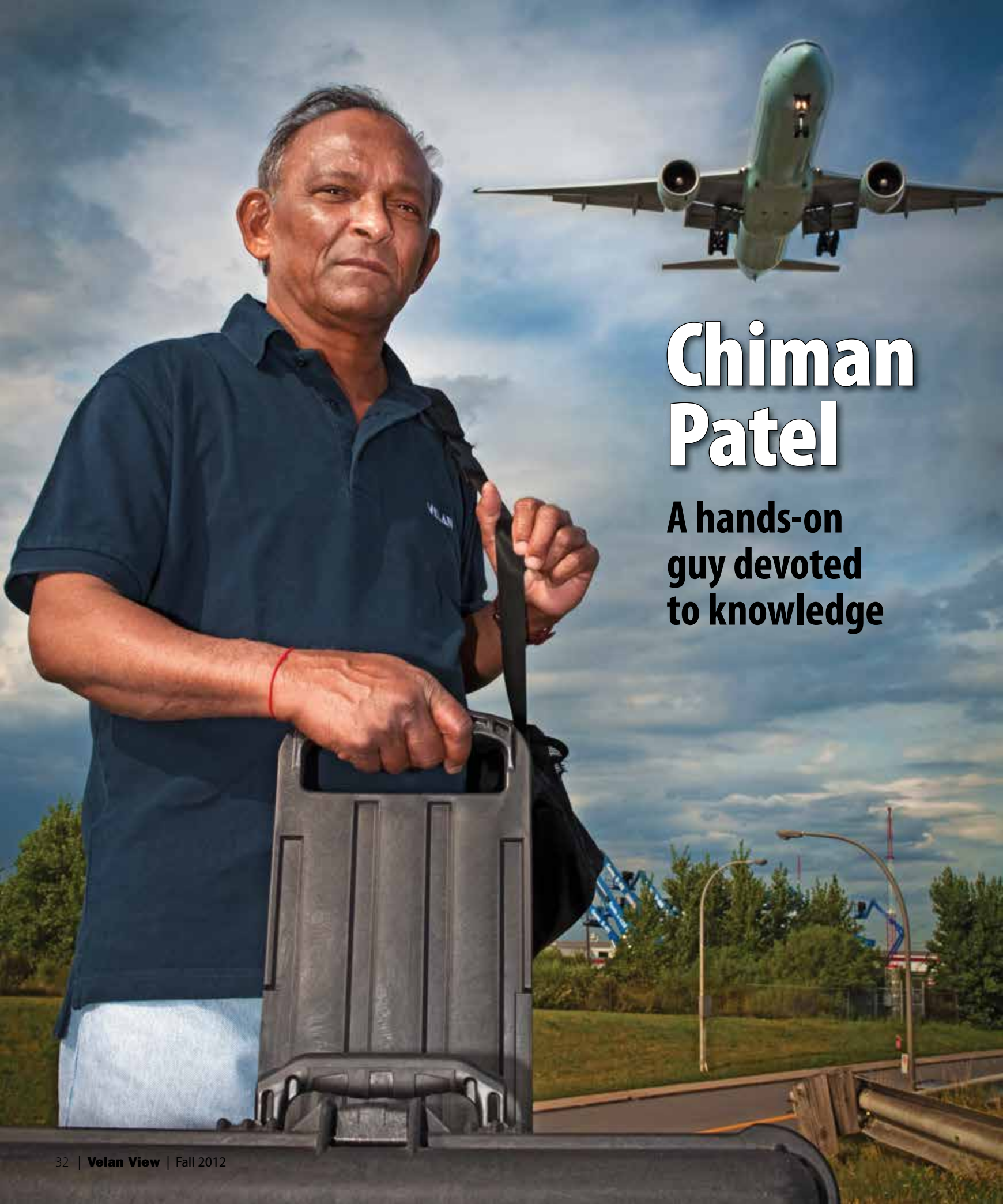
where the valve bodies awaiting the next step in the process should lay on the floor. Three spaces outlined in green indicate that up to three bodies can remain in the buffer area. The next space, outlined in red, can indicate that it’s time to move workers to the operation to help get rid of the back up. VMT could also include computer displays indicating the production status in detail. “As a result, the line can pull raw forging from stock in the morning and can assemble and test the finished valve much more quickly,” Bob attests.

To get the buy-in needed to reach the goals set, “we operate in a team environment where no one walks around with feathers in

their caps,” he says. He says he is particularly proud of helping to create that team effort.

“I have the privilege of working with some of the best-trained and highly motivated people around,” Bob says.

“Together we have cleaned up the shop, improved the air quality, made a safer workplace, improved the general efficiencies, and we are on our way to making Plant 3 a more efficient and competitive plant,” he concludes. **[VV]**



Chiman Patel

**A hands-on
guy devoted
to knowledge**

Chiman Patel, Field Engineering Service Technician, has a philosophy that sums up where he's been in life, how far he's come, and what he'd tell other professionals seeking to make that climb.

Just like with life itself, my work is a constant learning process whether that's on the road or in my daily association with various Velan departments such as engineering, production, sales, or the manufacturing facilities themselves," he says.

Chiman has a passion for that learning, and it comes through loud and clear when he talks about his extensive travels, his sensitive dealings with clients while on the road, and his long career—15 years and counting with Velan alone.

A practical education

Chiman was born in the small village of Bodali, India, and educated in Mumbai. His extensive knowledge of engineering and how things work began as far back as high school where he studied electronics and mechanical technology "as well as practical studies such as electrical wiring, carpentry, and trades in machine and smith shops," he explains.

Upon graduating, Chiman also attended a technical college in Mumbai (R.A.E. Technical College) and his travels began almost immediately with his first job: He went to Kuwait to work for a boiler construction company. He worked for Babcock and Wilcox for awhile, then came to Montreal in 1972 to work for a small company for about a year. He then joined giant industrial supply company Sulzer Pumps, then an engineering company called Lefebvre.

From the very first, his jobs have involved on-site work, everything from inspections and testing of equipment for Sulzer to inspecting spinning blocks for textiles

and radiography scanners for hospitals for Lefebvre. His career at Velan, which began in 1997, has continued along that path. He spends most of his time in the field working side-by-side with end-user facility personnel. This kind of work is something that Chiman believes would benefit most of today's up and coming engineers and mechanical experts, even those who are stuck behind a desk.

"At times I feel that professionals today could benefit from time performing hands-on work to gain valuable practical experience," he says.

He gets a chance to provide some hands-on experience for others as he travels around the world and trains customers, service shops, and field engineers on Velan products.

"I have realized that an engineering degree alone does not always provide solutions. It also helps greatly if you have detailed knowledge of how something works and lots

"Just like with life itself, my work is a constant learning process whether that's on the road or in my daily association with various Velan departments such as engineering, production, sales, or the manufacturing facilities themselves."

—Chiman Patel

of experience in getting it to work properly. This kind of 'street cred' knowledge can often help greatly when we find ourselves faced with a technical or procedural challenge in the field," he says.

Those challenges and the solutions he helps bring about, however, are the very reason he loves his job.



Chiman provides instruction to a group of Velan Service Shop employees from South America and the United States during this year's Velan Field Engineering Service Training Session.

“What keeps me going is the smile on a customer’s face at the end of a day after a job has been well done. I strive for this on a regular basis in keeping with Velan’s motto of commitment to quality.”

—Chiman Patel

“What keeps me going is the smile on a customer’s face at the end of a day after a job has been well done. I strive for this on a regular basis in keeping with Velan’s motto of commitment to quality,” he says.

Satisfied customers

As a field technician, Chiman gets plenty of chances to see those smiles. For example, he recently was working with Velan Valve India on a coker project in that country when he was suddenly called to an urgent crisis from an Indian oil company.

“They asked us to go immediately to Baroda to help with a situation where a valve was stuck in the open position and would not close,” he explains.

The team dropped everything and, even though there were no spare parts available at the refinery to help with the crisis, began to work on the problem.

“We disassembled, cleaned, refurbished, then reassembled the valve using existing parts, then installed the valve and were able

to bring the refinery back online,” he said. Then he used the event to stress to company personnel the importance of always stocking spare parts.

“This was an example of some quick thinking, common sense, and knowledge of the product,” he says.

It was also an example of another skill that someone with Chiman’s profession must have: diplomacy.

“There is always a diplomatic way to express and explain a mistake, whether it has been by a customer, by Velan, or by me.

I take my time and think a situation through thoroughly before I respond because I have learned that customers are always right even when they have done something wrong. After all, a satisfied customer is a repeat



Chiman performing measurement testing on the seat that will be installed within a metal-seated ball valve.



Happy family man: Chimam at home (front left) with his grandson, Rishi, next to him, and wife Kamla holding their granddaughter, Aisha. Behind them stands his daughter-in-law Shobha with her husband Devang (Chimam's son) and Chimam's daughter, Bhavisha.

“When I am here at home, I spend as much quality time as possible with my family. We do many activities together that allow us to talk and stay connected.”

—Chimam Patel

customer and that’s our eventual goal,” he says.

Thinking it through is also a Chimam trait.

“One thing I’ve learned is that you have to be resourceful in life, keep a low profile, and, at times, use common sense. You have to study the situation very carefully, especially if a problem could originate from a manufacturing defect or the issue may be the customer’s fault. It is like having two masters: You have to take care not to insult the customer and not to shed a negative light on your own employer,” he says.

He tells the story of a second case, which was also at a refinery in India where a ball valve was jammed.

“By being open minded about the situation, by listening to the customer and analyzing and understanding the situation while not panicking, the problem was resolved,” he said. The solution in this case was to inject diesel into the valve.

“When a valve will not operate, there is often an obstruction in the body and through experience, I have learned that

diesel can relax solid coke buildup in the valve cavity. Relaxing the torque on the fasteners can remove the tension on the ball. My recommendation was to wrap heating jackets around the body, which expanded it and created more room for the internal components, thus allowing the ball to open and close,” he explains.

A world traveler

Chimam has traveled to every continent in the world except Antarctica and his travels are also part of who he is.

“Traveling has not only increased and improved my skills for my profession, it has also expanded my knowledge of different people and cultures,” he says.

Although he often doesn’t have much time in a location, he tries to put aside hours after the work day to see the sites of an area.

“I also do a bit of shopping, particularly for my grandson, who always asks me if I brought anything back for him,” Chimam says.

When he’s in countries that are a little less comfortable because of political tension,

he stays closer to the hotel and tries to participate in indoor activities, preferring to use the in-house gym and dining facilities.

Countries that stand out in his mind include: New Zealand, Australia, the Netherlands, and Spain, and he loves traveling by train because it allows a closer look at the surrounding countryside.

“These countries have beautiful scenery with mountainous areas to explore. The cities are diverse with lots to see and many, many different cultures,” he says.

He also readily admits, however, that there is a downfall to being on the road.

“Being away from family and loved ones is not easy especially when I travel on a weekend,” he says.

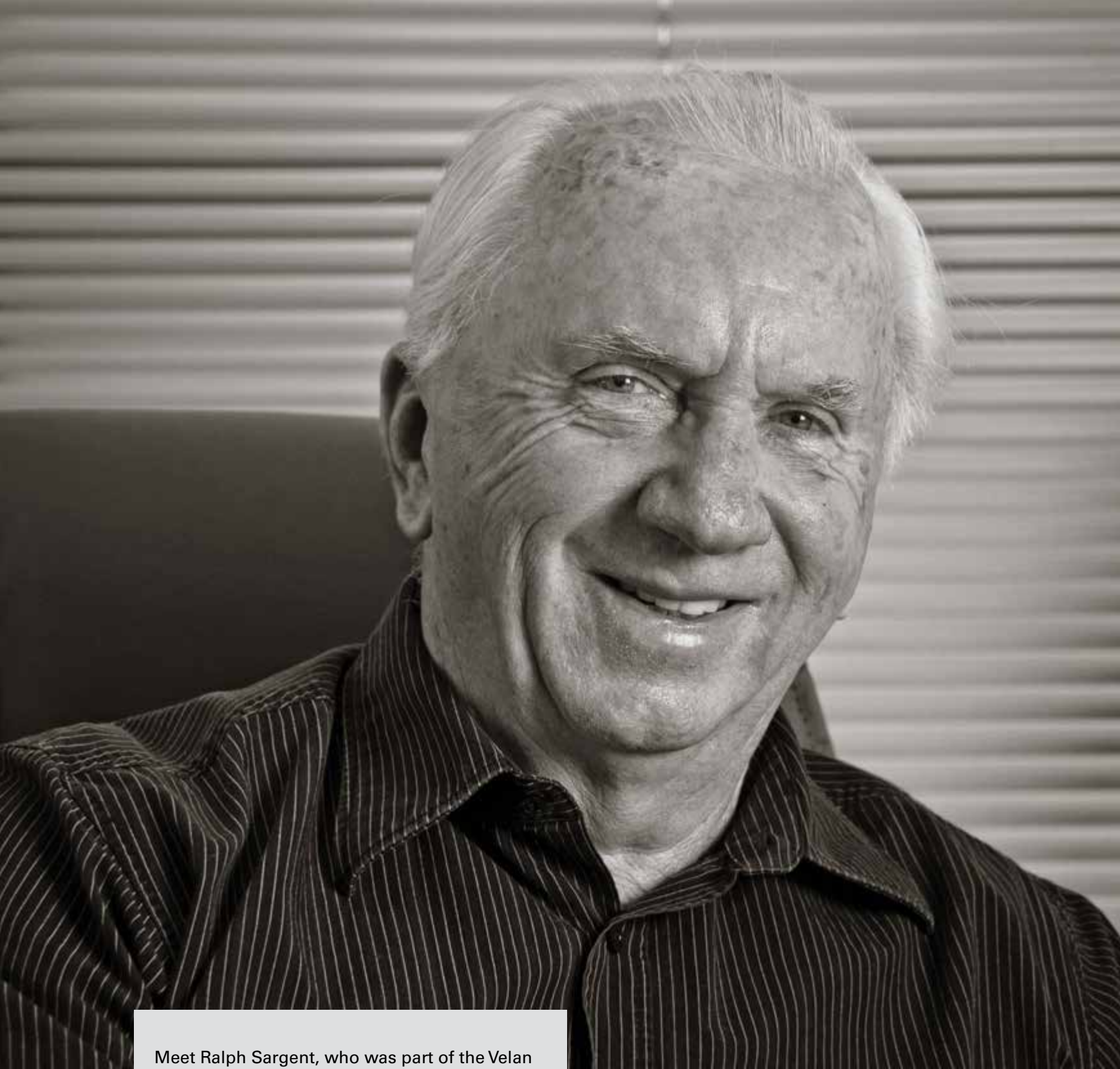
He compensates by keeping in touch daily to check in and check up on their well being and by making his hours with family count.

“When I am here at home, I spend as much quality time as possible with my family. We do many activities together that allow us to talk and stay connected,” he says. He loves barbecues and he loves most things connected with the Indian culture, including Indian movies and music.

“That’s why when you pass my office you will hear me singing songs from my homeland India,” he says.

And he believes the travel is worth the price because he loves what he does.

“My philosophy is that to achieve something in life one has to sacrifice something. I’m very lucky that I have no major health issues—I don’t get jet lag or have sleeping problems. And I am especially blessed that my family understands,” he concludes. **[VV]**



Meet Ralph Sargent, who was part of the Velan international sales team for over 46 years. During his years on the job, Ralph estimates he's traveled around the globe more than 80 times and personally brought in literally thousands of important valve orders.

What you might not know about Ralph is that he's an avid fisherman. So next time you see him, ask him about the one that got away...

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