

A.K. Velan: 1918-2017

An industry legend's legacy lives on



VP Customer Service Rob Velan, VP IT and Strategic Planning Shane Velan, VP Marketing Dan Velan, and President and CEO Yves Leduc.

Founded in 1950, Velan is a world leader in the design and production of cast and forged steel gate, globe, check, ball, triple-offset butterfly, engineered severe service valves, and steam traps offering superior performance across all major industrial applications.

While its founder A.K. Velan passed away on September 29th, 2017, just shy of his 100th birthday, the family influence remains strong. Today, three of A.K.'s grandchildren, Rob, Shane, and Dan Velan, are integral parts of the company, working closely with President and CEO Yves Leduc.

By Sarah Bradley, Editor

Ask anyone who knew A.K. Velan and they'll tell you he was a larger-than-life character. After all, we're talking about a man who was still doing push-ups in his eighties and continued to come into the office until the age of 96. He will be remembered as an entrepreneur, philanthropist, and loving patriarch of the Velan family whose inimitable leadership of the company spanned more than six decades.

Born on February 8, 1918, to a Czech father and a Polish mother, A.K. grew up in Zywiec, Poland, later moving to Brno, Czechoslovakia. In 1948, he and his young family left then-communist Czechoslovakia and sought freedom in Canada. In 1950, A.K. founded Velan Engineering Ltd. in his new hometown of Montreal. Soon thereafter he patented a revolutionary bimetallic steam trap, the first of his many successful patents.

Conceived in Czechoslovakia, designed and produced as a prototype in Switzerland, and first tested and manufactured on a shoestring budget in Canada, the steam trap helped Velan gain the market traction needed to expand its product line into valves, the vast majority of its current sales.

Thinking big

A.K. dreamt big when it came to his goals for the young company. Always a global visionary, he hit the ground running with typical energy and brio, establishing the company's first overseas manufacturing plant in 1954. As early as 1956, he travelled around the world, building a network of international distributors.

No matter what the challenge was, A.K. rarely shied away. Even if it was a completely new product to design and build or



1970s: A.K. Velan shown next to forged bolted bonnet valves in assembly.

a new industry to embrace, he would go after any new project that came his way. Back in the 1950s for example, an inquiry came in from a nuclear pilot plant for bellows seal valves. At the time this was a new term for A.K. and he had to look in a Czech/English dictionary for the word "bellows." Once the meaning was clarified, he jumped at the opportunity to design something new to him, and it worked: In 1958, Velan supplied 8,500 bellows seal valves to the Oak Ridge National Lab's research reactor in Tennessee. This pioneering spirit in the nuclear industry continues today as Velan is currently supplying valves for two pilot plants in China: the Hualong One (ACP1000) technology being built at FuQing, and the new High-Temperature Reactor (C-HTR) being built in Shidaowan, China. Velan is also a valve supplier to the

ITER Generation 5 nuclear fusion reactor prototype being built in France.

Equal parts entrepreneur, inventor, and salesman, in the 1950s A.K. convinced Newport News Shipbuilding, which was then the largest privately owned shipyard in the U.S., to have his new steam traps tested in the U.S. Navy labs, a process that took over a year. After the steam traps were qualified and supplied to the Navy in the 60s, Velan performed qualification tests on forged pressure seal parallel slide valves for the nuclear shipbuilding program.

This early entry into the nuclear navy program led to a very strong relationship with Newport News Shipbuilding. In the 2000s, Velan developed valves for the new Gerald Ford Class Nuclear Aircraft Carriers, including titanium triple-offset butterfly



1960s Velan designed tested the 5'-16" (125-400 mm) forged parallel slide gate valves for the USS Nimitz Aircraft Carrier, which was the first of nine nuclear-powered Nimitz Class Aircraft Carriers to be built.



Today, Velan valves still report for duty on board the next-generation aircraft carriers, such as the USS Gerald R. Ford-class shown above. (Illustration credit: Northrop Grumman Newport News.)

Ongoing innovation: Velan's Securaseal R-series cast metal-seated ball valve in-service

Recently launched at the Valve World Expo in Houston, Texas, Velan's new R-series cast product line leverages the company's extensive severe service technology in an optimized package suitable for most processes with fluid slurries and high temperatures. Yves Leduc, Velan's President and CEO, says, "Velan has a great history of innovation in metal-seated ball valves, but a lot of that innovation has happened on a project-to-project basis. The R-series is the result of an extensive research and development program built to optimize Velan's technology into a product that addresses the most common requirements—both from an application and commercial point of view."

The R-series cast is designed to meet process industry standards, including API 608, and stringent customer specifications. The new cast product line is available in all sizes and standard trims up to ASME Class 600 and is also offered on an engineered-to-order basis up to ASME Class 2500 and sizes 36" (900 mm) sizes. The Securaseal R-series offers unique features that make it simpler for customers to select, install, and maintain, including:

- High-integrity sealing with fixed downstream seating technology that prevents any unwarranted movements.
- Low emissions with full-size live-loaded API 641 and ISO 15848-1-compliant packing.
- Field-replaceable components providing greater flexibility for potential maintenance.
- Optional easy-to-automate mounting pad with severe service drive-train.

This product line has been carefully engineered and tested, both in Velan's own labs and in the field. "Our new platform for metal-seated ball valves has been engineered for weight and torque competitiveness, while ensuring components will perform over an extended service life," says Dan Velan, Vice President, Marketing.

"Some of the work is difficult to see, but ultimately we've made many optimizations based on our own field experience and the latest standards, resulting in a valve that meets Velan's high severe service standards, at a competitive price. In addition, this product comes with a vast material and coating selection that can be tailored to tough operating conditions such as high-pressure oxygen service, slurry-carrier applications, and high-pressure steam," he adds. Velan has over 30 years of engineering experience in metal-seated ball valves and has proven expertise in solving tough application challenges with high-performance valves. Velan valves are used extensively in applications ranging from delayed coking to hydroprocessing to hydrometallurgy. Over the past five years, Velan has brought to market over one thousand new designs.



20" (500 mm) Class 300 Securaseal R-series cast valve in service

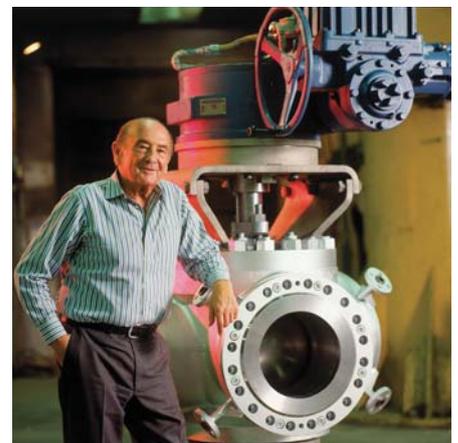
valves, titanium gate valves, Inconel metal-seated ball valves, and a forged version of the 140 Series SNVY globe valves. Velan currently has orders for the John F. Kennedy aircraft carrier. Velan also became the supplier of the 140 Series SNVY globe valves to Electric Boat for the Virginia Class Submarine Program. It's this combination of entrepreneurial spirit and long-term relationship building that has seen Velan grow into a company of almost 2,000 people (comprising over 70 different ethnicities!), manufacturing valves in nine countries on three continents.

A family man creates a family-spirited company

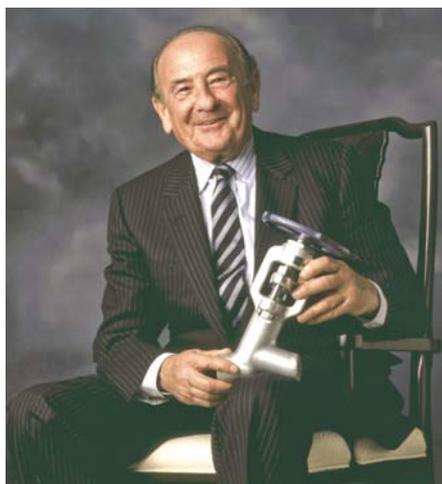
A.K. was always a devoted family man: The family that immigrated to Canada grew to three sons, twelve grandchildren, and fifteen great-grandchildren. He liked to laugh, tell jokes and stories, and have fun together with his children and grandchildren. He also brought these qualities into work, where no meeting was considered a complete success without at least one moment of him making everyone laugh. "My father cast a big shadow, and his vision and values have spread throughout the company," Tom explains. "Over time, they have become the very foundation of Velan.

"My father taught me so much about the industry and about life in general. My own background in international sales and management of our overseas subsidiaries helped me to lead the further growth of our global presence and to reach a peak sales of \$501 million US dollars in fiscal 2013," he adds.

Though now officially retired after 44 years with the company, the last 14 years as its leader, Tom continues to serve as Chairman



In 1998, A.K. Velan stands next to a Velan 4-way switch valve used in delayed coker ball valve applications. Velan supplies valves to over 170 delayed cokers worldwide.



1991: This photo was taken of A.K. Velan by the Department of International Trade. Velan was one of 15 companies who received the Canada Export Award for its ability to successfully export products and services worldwide.

of the Board. Yves Leduc, first non-family member to serve as President, says, "I have been proud and privileged to succeed Tom as our company's President and CEO, and I continue to rely on his invaluable counseling and the support of both the Board and the Velan family. I am very motivated to work with all our employees and the management team, including three third-generation Velans—Rob, Shane, and Dan—to achieve our ambitious goals."

Innovation in the blood

When it came to product development, Vahe Najarian, Corporate Manager, Research and Development, says, "A.K. was exceptional. He made me feel that no challenge was too big, nothing was impossible. He just rolled up his sleeves and jumped in. It goes without saying—he was the leader. Not because of his position, but because of his spirit. I truly felt he could lead us through anything: We could do anything," he adds.

Take the 1984 design of Velan's resilient-seated ball valve with its patented Memo-ryseal seats. With this innovation, A.K. expanded the company's reach, bringing a company known for gate, globe, and check valves into quarter-turn valves. Over the years, the ball valve product line would expand into metal-seated ball valves for severe services.

Yves mentions a time when a customer told him of an encounter with A.K. This customer had suggested that Velan's valves were over-designed. "A very angry A.K. proceeded to talk for 30 minutes about how no other manufacturer packed a valve like Velan, how every weld was a piece of art, and how the combination of science and craftsmanship was unparalleled anywhere in the world. So the

customer couldn't resist any longer and placed the order," Yves adds with a smile.

Leaving behind a legacy

Tom says, "A.K. was always enthusiastic and passionate about our company and products and that rubbed off on a lot of people: I believe it's one reason why we have so many loyal employees around the world."

As Yves explains, "This company is built on A.K.'s exceptional heritage, outstanding capabilities and pride. Even in challenging and turbulent markets, companies like ours have an advantage over others because our foundation is strong. We also have a healthy balance sheet because A.K. was allergic to debt!" he adds.

The last time Yves met with A.K. was at his home. "At the end of our meeting, which I will always remember, he said: 'I often think of the company, and tell myself I could have done more.' It was expressed almost like a regret. I was so moved by what he said that I don't clearly remember what I told him in response. What I hope I told him is what I viscerally believe today: You have done amazing things, but now it's up to all of us to continue what you and your sons, and those you inspired, built together."

In his own words: Yves Leduc, President and CEO

When I began my relationship with the Velan family back in 2014, I was immediately fascinated by the many stories that earmarked the company's history. Velan was like a big adventure that started almost 70 years ago. As you can guess, many of these stories featured A.K. prominently. In my first months as President, I quickly realized that Velan's reputation is one of the strongest in the industry. I talk to customers as often as possible and when I ask what Velan means to them, the answer almost always goes like this: "Velan is the leader. You have the best product, the best quality, the best engineering, the lowest total cost of ownership...." Then they usually share an anecdote involving A.K. or his sons.

A.K.'s passion was brought to life for me thanks to the many employees, customers, agents, and suppliers who are so proud to have known him. After he passed away, I told Tom that even though I'd not met him often, I felt like an important piece of my life had gone, as I have come to know him in my own particular way through so many accounts of his beliefs, achievements, and actions.

Last year, our company crystallized the set of values upon which it rests. Those values are: Integrity, Quality, Innovation, Customer first, and Family spirit. I could easily trace back these values to things I've heard about A.K., things that are part of the company's collective memory. For example:

"I owe it to A.K. that my children are so happy and successful, because he trusted me and gave me a job when I had arrived in Canada as an immigrant."

"Every meeting was about the product. He would argue with engineers for hours and in the end, as he said, quality came first and thwarted every other argument. These meetings were moments of truth."

"The first thing that hit me was his passion for the company and the true quality of the valves. It was contagious, and I immediately wanted to be associated with him."

"A.K. treated his employees like they were part of his family. He was not only a great leader, he was a humanist. He was one of a kind."

It's my immense privilege to lead a company with such heritage, capabilities, and pride. I often say that no company has an absolute right to exist. We need to constantly claim our *raison d'être* by earning our customers' business. We can't rest on our laurels. We need to carry A.K.'s legacy forward each and every day.



2016: Wolfgang Maar, Yves Leduc, and Tom Velan visit the Reliance project in India.