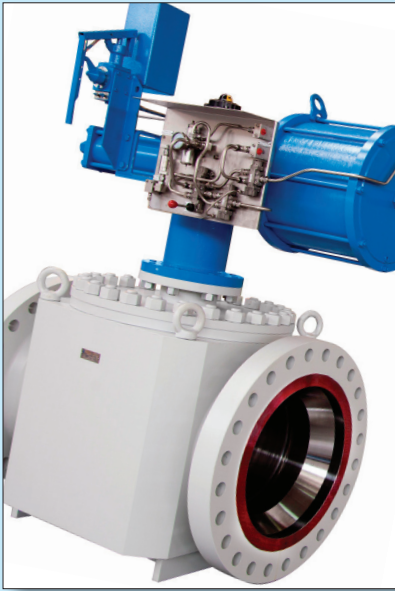


A World-Leading Valve Product Range



VELAN

Quality that lasts.

Velan at a glance

History

- Founded in 1950

People

- Over 1,200 employees

Product line

A world-leading range of valves across all major industrial applications:

- High pressure gate, globe, and check
- API standard gate, globe, and check
- Metal-seated and resilient-seated ball
- Triple offset and dual plate check
- API 6D & 6A

Including: actuators and steam traps

Quality

Velan holds major applicable approvals:

- ASME N/NPT (since 1970)
- ISO 9001 (since 1991)
- ISO 14001
- ISO 45001
- PED
- IEC 61508 SIL 3 Capable
- API 6A and 6D
- ATEX

Comprehensive quality programs are fully compliant with the most stringent industry standards such as: ISO-9001, ASME NCA 4000, ASME NQA-1, and 10 CFR 50 Appendix B.

Velan has been surveyed and audited by leading organizations around the world such as Bureau Veritas, API, ASME, NUPIC, DCMA, and shipbuilding companies.

Total Process Improvement Program, including Lean manufacturing and Six Sigma.

Headquartered in Montreal, Velan has several international subsidiaries.

For general inquiries:

Velan Head office:
7007 Côte de Liesse,
Montreal, QC H4T 1G2 Canada

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velan.com

A world leader in valve design, engineering solutions, and manufacturing



A large Torqseal™ triple offset valve used for crude oil service in the Dalian Seaport (China).

Leading the way

Velan is one of the world's leading manufacturers of industrial steel valves, recognized as a standard-bearer in quality and innovation. The company was founded by acclaimed inventor and entrepreneur A.K. Velan in 1950, and continues to leverage advanced engineering capabilities and innovation to create high-performance valves that meet critical industrial needs in a diverse range of applications.

Today, Velan's extensive range of valves, steam traps, control systems, and actuators are installed throughout the world, handling diverse applications in cogeneration, fossil, nuclear power, oil and gas, refining and petrochemicals, chemicals and pharmaceutical, pulp and paper, LNG and cryogenics, marine, mining, water and wastewater, and HVAC industries.

Engineered solutions

Velan's Engineering Group has vast experience, sophisticated software, and testing tools that enable us to find solutions to any customer challenge.

Whether it is for valves to handle liquid helium at -458°F (-272°C) in the world's largest particle accelerator at CERN, Geneva; four-way switch coker ball valves to handle one of the refining industry's toughest services; or valves for main steam isolation service in an operating nuclear power plant, Velan has been selected by most of the world's leading engineering construction firms and industrial end users.

A long-standing commitment to quality has kept Velan at the forefront of industry standards. Velan holds all major industry certifications, including ASME Section III, ISO 9001:2008, PED, and API 6A and API 6D. Many prominent companies have established partnerships or global supply agreements with Velan.

A commitment to quality

Our Integrated Management system is based on a continuous improvement of our processes in terms of organization, Environment & Sustainability, and Health & Safety. To offer products and service that exceed customer expectations.

All Velan valves are designed and manufactured with an emphasis on low emissions, safety, simple maintenance, ease of operation—and above all—long, and reliable service life. In fact, several years ago when a leading North American repair shop did an analysis on the reliability and reparability of commodity valves, Velan finished first. Whether we are manufacturing commodity valves or specialty valves, we deliver excellent long-term value to our customers.

Manufacturing capabilities

Velan uses the latest automation technology, including CNC machines and many special-purpose transfer machines, enhanced by proprietary production techniques. Thanks to a wide range of equipment, we can efficiently handle highly customized orders as well as large production runs.

Velan employs over 1,200 professionals, the majority of whom are located in North America. International production centers are complemented by a global sales and distribution network, offering personal customer service and quick access to stock worldwide.

After sales service support

Velan aftermarket services offer customers with in-line service and maintenance on all our valve products. Our team of engineers and technicians is equipped with the most sophisticated tools available on the market and have over 75 years of valve service experience across a wide range of industries.

Velan is a true global manufacturing force

Head office



Montreal, Canada
Velan Inc.

Global service with strong local presence

Velan is a true global manufacturing leader. What's more, our global presence goes far beyond our manufacturing facilities. Velan's wide range of valves are sold through an extensive network of distribution companies worldwide, guaranteeing that one of our Velan representatives is always nearby and ready to help.

Our distributors are further supported by our North American and European distribution centers. Velan's large inventories and premier sales network have helped us become a leader in supplying maintenance, repair, and overhaul (MRO) contracts to many of the world's largest industrial companies.

- 11 production facilities
- 3 plants in North America
- 2 plants in Europe
- 1 plant in Middle East
- 5 plants in Asia
- 2 stocking and distribution centers
- Hundreds of distributors worldwide
- Service shops worldwide

Manufacturing plants

North America



Montreal, Canada
Velan Inc. **ASME N-stamp**



Granby, Canada
Velan Inc.



Williston, VT, U.S.A. **ASME N-stamp**
Velan Valve United States Opco, Inc.

Europe



Lisbon, Portugal
Velan Válvulas Industriais, Lda.



Lucca, Italy
Velan ABV S.r.l.

Middle East



Dammam, Saudi Arabia
Velan Gulf Manufacturing Company

Asia



Ansan City, South Korea
Velan Ltd., Plant 1



Ansan City, South Korea
Velan Ltd., Plant 2



Taichung, Taiwan
Velan Valvac Mfg. Co., Ltd.

Distribution centers

North America



Missouri City, TX, U.S.A.
Velan Valve United States Opco, Inc.

Europe



Willich, Germany
Velan GmbH



Suzhou, China
Velan Valve (Suzhou) Co., Ltd.



Coimbatore, India
Velan Valves India Pvt. Ltd.

An extensive product line for all your industrial valve needs

A one-stop valve shop

Velan offers one of the most comprehensive valve product lines available from any manufacturer in sizes varying from NPS ¼– 80, with pressure ratings from vacuum to over 10,000 psi, temperature ratings of up to 1,500°F, and availability of many material and design options.

From the most common application to the most severe, Velan has a solution. Our products incorporate many unique design features for low fugitive emissions, simple in-line maintenance, and long service life.

Built to order

Our valves are available with a large selection of steel body materials, trims, options and accessories. With options such as bypasses and equalizers to special trims for HF acid or NACE service, Velan can provide valves built to your needs—often directly from our sales network’s extensive stock.

All Velan valves are available with actuation packages according to your needs. This includes electric, hydraulic, and pneumatic actuation with a complete range of controls and sensors.

Engineering expertise

Velan has brought together a strong team of professional engineers with extensive experience in critical applications. Using advanced software applications including Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), and 3D Solid-Modeling, Velan’s engineers design superior quality valves that meet the most demanding performance requirements.

Customer support

Velan’s engineering team has a long history of working with customers to solve their valve application problems. Our team of application engineers offer professional advice and expertise enabling them to select the best valve for any environment.

		Type												
		Angle	Ball, metal-seated	Ball, resilient-seated	Triple offset	Butterfly	Check, piston	Check, ball	Tilting disc	Check, swing	Check, dual-plate	No slam check	Control	Gate
Gate, globe, & check	Pressure seal and bolted bonnet													
	API 600, API 623, & API 594 cast steel ⁽¹⁾													
	API 603 stainless steel ⁽¹⁾													
	API 602 small forged ^{(1) (2)}													
	Bonnetless													
	Dual-plate check													
Quarter-turn	API 6D and 6A check and gate													
	Memoryseal® ball													
	Securaseal® metal-seated ball													
	API 6D and 6A ball													
	Coker ball													
	General purpose ball													
Special applications	Torqseal® triple offset													
	Bellows seal													
	Cryogenic													
	Cryogenic control													
	Control and choke													
	HIPPS, ESDV													
Subsea														
Steam traps														

(1) The API designation defines the product design basis even though not all the valves are covered in the referenced API specification. These valves are also used in non-API service.

Delivering value through performance

Low total cost of ownership

When you take into account all the factors involved in owning a valve—including installation, service, and maintenance—the total cost of ownership of a valve can be several times the initial purchase price.

Velan valves are designed and manufactured to save you money by lowering maintenance costs and fugitive emissions and increasing service life—and the chance that a valve can be repaired rather than replaced. We offer value unparalleled in the industry.

The performance of our valves has been proven over and over again in thousands of qualification tests, independent studies, and, most importantly, in working field conditions.

Valves qualified for API 624 and ISO-15848-1

Dual qualification of API 600, API 602, API 603, and API 623 valves to API 624 and ISO-15848-1 fugitive emission requirements

Low fugitive emission valves

API 602	API 600	API 603	API 623
<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat. 	<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat. 	<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat. 	<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat.

Valves dual qualified for API 641 and ISO-15848-1

Dual qualification of Torqseal® triple offset butterfly valves and Securaseal® and Memoryseal® ball valves to API 641 and ISO-15848-1 fugitive emission requirements

Low fugitive emissions valves

Torqseal® triple offset butterfly valve	Securaseal® metal-seated ball valve	Memoryseal® resilient-seated ball valve
<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat. 	<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat. 	<ul style="list-style-type: none"> • All gate valves are qualified with dual plate design, 100% inspection and 100% testing. • All gate valves have proven low fugitive emissions from the stem packing and seat.

To see our Product update for Velan valves that are dual qualified for API 641 and ISO-15848-1 go to our website and sign in as a My Velan member.

Velan valve product lines are backed by the most stringent fugitive emissions qualifications in the industry. With both graphite and PTFE packing options, dual qualified to API 624/641 and ISO-15848-1.

We also offer supplier-integrated engineering, value-added services, and all the other advantages you would expect from a world-class organization. Any way you look at it, Velan offers exceptional performance and value.

Size ranges				Pressure class							Temp.			Materials				Certifications						Industry									
NPS 1/4–2 (DN 8–50)				ASME class 150							Cryogenic			Carbon steel				PED						Power									
NPS 2–4 (DN 50–100)				ASME class 300							Low			Stainless steel				ASME N						Oil and gas upstream									
NPS 4–24 (DN 100–600)				ASME class 600							High			Alloy steel				TA LUT						Refining and petrochemical									
NPS 26 (DN 650) and up				ASME class 900										Nickel alloy steel				API 6A						Chemical									
				ASME class 1500														API 6D						Pulp and paper									
				ASME class 2500														Fire tested						LNG and cryogenic									
				ASME class 4500																				Marine and navy									
																								Mining									
																								HVAC									
																								Water and wastewater									

(2) Available in Class 800 in threaded and welded end connections.

• Inherently fire safe

Total quality commitment

Quality is our first priority

How does Velan design and manufacture valves that offer superior performance, reliability, and service life? We are committed to total quality in all we do. Since our company was founded, our entire philosophy has been focused on quality.

Our comprehensive Quality Assurance System is geared towards continuous improvement, process quality, and stringent compliance to worldwide standards including ASME N stamp and NPT, ISO 9001, ISO 14001, ISO 45001, PED, IEC 61508 SIL 3 Capable, API 6A & 6D, and ATEX.

Design

Velan’s Engineering Group performs FEA and qualification testing to validate designs. Velan has introduced many innovative technologies to the market, many of them simplifying maintenance and increasing service life. Keen attention to design detail and actual field feedback help us constantly improve our products and maximize performance.

Strategic procurement

Velan runs a strategic procurement program to help ensure final product quality. Velan’s Casting Quality Program brings together resident engineers at foundries, at-foundry statistical analysis programs, and pour simulation software, to help us achieve an extremely low shell-leakage rejection rate of less than 0.05%.

Automated production

Velan has long been a leader in automated production of world-class valves. Our network of CNC machines employing Tool Data Management software and rigorous semi-automated testing ensure our valves have the tightest tolerance and the greatest level of consistency and reliability.

Production testing

Every Velan valve is subjected to hydrostatic testing before leaving the factory to help ensure problems won’t arise in the field. Production tests are part of our strict QC Program, developed over many years as a leading supplier of nuclear valves.

Total quality commitment

Velan is totally committed to offering products and services that exceed customer expectations. All Velan valves are designed and manufactured with an emphasis on low emissions, safety, ease of maintenance and operation, reliability and long service life.

Gate, globe, and check valves



Large forged bolted bonnet valves with tight shutoff and leakproof design are ideal for the most demanding services

Sizes: NPS 2–24 (DN 50–600)
ASME classes: 150–1500

- One-piece forged bodies for superior strength and quality
- Available with spiral wound, stainless steel, or graphite gasket
- Machined body guides and a robust torque arm assembly
- Valve types
 - Gate: flexible wedge and parallel slide
 - Globe: y-pattern, needle, and stop
 - Check: piston, swing, stop, and tilting disc
- Designed to ASME B16.34
- Optional cast product offering
- Available in carbon, stainless, alloy (including F91), and nickel alloy steels
- Body and disc are CoCr alloy hardfaced on seat contact and disc guiding surfaces
- Available for catalytic reforming, NACE (sour gas) and nuclear services



Pressure seal gate, globe, and check valves for high pressure and high temperature services

Sizes: NPS 2–60 (DN 50–1500)
ASME classes: 150–4500

- One-piece forged bodies for superior strength and quality
- Live-loaded pressure seal bonnet bolting as a standard⁽¹⁾
- Spiral wound gasket, stainless steel with graphite filler
- Machined body guides and a robust torque arm assembly
- Valve types
 - Gate: flexible wedge and parallel slide
 - Globe: y-pattern, needle, and stop
 - Check: piston, swing, stop, and tilting disc
- Designed to ASME B16.34
- Optional cast product offering
- Available in carbon, stainless, alloy (including F91), and nickel alloy steels
- Body and disc are CoCr alloy hardfaced on seat contact and disc guiding surfaces
- Available for catalytic reforming, NACE (sour gas) and nuclear services



API 600 gate, API 623 globe, & API 594 swing check cast steel valves for a broad range of applications

Sizes: NPS 2–64 (DN 50–1600)
ASME classes: 150–1500

- World's largest manufacturer of cast steel gate, globe, and check valves
- Bubble-tight shut off of gate valves up to NPS 12 (DN 300)
- Valve types
 - Gate
 - Globe: needle and stop
 - Check: piston and swing
- Available in cast carbon, stainless, alloy, and nickel alloy steels
- Dual qualified to API 624 and ISO-15848-1⁽³⁾ and also available with bellows seal for zero emissions
- Available for block and bleed, cryogenic, HF acid, NACE (sour gas), and nuclear services



API 603⁽²⁾ corrosion-resistant stainless steel gate, globe, and swing check valves

Sizes: NPS ½–24 (DN 15–600)
ASME classes: 150–600

- Precision high quality investment castings
- Wall thickness to ASME B16.34
- Valve types
 - Gate
 - Globe: needle and stop
 - Check: stop and swing
- Available in cast stainless steel
- Integral seat design
- Option integral CoCr alloy seat face available for longer service life
- Dual qualified to API 624 and ISO-15848-1⁽³⁾
- Available for cryogenic and NACE (sour gas) services

⁽¹⁾ Applicable to certain sizes and pressure classes – contact factory for verification.

⁽²⁾ The API designation defines the product design basis even though not all the valves are covered in the referenced API specification. These valves are also used in non-API service.

⁽³⁾ Consult the product update for details (Document code: PU-API 624).

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Gate, globe, and check valves



Comprehensive range of small forged gate, globe, check, angle, and bellows seal valves

Sizes: NPS ¼ – 4 (DN 8 – 100)
ASME classes: 150 – 4500

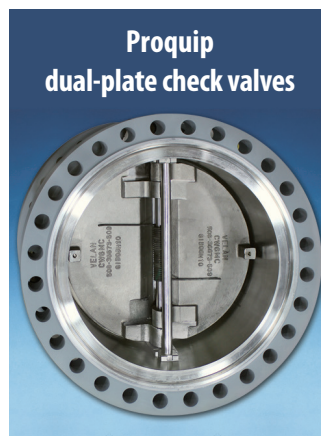
- Bolted and welded bonnet body styles
- Valve types
 - Gate
 - Globe: angle, needle, and stop
 - Check: ball, piston, and swing
- Available in forged carbon, stainless, alloy (including F91), and nickel alloy steels
- Dual qualified to API 624 and ISO-15848-1⁽³⁾ and also available with bellows seal for zero emissions
- Available for block and bleed, cryogenic, HF acid, NACE (sour gas), and nuclear services



Forged, one-piece high pressure y-pattern, oblique, vertical and angle valves

Sizes: NPS ¼ – 4 (DN 8 – 100)
ASME classes: 1690 – 4500

- One-piece forging with integral body-bonnet design
- Fully guided, non-spinning, CoCr alloy disc⁽¹⁾
- Non-rotating stem⁽¹⁾
- In-line repairable
- Valve types
 - Globe: needle and stop
 - Check: piston⁽²⁾
- Available in forged carbon steel, stainless, alloy (including F91 and F92), and nickel alloy steels⁽¹⁾
- Available with bellows seal⁽¹⁾
- Available for nuclear⁽¹⁾ and NACE (sour gas) services



Retainerless dual-plate check valves for a broad range of applications

Sizes: NPS 2 – 60 (DN 50 – 1500)
ASME classes: 150 – 2500
API 6A classes: 2000 – 5000

- Lightweight and compact-size
- Retainerless design means zero fugitive emissions
- Self-seating feature extends valve life
- End body styles: Wafer, lug, double flange, hub-end, and butt-weld
- Available in carbon, low-temperature carbon, stainless, low-alloy, nickel alloy, titanium, nickel-alum-bronze, and carbon with Inconel 625 cladding
- Seating surfaces offered as metal-to-metal and soft seat
- Also available for cryogenic and NACE (sour gas) services



API 6D and 6A axial flow and swing check, through conduit slab, and double expanding gate valves

Sizes: NPS 2 – 60 (DN 50 – 1500)
ASME classes: 150 – 2500
API 6A classes: 2000 – 15000

- **Axial flow check valve**
Non-slam type, spring assisted, metal-seated, internal venturi pattern, very fast response prevents water hammer, pump protection
- **Swing check valve**⁽⁴⁾
Non return valve, metal-seated, swing arm operable by a manual override for pipeline pigging operations
- **Through conduit gate**⁽⁴⁾
Block valve, soft or metal-seated, minimal resistance to the flow, reverse acting slab as option
- **Double expanding gate**⁽⁴⁾
Block valve with wedge formed by two pieces, moveable seats with angle compensation, DB&B feature for isolating the body cavity from the line
- Full range of automation capabilities
- For more information visit: abvvalves.com

⁽¹⁾ Applicable to y-pattern valves

⁽²⁾ The piston check valve is designed with a screwed-in cover.

⁽³⁾ Consult the product update for details (Document code: PU-API 624).

⁽⁴⁾ Sizes up to NPS 2–36 (DN 50–900)

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Quarter-turn valves

Memoryseal[®] ball valves



Resilient-seated ball valves with value-added technical features for superior performance

Sizes: NPS ¼–24 (DN 8–600)
ASME classes: 150–600
WOG: up to 2000

- Memoryseal[®] in-tension flexible seat design
- Dual qualified to API 641 and ISO-15848-1⁽¹⁾
- Fire tested API 607/ISO 10497
- Body design: end-entry, one-piece, split-body, top-entry, unibody, and three-piece
- Available in carbon, stainless, alloy, and nickel alloy steels
- Available for chlorine, cryogenic, NACE (sour gas), nuclear, oxygen, throttling, and vacuum services

Securaseal[®] metal-seated ball valves



Severe service metal-seated ball valves for high temperature, abrasive, and corrosive applications

Sizes: NPS ½–24 (DN 15–600)
ASME classes: 150–4500
Temp: up to 1500°F (816°C)

- Shutoff to FCI 70-2 class 6
- Advanced trim coating technology
- Low emission options available to API 641 and ISO-15848-1⁽¹⁾
- Cast and forged bodies
- Available in carbon, stainless, alloy, duplex, titanium, and nickel alloy steels
- Available for mining HPAL and POX, slurry transportation, ebullated bed and slurry-phase hydrocrackers, batch digester capping, nuclear and oxygen service.

Securaseal[®] Coker ball valves



Complete valve solutions for the delayed coker industry and high temperature slurry applications

Sizes: NPS 3–36 (DN 80–900)
ASME classes: 150–900

- Switch valves
NPS 3–18 (DN 80–450)
ASME classes 300–900
- Isolation valves
NPS 3–36 (DN 80–900)
ASME classes 150–900
- Low emission options available to API 641 and ISO-15848-1⁽¹⁾
- Complete automation packages including valve interlocks through PLC or DCS
- Two wire loop controls and diagnostic packages

Torqseal[®] triple offset valves



Bi-directional, zero-leakage, metal-seated triple offset valves

Sizes: NPS 3–96 (DN 80–2400)
ASME classes: 150–900
Temp: –425 to 1,200°F (–254 to 650°C)

- Zero-leakage to API 598 resilient-seat standard
- Zero-leakage testing to API 6D standard available on request
- Bi-directional shutoff
- Fire tested to API 607/ISO 10497
- Available in lug or wafer per API 609, flanged per ISO 5752 or ASME B16.10, and butt weld per ASME B16.10 body patterns
- Available in carbon, stainless, alloy, duplex, titanium, and nickel alloy steels
- Dual qualified to API 641 and ISO-15848-1⁽¹⁾
- Available for cryogenic, NACE (sour gas), nuclear service, and vacuum service
- SIL 3 certified

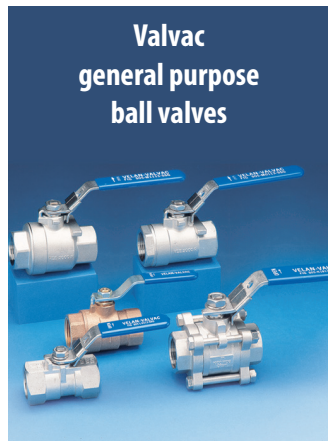
(1) Consult the product update for details (Document code: PU-API 641).

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Quarter-turn valves



Valvac
general purpose
ball valves

Resilient-seated ball valves for general use and commodity applications

Sizes: NPS ¼ – 2 (DN 8 – 50)
WOG: 600 – 2000

- Body design: end-entry (two-piece), one-piece/unibody, and three-piece (bolted)
- Available in carbon and stainless steel
- Seats made of glass reinforced PTFE
- Available in reduced, regular, or full port designs
- Butt weld, threaded, and socket weld connections



API 6D and 6A
ball valves

API 6D and API 6A floating and trunnion-mounted ball valves for oil and gas, pipeline, offshore, LNG, and petrochemical process

Sizes: NPS ½ – 60 (DN 15 – 1600)
ASME classes: 150 – 2500
API 6A classes: 2000 – 15000

- Body design: side-entry, top-entry, or fully welded
- Modular double block and bleed valves, also in compact face-to-face execution
- Anti blow-out stem, antistatic, fire safe design
- Soft-seated (leakage rate: A) or metal-seated (leakage rate: D)
- Self relieving or double piston effect seats
- Available in carbon or low temperature carbon steel, stainless steel, exotic alloys
- For severe service and aggressive environments
- Extended bonnet for cryogenic applications
- Stem extension for underground service
- Full range of automation capabilities
- For more information visit: abvvalves.com



Control and choke
valves

Caged ball valves and DTP⁽¹⁾ trim control valves for severe service and choke applications

Sizes: NPS 1 – 48 (DN 25 – 1200)
ASME classes: 150 – 4500
API 6A classes: 2000 – 15000

- **KEY-C:** Control ball valve trunnion mounted with special caged trim for noise reduction and cavitation/flashing prevention. Unidirectional, only one metal seat on the up-stream part. Very high rangeability
- **DTP:** Angle body construction with multi-stage trim suitable for high energy dissipation and for high level of reliability, excellent erosion resistance, suitable for low noise applications
- Trim materials with highest mechanical performances to guarantee long trim life and low maintenance cost
- DPT choke valve for wellhead – mainly oil and gas applications
- Full range of automation capabilities
- For more information visit: abvvalves.com

(1) Discrete tortuous path (DPT) trim



HIPPS and ESDV
valves

HIPPS - High integrity pressure protection system and ESDV - Emergency shutdown valves

Sizes: NPS ½ – 48 (DN 15 – 1200)
ASME classes: 150 – 2500
API 6A classes: 2000 – 15000

- Complete system: valve actuator and control panel; optionally, logic solver and pressure transmitters can be supplied
- Fast operation (down to less than 2 seconds for HIPPS)
- Fail close emergency action
- Hydraulic or pneumatic actuator solution, spring return or double acting with auxiliary tank
- High Safety Integrity Level (up to SIL 3 for a single actuated valve) & SIL certification
- Partial stroking test functionality to increase the reliability
- Full range of automation capabilities
- For more information visit: abvvalves.com

(1) Consult the product update for details (Document code: PU-API 641).

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Special applications

Steam traps



An extensive range of traps for steam and air lines

Sizes: NPS $\frac{3}{8}$ –3 (DN 10–80)

Temp: up to 1,100°F (593°C)

Pressure: up to 4000 psi (276 bar)

Capacities: 160,000 lb/hr
(72,575 kg/hr)

- Available in Piping King arrangements
- Cage unit design for easy in-line repair
- Float bimetallic, hermetically sealed, piston-operated, space-heating, and thermodynamic types
- Optional blowdown valve, temperature controller, thermometer, and vacuum breaker available

Bellows seal valves



The original hermetically sealed bellows seal valves for absolute zero-leakage service

Sizes: NPS $\frac{1}{2}$ –12 (DN 15–300)

ASME classes: 150–1500

- Multi-ply stainless steel, inconel and hastelloy bellows for long service life
- Gate, globe (angle, needle, and stop), and control valves
- Available in carbon, stainless, alloy, and nickel alloy steels
- Available for lethal, NACE (sour gas), nuclear, and vacuum service

Subsea valves and actuators



Subsea ball and check valves; hydraulic actuators and gear operators with handwheel/ ROV for shallow water

Sizes: NPS $\frac{1}{2}$ –48 (DN 15–1200)

ASME classes: 150–2500

API 6A classes: 2000–15000

- Valve designed and tested as per API 6DSS
- Corrosion-resistant alloys on dynamic sealing surfaces and ring joint grooves as a minimum
- Redundant sealing for high reliability
- Valve operable down to a water depth of 500 m (1700 ft)
- Suitable for high percentage of sand and solid particles
- Fully piggable design options
- Baric compensator device to avoid structural overstress
- Full range of automation capabilities
- For more information visit: abvvalves.com

Control valve and automation



Valve automation, control, and monitoring for industrial processes

- **Programmable Logic Controllers (PLC) and Control Panels:** Robust features and benefits, including redundancy, HMI diagnostic features, and integration with ancillary equipment
- **V-Box:** Innovative solution for delayed coker valves, especially the switching valve
- **V-Flange:** Advanced and reliable remote monitoring system designed specifically for quarter-turn valves
- **Pressure Letdown Skid:** Velan's high-temperature letdown stations offer a comprehensive solution for the most critical applications in residue hydrocracking
- **IIoT and AI Integration:** Velan is a leader in IIoT, actively participating in the API RP 559 IIoT Task Force

Automation capabilities

Velan offers a wide range of products to address each customer application.

- Electric, hydraulic, and pneumatic actuation
- Pre-installation of switches, positioners, thrust and torque sensors, signal conditioners
- Integral control actuation and two-wire control
- Overrides, limit stops, and most standard accessories

Visit velan.com for Velan's latest product literature

Go to the *Literature* tab to see our most up-to-date library of literature.

Join My Velan to gain access to additional resources including Maintenance manuals (IOMs), Data sheets, Product updates, Application notes, and more.

Research & Development

Velan's R&D group is at the core of our engineering excellence. We drive innovation through strategic technical project management, advanced design, analysis, and rigorous experimentation tailored to both standard and custom requirements. Our comprehensive approach encompasses targeted performance evaluation and seamless turn-key support, guiding projects from initial concept to implementation.

Velan's four state-of-the-art R&D centers and laboratory testing facilities offer a wide range of process simulation testing capacities, including steam boilers, superheaters, flow loops, cryogenic stands, cycling stations, and diverse test fluids.

Velan's R&D provides customized testing programs, working closely with specialized third-party labs, to help develop and qualify our valves to client's specifications and qualification needs.

Velan also has a long-standing history of partnering with major architects/engineers and end users to develop innovative solutions for their valve needs.



Velan employees, part of the R&D Center of excellence in Montreal.

Aftermarket & Field Engineering

Velan offers comprehensive services to ensure our valves operate smoothly their entire life cycle. We provide complete end-to-end support from startup and commissioning to complete overhaul.

Our technical field services team provides complete support to end-users leading up to and throughout maintenance outages and turnarounds. All work carries the Velan

quality customers have learned to trust and is backed by our warranty.

Velan's global team of experienced valve service technicians is available to supply assistance across all industries 24-hours per day. Our network of authorized service shops across the globe ensures customers can meet maintenance and service requirements in any location.



On-site service for Velan valves.

Contact Aftermarket

For technical support or a spare parts quote: +1 514-748-7743

Emergency technical support: +1 866-994-5656

Email:

Technical support: after.market@velan.com

Spare part quotes: spare.parts@velan.com

Technical Services

Velan offers a wide range of services carried out with the quality our customers rely on and backed by our warranty to ensure satisfaction. Our factory service handles all valve and actuator repair needs, including installation, overhaul, and field service. Additionally, we offer in-line valve repairs through our certified partners and maintain a global network of Authorized Service Centers for local support.

- Onsite field service
- Startup and commissioning
- Valve installation
- Repair and overhaul
- In-line valve repair and seat replacement
- Actuator service

Spare Parts

Velan supplies genuine OEM spare parts to stocking locations around the world manufactured to our stringent quality standards for easy replacement.

- OEM parts guaranteed to work
- In-stock parts
- Competitive lead times
- Expedited shipping capability
- Upgrade options to make your equipment last longer
- Engineering support and analysis

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Velan's extensive portfolio of valves are installed worldwide to handle diverse applications



Process

- Refining and downstream
- Unconventional oil processing
- Chemicals and petrochemical
- Coker
- Mining
- Cryogenic
- HF Alkylation
- Pulp and paper

Upstream and midstream

- Onshore exploration and production
- Pipelines
- Underground gas storage
- LNG liquefaction and regasification terminals and tank farms
- Offshore production, platforms, FPSOs, and FLNGs
- Subsea

Power

- Nuclear
- Fossil
- Combined-cycle
- Supercritical and ultra-supercritical
- Geothermal
- Solar
- Hydro
- Biomass

Learn more – visit our website: velan.com

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