# A world-leading valve product range





Quality that lasts.

# Velan at a glance

#### History

• Founded in 1950

#### People

• Over 1,600 employees

#### **Product line**

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

- High pressure gate, globe, and check valves
- API standard gate, globe, and check valves
- Metal-seated and resilient-seated ball valves
- Triple offset valves
- Dual plate check valves
- API 6D & 6A valves
- Including: steam traps, actuators, and control systems.

#### Quality

Velan holds major applicable approvals:

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

Comprehensive quality programs that are compliant with the most stringent industry standards such as: ISO 9001, API Q1, 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

Tel: +1 514 748 7743 Fax: +1 514 748 8635

#### velan.com

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



A large Torqseal<sup>™</sup> 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.

### **Total quality commitment**

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

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 repairability of commodity valves, Velan finished first. Whether we are manufacturing commodity valves or specialty valves, we deliver excellent longterm 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 1,600 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 70 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.

- 12 production facilities
- 3 plants in North America
- 4 plants in Europe
- 5 plants in Asia
- 2 stocking and distribution centers
- Hundreds of distributors worldwide
- Service shops worldwide

## **Manufacturing plants**

#### **North America**



Montreal, Canada Velan Inc.



Granby, Canada Velan Inc.



Williston, VT, U.S.A. Velan Valve Corp.

Europe



Velan SAS



Mennecy, France Segault SAS



Lisbon, Portugal Velan Válvulas Industriais, Lda.



Lucca, Italy Velan ABV S.r.l.

#### Asia



Ansan City, South Korea Velan Ltd., Plant 1



Ansan City, South Korea Velan Ltd., Plant 2



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



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



Coimbatore, India Velan Valves India Pvt. Ltd.

#### **Distribution centers**

#### **North America**



Missouri City, TX, U.S.A. Velan Valve Corp.

#### Europe



Willich, Germany Velan GmbH

# 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  $\frac{1}{4}$ - 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 needsoften 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.

#### Globe (stop), stop check Ball, resilient-seated Ball, metal-seated Check, dual-plate No slam check Check, piston Check, swing **Triple offset** Check, ball Tilting disc Butterfly Control Angle Gate **VALVE PRODUCT LINES** Pressure seal and bolted bonnet Gate, globe, & check API 600, API 623, & API 594 cast steel (1) API 603 stainless steel<sup>(1)</sup> API 602 small forged (1) (2) Bonnetless **Dual-plate check** API 6D and 6A check and gate Memoryseal<sup>®</sup> ball Securaseal<sup>®</sup> metal-seated ball Quarter-turn API 6D and 6A ball Coker ball General purpose ball Torgseal<sup>®</sup> triple offset Velflex<sup>™</sup> cryogenic butterfly **Bellows seal** Special applications Cryogenic Cryogenic control Control and choke HIPPS, ESDV Subsea

(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

Steam traps

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.



Туре

Y-pattern (inclined)

Steam trap

Parallel slide

Needle

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 r	ange	S	Pressure class									Temp.				Materials						Certifications							Industry										
NPS 14-2 (DN 8-50)	NPS 2-4 (DN 50-100)	NPS 4-24 (DN 100-600)	NPS 26 (DN 650) and up		ASME class 150	ASME class 300	ASME class 600	ASME class 900	ASME class 1500	ASME class 2500	ASME class 4500		Cryogenic	Том	High		Carbon steel	Stainless steel	Alloy steel	Nickel alloy steel		PED	ASMEN	TALUFT	API 6A	API 6D	Fire tested		Power	Oil and gas upstream	Refining and petrochemical	Chemical	Pulp and paper	LNG and cryogenic	Marine and navy	Mining	HVAC	Water and wastewater		
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# 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, OHSAS 45001, PED, IEC 61508 SIL 3 Capable, GOST/EAC, API 6A and 6D and TA-Luft.

#### 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 🗸 🖊

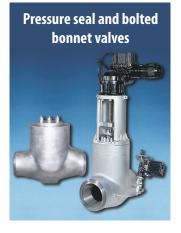
Our aim is to offer products and services that not only meet but also clearly exceed the expectations of our customers.

Through training, teamwork, and performance, our employees strive to achieve continuous improvement of all processes.

Our goal is total quality and on-time delivery; our method is total commitment.

> A.K. Velan Founder

# Gate, globe, and check valves



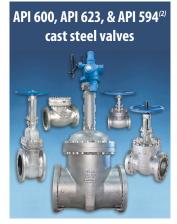
Forged pressure seal and large bolted bonnet gate, globe, and check valves for high pressure and high temperature service

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

 One-piece forged bodies for superior strength and quality

· Live-loaded bonnet as a standard

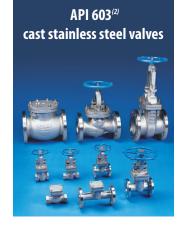
- feature<sup>(1)</sup>
  Graphite pressure seal gasket
- Machined body guides and a robust torgue arm assembly
- Valve types
- Gate: flexible wedge and parallel slide
- Globe: angle, needle, and stop
  Check: piston, swing, stop,
- Check: piston, swing, stop, and tilting disc
- Optional cast product offering
- Available in carbon, stainless, alloy (including F91), and nickel alloy steels
- Available for catalytic reforming, NACE (sour gas) and nuclear services



API 600, API 623, & API 594<sup>(2)</sup> cast steel gate, globe, and check 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<sup>(3)</sup> 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<sup>(2)</sup> 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<sup>(3)</sup>
- Available for cryogenic and NACE (sour gas) services

# API 602<sup>(2)</sup> small forged valves



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

**Sizes:** NPS <sup>1</sup>/<sub>4</sub> - 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<sup>(3)</sup> and also available with bellows seal for zero emissions
- Available for block and bleed, cryogenic, HF acid, NACE (sour gas), and nuclear 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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Join My Velan to gain access to additional resources including Maintenance manuals (IOMs), Data sheets, Product updates, Application notes, and our Supplier portal.

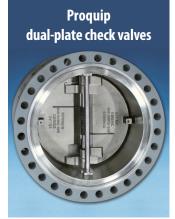
# Gate, globe, and check valves



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<sup>(1)</sup>
- Non-rotating stem<sup>(1)</sup>
- In-line repairable
- Valve types
- Globe: needle and stop
- Check: piston<sup>(2)</sup>
- Available in forged carbon steel, stainless, alloy (including F91 and F92), and nickel alloy steels<sup>(1)</sup>
- Available with bellows seal <sup>(1)</sup>
- Available for nuclear<sup>(1)</sup> 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-tometal 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, metalseated, internal venturi pattern, very
   fast response prevents water hammer,
   pump protection
- Swing check valve<sup>(#)</sup> Non return valve, metal-seated, swing arm operable by a manual override for pipeline pigging operations
- Through conduit gate<sup>(4)</sup> Block valve, soft or metal-seated, minimal resistance to the flow, reverse acting slab as option
- Double expanding gate<sup>(4)</sup> 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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(IOMs), Data sheets, Product updates, Application notes, and our Supplier portal.

# **Quarter-turn 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

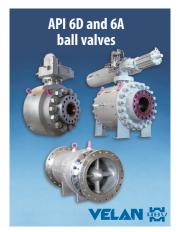
- Memoryseal<sup>®</sup> in-tension flexible seat design
- Dual qualified to API 641 and ISO-15848-1<sup>(1)</sup>
- Fire tested API 607/ISO 10497
- Body design: end-entry, one-piece, split-body, top-entry, unibody, and three-piece
- Available in carbon, stainless, alloy, and nickel alloy steels
- Available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



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<sup>(7)</sup>
- · 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.



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



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

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

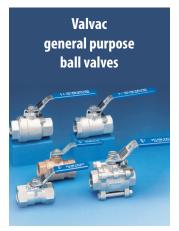
- Switch valves NPS 3–18 (DN 80–450) ASME classes 300–900
- Isolation valves NPS 3–36 (DN 80–900) ASME classes 150–900
- Low emission options available to API 641 and ISO-15848-1<sup>(1)</sup>
- Complete automation packages including valve interlocks through PLC or DCS
- Two wire loop controls and diagnostic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

Visit velan.com for Velan's latest product literature

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

# **Quarter-turn 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



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<sup>(7)</sup>
- Available for cryogenic, NACE (sour gas), nuclear service, and vacuum service
- SIL 3 certified

Velflex cryogenic butterfly valves

High performance cryogenic metal-seated butterfly valves

Sizes: NPS 6-48 (DN 150-1200) ASME classes: 150-300 Temp: down to -420°F (-252°C)

- Butt-weld end or flanged types
- Side-entry design offers easy in-line maintenance
- Bi-directional shutoff
- Zero-leakage to API 598
- Metallic seal (Velflex<sup>™</sup> technology)
- Fire tested (API 607 rev. 4, API 6FA and BS 6755 - Part II)

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

# **Special applications**



An extensive range of traps for steam and air lines

Sizes: NPS <sup>3</sup>/<sub>8</sub>-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



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

**Sizes:** NPS ½-12 (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



Severe service control valves for extreme temperature applications

Sizes: NPS ¼ -16 (DN 8 - 400) ASME classes: 150 - 4500 Temp: down to -457°F (-272°C) Cv: 0.01 to 3074

- Resilient stainless steel design
- Linear or equal percentage flow characteristics
- Top-entry for easy maintenance
- Excellent seat tightness
- Cold box adaptation
- Available in angle, straight or y-pattern
  patterns
- Anti-cavitation, and low dB design for critical applications
- Vacuum jacketed on request



Caged ball valves and DTP<sup>(1)</sup> 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

#### Automation capabilities

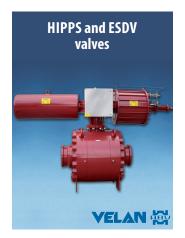
Velan offers a wide range of products to address each customer application.

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

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# **Special applications**



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



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

Sizes: NPS ½ – 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

# Research & Development

Velan's Research & Development (R&D) group is a key part of the Velan engineering team, and the services they provide include technical project management, design and analysis, standard and customized experimentation, performance evaluation, and turn-key support from project initiation to program completion.

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.



Customers get a first hand look at Velan's R & D facilities in Montreal, Canada.

Our R&D facilities, equipped with steam boilers, superheaters, flow loops, fugitive emissions, and cryogenic test stands, enable us to run comprehensive testing programs.

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

# Aftermarket & Field Service

Velan offers our end-users technical support and in-line service and maintenance on all our valve products. We are your one-stop shop for repairs backed by Velan quality and warranty. We offer complete support leading up to and throughout your maintenance outages and turnarounds.

Our team of service engineers and technicians are available 24 hours a day. We are equipped with the most sophisticated tools available and have over 70 years of valve service experience in a wide range of applications.

Velan has a network of authorized service shops across the globe, ensuring we can meet your maintenance and service requirements whatever your location. Visit our website to find a service shop in your area.

## Spare parts

Certified genuine Velan in-stock spare parts are at locations around the world. Our spare parts are manufactured to Velan's stringent quality standards for easy replacement. OEM parts are guaranteed to work. We offer competitive lead times, expedited shipment capability, and upgrade options to make your equipment last longer.



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

#### Visit velan.com for Velan's latest product literature

Go to the *Resources* tab to see our most up-to-date library of literature and tools. Join My Velan to gain access to additional resources including Maintenance manuals (IOMs), Data sheets, Product updates, Application notes, and our Supplier portal.

# 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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Headquartered in Montreal, Canada, Velan has several international subsidiaries. For general inquiries:

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

Tel: +1 514 748 7743 Fax: +1 514 748 8635

For more contact information visit velan.com

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