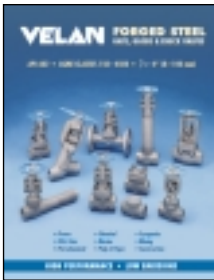




FIELD ENGINEERING SERVICES STANDARD WARRANTY DETERMINATION PROCEDURES



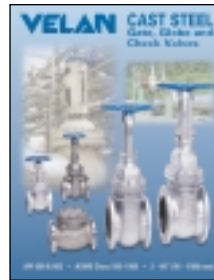
**API 602
Forged Steel**



Pressure Seal



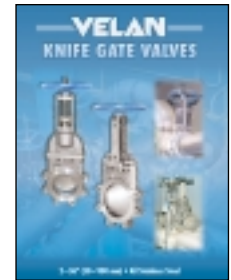
**Y-Pattern
Inclined Globe**



Cast Steel



Bellows Seal



Knife Gate



**API 603
Stainless Steel**



Cryogenic



Torqseal Butterfly



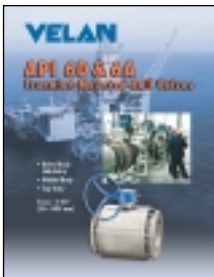
Memory Seal



Unibody



Top-Entry



**API 6D
Trunnion Mounted**



**Securaseal
Metal-Seated Ball**



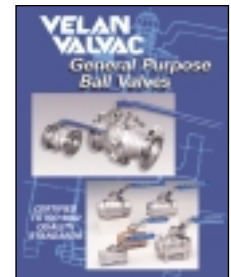
Severe Service



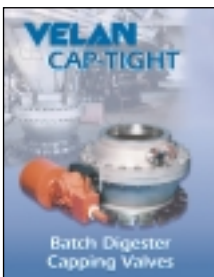
Coker Ball



Power Ball



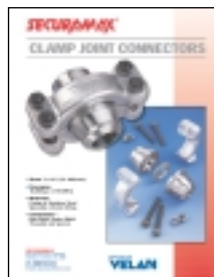
General Purpose



**Batch Digester
Capping**



3-Piece Ball



**Clamp Joint
Connectors**



Adareg



Wafer Check



Steam Traps

A COMPREHENSIVE PRODUCT LINE TO COVER VALVE APPLICATIONS IN POWER AND ALL MAJOR INDUSTRIES



Velan is one of the world's leading manufacturers of industrial valves with 13 specialized manufacturing plants including 5 in Canada, 1 each in the United States, France, United Kingdom, Italy and Portugal, 2 plants in South Korea and 1 in Taiwan. We employ over 1,400 people of which over 1,000 employees are in North America. We have one of the most comprehensive lines of cast and forged steel gate, globe, check, ball, butterfly and knife gate valves, steam traps and clamps comprising 22 product lines.



The Velan corporate philosophy is to bring to the market new and innovative designs with special emphasis on quality, safety, ease of operation, simple in-line maintenance and most of all long service life. In our 53 years of operation we have supplied valves for over 2,500 thermal power stations, 330 nuclear power stations, over 1,000 ships of the U.S. and NATO fleets including all US Navy nuclear and non-nuclear aircraft carriers and most nuclear submarines. In addition, we have supplied valves to over 1,800 oil, gas, petro-chemical, chemical, pulp and paper, mining and cryogenic installations. We have an installation base of millions of valves around the world in over 120 countries.



VELAN FIELD ENGINEERING SERVICES

The Velan Field Engineering Services Department offers customers in-line service and maintenance for all of our products. Our team of engineers and technicians is on call 24 hours a day and is equipped with the most sophisticated tools and has over 50 years of valve servicing experience to all industries. We also have over 65 Velan Authorized Service and Modification Shops around the world with a list published on our website at www.velan.com. Up-to-date Service Manuals are available for all product lines, either in pdf format from our website, on a CD or in hardcopy format which can be obtained from our Advertising Department. The Field Engineering Services Department maintains a detailed database with information on every reported valve problem, regardless of whether the problem was caused by Velan or came to light by the process or application. This database is used as the basis for design enhancements as well as for root cause corrective action.



ADDITIONAL SERVICES

Velan's Field Engineering Services Department can provide the following additional services: commissioning and start-up; forensic examination; assistance in hydro, steam blow, and acid cleaning; non-destructive testing, x-ray, and ultrasonic testing; application engineering; flow analysis; material selection; stress analysis; actuator sizing; design of special tooling; validation of retrofit changes; and delivery of tools and special lapping equipment.



Our Service Technicians often provide training to maintenance personnel of proper functional procedures shown in our maintenance manual (hot torquing, gasket compression, torque and limit switch setting on electronic actuators) to prevent incorrect application or misuse.



Once per year we organize, in our head office, training workshops for our own and all Authorized Service Shops. Working closely with the service department is a group of administrators and technical support specialists. Precision coordination and cooperation at all levels is required to rush replacement parts to the sites, sometimes in remote locations.

TYPICAL PERFORMANCE GUARANTEE

VELAN
Guarantee

FOR LOW FUGITIVE EMISSION SERVICE

STANDARD VELAN FORGED & CAST STEEL VALVES
WITH GRAPHITE PACKING RINGS AND SPIRAL WOUND STAINLESS STEEL / GRAPHITE GASKETS
(150# CAST STEEL GATES 2"-48" CORRUGATED STEEL WITH GRAPHITE CHANNELS)

◆ API 600 Cast Steel Gate, Globe and Check Valves
◆ API 602 and 606 Forged Steel Gate, Globe and Check Valves

We guarantee, based on extensive laboratory testing and field experience, that standard Velan steel valves, will provide low-emission service, on gaskets, and stem seals, under normal operating conditions, provided that gland and body-bonnet bolting is torqued to minimum values (shown in Velan Instruction Manuals) and stems are clean.

1. Graphite packing: Maximum 50 ppm.
2. TA-Laft packing: less than 1 ppm (0.0014 ppm).
3. Gaskets: Maximum 20 ppm.

Certification: *At an optional extra cost we offer individual valve testing with 200 psi methane and a certificate of actual result.*

Cycling results: *For applications with extensive cycling ask factory for information.*

This guarantee for one year is limited to the free supply of seals only. For special applications such as high flow conditions, high pressure, high temperature and frequent cycling or highly toxic fluids, please consult the factory.

FOR VELAN INC., AND VELAN VALVE CORPORATION

A.K. Velan
A.K. Velan
CEO
June 2003

VELAN
Guarantee

FOR LOW FUGITIVE EMISSION SERVICE

STANDARD MEMORY SEAL AND SECURASEAL® BALL VALVES

We guarantee, based on extensive laboratory testing and field experience, that standard Velan steel ball valves, will provide low-emission service, on gaskets, and stem seals, under normal operating conditions, provided that gland and body-bonnet bolting is torqued to minimum values shown on the enclosed tables and with clean stems.

1. Teflon Stem Seal: maximum 20 ppm.
2. Garlock EVSP 9000 packing: 0 helium bubbles.
3. Unique 4-way seal: 1 ppm.
4. TA-Laft packing: less than 1 ppm (0.0014 ppm).
5. Graphite packing (STD.) 100 ppm.
6. Gaskets: maximum 20 ppm.

Certification: *At an optional extra cost we offer individual valve testing with helium or methane and a certificate of actual result.*

Cycling results: *For applications with extensive cycling ask factory for information.*

This guarantee for one year is limited to the free supply of seals only. For special applications such as high flow conditions, high pressure, high temperature and frequent cycling or highly toxic fluids, please consult the factory.

FOR VELAN INC., AND VELAN VALVE CORPORATION

A.K. Velan
A.K. Velan
CEO
June 2003

EXAMPLES OF CUSTOMER FEEDBACK

McStay Engineered Products Co., (Cleveland, OH)

"Chiman Patel was an excellent representative for Velan. He was attentive to and exhibited genuine concern for the Sammis maintenance and operations personnel's concerns. Chiman also possessed excellent Velan product knowledge and mechanical skills and repair/operations procedures. Furthermore, he worked two 24-hour shifts during the repair and was a constant source of support and assurance to the Sammis maintenance personnel working on the valve. Chiman Patel's dedication to the positive resolve of the problem and subsequent commissioning of the valve to get this 650 mgw unit back online went a long way to defusing a potentially very touchy situation."

"Again, I cannot commend Chiman enough nor Velan for assigning him to this problem. He is a credit to all the values and product excellence that Velan stands for."

The Dow Chemical Co., (Plaquemine, LA)

"I would like to thank you for the outstanding level of field service we received. Our staff was quite impressed with the level of knowledge, degree of preparation, and attitude of cooperation your representative demonstrated. We could not have been more satisfied."

Korea Heavy Industries & Construction Co. Ltd., (Seoul, Korea)

"The purpose of this letter is to convey our sincere appreciation to Velan, for your prompt actions, regarding subject valve modifications. We also would like to convey our special appreciation to Mr. J. Kuhner for his diligent efforts and assistance at the site, for these modifications."

Alabama Power Co., (J.M. Farley Nuclear Plant, Ashford, AL)

"I thank you for the outstanding support that your company provided to Farley Nuclear Plant during our recent outage. The knowledge, cooperation and dedication of your Field Service Representative, Mr. Jack Kuhner, who provided continuous guidance and support from the time he arrived at the site until the job was satisfactorily completed, is commendable. We appreciate the dedicated services your organization provided to Farley Nuclear Plant and wish to express a heartfelt well done to everyone at Velan Valve Corporation."



PROCEDURE FOR CARRYING OUT FIELD SERVICES

Scope

This policy applies to all Velan Service personnel, commissioning and other Engineers sent to the site when customers require services.

Procedure

1. All assignments for sending Velan personnel to the site or placing an order with an Authorized Service Shop must be authorized by the Velan Corporate Service Manager.
2. In all instances, prior to departure to the job site or assigning an Authorized Service Shop the customer must provide by fax or e-mail a firm purchase order to Velan.
Note: Velan will not charge the customer if the work is determined to be covered under warranty.
3. After arrival at the job site and completion of the analysis of the reported failures or malfunction of a valve or actuator the Velan technician or Authorized Service Shop must review the finding with the customer's responsible person at the site and send a report to the Velan Service Manager by fax or e-mail in order to determine if the failure has been caused by faulty material, clearly the responsibility of Velan (warranty case) or by misuse or misapplication at the site, clearly the responsibility of the customer (non-warranty case). In some cases the responsibility may rest with both sides. A detailed listing of warranty and non-warranty cases is shown on pages 10 and 11.
4. Prior to carrying out the service repair work, an agreement must be reached between the Site Representative and the Velan Service Representative as to the responsibility for the repair and whether or not it is covered by the warranty. This agreement between the Site Representative and the Velan Service Representative must be explained and signed on the Velan Warranty Determination Form (as shown on pages 5 and 6) in order to eliminate any subsequent disputes. Only in exceptional cases and with written approval from the Head of the Service Department can the Velan Service Representative be authorized to perform the service work without following the Velan Warranty Determination procedure.
5. The Service Technician or Engineer must remain in live contact with the Service headquarters in Montreal. Frequent written progress reports via fax or e-mail are expected.
6. All Corporate departments of Velan must be available for complete assistance to Service personnel for a successful completion of the service job in the shortest possible time and to the full satisfaction of the customer.
7. On completion of the service trip the technician should return to home base with time sheets duly signed by Site Representative. Copies of service reports must be sent to the CEO, the President, the Executive Vice President of Engineering and Quality Assurance, the Field Service Manager and the General Plant Manager

involved. A copy of the service report will be sent to the customer by the Field Service Manager along with invoices etc. All service reports should be ready for distribution within 2-4 days after return to home base.

8. Assignment for Service or Assistance of an Authorized Service Shop

In cases where the Service Technician feels that he/she requires the assistance of an Authorized Service Shop to complete the job they must first have an authorization from the Head Office as well as from the authorized representative of the customer at site. The customer must be made aware of the costs involved based on data provided by the service shops which can be obtained from the Field Service Department.

9. Support for the Site Services

The customer must be made aware that Velan is not automatically responsible for lagging, de-lagging, cranes, and other assistance at the site. In cases where the job has been determined to be performed under warranty, the site assistance expenses must be settled and approved by the Velan Field Service Department prior to proceeding with the job.

In cases where the service job has been determined by Velan and by the authorized representative of the customer at site to be a non-warranty case, Velan will not accept any charges.

10. Cost of service trips requested to the site and cancelled by the site for reasons beyond the control of Velan will be charged to the customer based on the actual costs incurred, as per Velan's Service rates and conditions.

11. It is our field support policy to ensure that the Velan products are fully supported and the customer is guaranteed excellent service at all times.

All service personnel are ambassadors of the company and are required, therefore, to operate in a professional and highly technical manner.

Velan service personnel are required to carry their plasticized I.D. card on the job and wear the appropriate Velan Service Jacket and ensure that all local safety requirements are complied to.

12. It is the responsibility of the Service Technician to complete an Expense Report in an organized and accurate manner. All expenses must be submitted to the Field Service Manager for review. Each type of expense must be allocated in the appropriate category.

13. In order to maintain responsibility over the scope of the service work, its lowest possible cost, the supply of replacement parts and the quality of the work, orders to Authorized Service Shops are issued by Velan with copy submitted to the customer.



WARRANTY DETERMINATION FORM
(Page 1 of 2)

Project Name: _____ **Project Location:** _____

Velan Technician or Authorized Shop: _____

Site Representative: _____

Valve Figure No.: _____

Equipment Tag No. or Stock Code No.: _____

Date Velan was contacted: _____

Date of Velan's scheduled Service Call: _____

Has the equipment been maintained per the Instructions and Operations Manual (IOM)?

Yes No

Date of last maintenance: _____

Nature of last maintenance: _____

Has the system, equipment or material involved been modified in any way since receipt of goods?

Yes No

If Yes, describe the modification(s) in a separate attachment.

Date when first noticed: _____

Name of person who reported problems: _____

Phone No. of person who reported problems: _____

Contact: _____ Phone No.: _____

This notice has determined:

Nonconformance between valve design requirements and the valve in question:

Specification to which design does not conform,
(Provide drawing number, etc.) _____

Nature of nonconformance: _____

A defect in material or workmanship:

Material involved: _____

Nature of defect: _____

Incorrect application or specification has caused valve to fail (non-warranty):

WARRANTY DETERMINATION FORM

(Page 2 of 2)

SYMPTOMS OF THE FAILURE DEFECT

Describe nature of equipment failure / defect. Provide system and component data where applicable.

VELAN REPRESENTATIVE COMMENTS

Is this Equipment Failure Defect covered under vendor warranty? Yes No
Please indicate that you have read, understood and agree with the above statements.

Site Representative

Date

Velan Service Representative

Date

Or state reason(s) for refusal: _____



**VALVE AUTOMATION DATA
MULTI-TURN VALVES**

**Please complete Part 1 of the form below and return to Velan by fax or e-mail:
Fax: (514) 748-8635, e-mail: service@velan.com**

PART 1 - THIS SECTION FOR COMPLETION BY CUSTOMER

Customer Name: _____ Customer Reference No.: _____
Project Reference: _____ Velan Reference No.: _____

Valve Details

Valve Type: _____
Size: _____ Pressure Class: _____
Figure No.: _____ Tag or Item No.: _____

Bare Stem Supply: Yes No Free Issue Actuator: Yes No
Mounting Bracket by: Velan Other Installation/Test by: Velan Other
Stem Orientation: Horizontal Vertical Other

Valve Process Conditions

Design Pressure: _____ kPag psig Design Temp.: _____ °C °F
Inlet Pressure: _____ kPag psig Operation Temp.: _____ °C °F
Outlet Pressure: _____ kPag psig Temp. Fluctuation: _____ °C °F
Flow: _____ GPM lb/h m³/h kg/h
Medium: _____ Specific Gravity: _____
Valve Application: Throttling Continuous Blowdown Intermittent Blowoff
 BFP Outlet Start-up Cold Reheat
 Isolation Other: _____

Actuator

Actuator Type: Electric Rotary Linear Pneumatic Hydraulic
 Other: _____
Stroke Time (seconds): _____
Frequency Of Operation (cycles): _____ Per Hour Per Day Other: _____
Completed & Verified by: _____ Title: _____
Fax No.: _____ Tel. No.: _____
Date: _____ E-mail: _____

PART 2 - THIS SECTION FOR VELAN USE

Seat Diameter: _____ Thread Pitch: _____
Valve Lift: _____ Thread Lead: _____
Stem Diameter: _____ Stem Thrust: _____
Stem Threading: _____ Stem Start Torque: _____
Calculated By: _____ Stem Run Torque: _____

Velan is providing this data to you, on the basis of information provided to us in Part 1. Velan shall not accept any liability, unless the selection of the actuating device and the automation is carried out at a Velan manufacturing plant.



**VALVE AUTOMATION DATA
QUARTER-TURN VALVES**

Please complete Part 1 of the form below and return to Velan by fax or e-mail:
Fax: (514) 748-8635, e-mail: service@velan.com

PART 1 - THIS SECTION FOR COMPLETION BY CUSTOMER

Customer Name: _____ Customer Reference No.: _____
Project Reference: _____ Velan Reference No.: _____

Valve Details

Valve Type: _____
Size: _____ Pressure Class: _____
Figure No.: _____ Tag or Item No.: _____
Bare Stem Supply: Yes No Free Issue Actuator: Yes No
Mounting Bracket by: Velan Other Installation/Test by: Velan Other
Stem Orientation: Horizontal Vertical Other

Valve Process Conditions

Design Pressure: _____ kPag psig Design Temp.: _____ °C °F
Inlet Pressure: _____ kPag psig Operation Temp.: _____ °C °F
Outlet Pressure: _____ kPag psig Temp. Fluctuation: _____ °C °F
Shut-Off Pressure: _____ kPag psig Specific Gravity: _____
Flow: _____ GPM lb/h m³/h kg/h
Medium: _____ Valve Application: Throttling On/Off
Valve Description: (e.g.: pump isolation, blowdown, etc.) _____

Actuator

Actuator Type: Electric Pneumatic Hydraulic Other: _____
Model No.: _____ Fail Condition: Closed Open Last
Power Supply (Electric): _____ V _____ Ph _____ Hz _____ VDC (Pneumatic/Hydraulic): _____ kPag psig
Stroke Time (seconds): _____ Frequency Of Operation (cycles): _____ Per Hour Per Day Other: _____

Completed & Verified by: _____ Title: _____
Fax No.: _____ Tel. No.: _____
Date: _____ E-mail: _____

PART 2 - THIS SECTION FOR VELAN USE

Port Diameter: _____ Break Torque: _____
Seating Type: _____ Run Torque: _____
Service Factor: _____ End Torque: _____
Sizing ΔP: _____ Stem Allowable: _____
Calculated By: _____ Mounting Standard: _____

Velan is providing this data to you, on the basis of information provided to us in Part 1. Velan shall not accept any liability, unless the selection of the actuating device and the automation is carried out at a Velan manufacturing plant.

VELAN STANDARD PRODUCT WARRANTY

UNLESS STATED OTHERWISE IN THE SALES CONTRACT BETWEEN VELAN AND THE CUSTOMER THE FOLLOWING PRODUCT WARRANTY SHALL APPLY.

Seller warrants the equipment of its own manufacture to be free of defects in material and workmanship, under normal use and proper operation for a period of one year from the date of shipment from Seller's plant. Seller's obligation under warranty shall be strictly limited, at Seller's option, to: (i) furnishing replacement parts for or repairing without charge to Purchaser, FOB. Seller's plant or (ii) issuing written authorization for Purchaser or others to replace or repair without charge to Purchaser, at costs comparable to Seller's normal manufacturing costs those parts proven defective, or (iii) in discharge of Seller's maximum liability herewith, refunding all monies paid by Purchaser to Seller for the Product and, at discretion of Seller, having the product removed and returned to Seller at Purchaser's expense. All transportation charges relative to corrective work, defective parts or replacement parts shall be borne by Purchaser. Purchaser shall give Seller immediate notice upon discovery of any defect. **The undertaking of repairs or replacements by Purchaser or its agents without Seller's written consent shall relieve Seller of all responsibility herewith.**

Finished materials and accessories purchased from other manufacturers are warranted only to the extent of the manufacturer's warranty to Seller.

Any alteration in material or design of Seller's product or component parts thereof by Purchaser or others without written authorization by Seller voids all obligations of Seller regarding the product and any associated warranty herein stated or implied.

Seller's sole liability shall be exclusively as set forth herein, and Seller shall not be liable for any incidental or consequential damages due to its breach of any warranty herein contained, or otherwise. Without limitation to the foregoing, in no event shall Seller be liable for the loss of use of the product or of any other product, process, plant, equipment, or facilities of the Purchaser or End-user whether partially or wholly due to defects in material and/or workmanship and/or design of Seller's product, and in no event shall Seller be liable for removal of appurtenances or incidentals such as connections, pipe work and similar items of obstruction or for any cost brought about by the necessity of removing the product from its point of installation.

Seller makes no warranty of any kind whatsoever, expressed or implied, other than is specifically stated herein; and there are no warranties of merchantability and/or fitness for a particular purpose which exceed the obligations and warranties specifically stated herein.

Parts furnished without charge as replacements for original parts under warranty are warranted for that period of time during which the original parts warranty is effective.

WARRANTY DETERMINATION CLAUSES

Following are service cases subject and not subject to warranty coverage.
Any service case not included in the list below shall be evaluated by Velan to determine whether it is subject to warranty or not.

WARRANTY

A. The following required service cases, determined at the site, are considered as warranty and are therefore Velan responsibility:

1. Through wall leaker in castings. Note: This does not include gasket leakers or porosity found by x-ray on butt welds.
2. Material does not conform to Bill of Materials on approved generic or project drawing (wrong trim, bolt material, stem, packing, missing water seal, etc.)
3. Valve envelope dimensions do not match approved drawings etc., face-to-face, motor orientation, equalized/auxiliary connection, bypass orientation, equalizer hole, hand wheel size, etc.)
4. Material does not conform to customer's Data Sheet, (specific paint protection, incorrect tagging, etc.)
5. A valve selection error made by Velan or agreed upon requests at time of quote (interpolated class required, larger seat bore to accommodate Cv, etc.)
6. Valve shipped with bare stem (without motor), because the motor was not delivered on time.
7. Mechanical Dial Position Indicator (MDPI) does not accurately correspond within $\pm 10\%$ to actual open/close position.
8. Missing actuator options called out on Data Sheet.
9. Defective material supplied by subcontractor (parts are not explosion-proof, etc.)
10. Nonconforming workmanship, discovered after disassembly of the valve (sharp edges on parts, lack of specified clearances, etc.)
 - Cost for site services, if required and agreed upon by Velan, such as lagging, de-lagging, cranes, craft assistance, etc. must be quoted to Velan and agreed in writing by Velan prior to proceeding with the service job. This applies as well if a Velan Authorized Service Shop performs the job.
 - If a Service trip is cancelled after arrival to the Site due to construction and/or operating schedule, expenses incurred will be charged to the customer.
 - Velan warranty extends only to corrective action leading to satisfactory valve performance. **Velan is not responsible for any consequential or other damages claimed, if any, by the customer or end user.**

NON-WARRANTY

B. The following malfunctions of valves at the site caused by improper piping designs or nonconformance to Velan Installation and Operational Manuals, which are part of all project contracts are considered to be non-warranty cases and all work performed at the site by Velan Service Technicians or Authorized Service Shops must be paid by the customer. Note: The following is a partial listing only:

1. Non-conformance to the Velan "Start-up Installation Procedures" in Instructions and Operations Manuals (IOMs).
2. Valves welded into the line in open position.
3. Noncompliance to Post Weld Heat Treating standards or excessive heat, which can cause damage to valve working parts.
4. Use of nonconforming spare parts supplied by others.
5. Lack of lubrication due to long and/or improper storage or use of improper grease.
6. Damage to paint due to improper storage and/or exposed to unusual heat and humidity.
7. Lack of "hot torquing" of the bonnet bolting at operational pressure/temperature for pressure seal valves.
8. Lack of "warm-up" by-pass piping for wedge gate valves causing thermal binding of valves closed hot and opened cold, especially on frequent peaking operations on DSS or WSS (Daily Start and Stop or Weekly Start and Stop) operations. This applies to motor or gear actuated valves.
9. Specifying wedge gate valves in sizes above 10" and temperature higher than 900°F where parallel slide gate valves are recommended.
10. Violation of roll and tilt angle for check valves unless an alternate angle specified in the purchase order documents.
11. Lack of cavity over pressurization protection by installing Pressure Relief Valves or suitable bypass piping.
12. Installing standard gate valves 10" and larger without Stellited® wedge, guide, and grooves in horizontal stem position and inadequate support for actuators. Velan must be advised in advance on horizontal valve stem installation to provide Stellited® grooves and guides. Standard valves can be used up to an angle of 45°.
13. Installation of swing check valves with inadequate flow or less than 5-10 pipe diameters from a pipe end, elbow or pump.

WARRANTY DETERMINATION CLAUSES

NON-WARRANTY (cont.)

14. Installations of standard gate and globe valves in throttling services exceeding stated limitations and causing cavitation.
15. All cases where factory settings of actuator torque or limit switches are adjusted at site without knowledge and approval of Velan.
16. All cases where manual overrides or declutch levers have broken due to excessive forces used at the site.
17. The use of parallel slide valves for steam blow applications without removal of working parts, during the steam blow, or the cycling of valves during steam blow. No valves, except steam blow valves, can be cycled during and actual blow.
18. In the case of use of special steam blow valves with Stellited® guides and grooves and the annular upstream seat for more than 300 steam blow cycles, the number of each cycle must be documented.
19. Valve insulation carried all the way above gland area, causing overheating in torque arm area.
20. Motor burnt out caused by DCS by-pass of local thermal protection or repeated push-button use of motor exceeding duty cycle.
21. Use of valves in high velocity applications that exceed media limits (causing erosion/material wear).
22. Use of globe valves in throttling applications that near choked flow limits.
23. Visible use of over-torquing on small forged steel valves exceeding valve thrust requirements.
24. Use of uni-directional seal valves (with holes in wedge, etc.) for bi-directional sealing purposes, including ball valves with uni-directional sealing.
25. Excessive heat used in welding ball valves or other soft seated valves in line, resulting in soft seat distortion.
26. Use of 3rd party automation of ball valves in control applications resulting in leakage.
27. Use of site engineered stem extensions, gearbox relocation, etc. resulting in torque loss.
28. Use of unauthorized service shops to carry out valve modifications.
29. Use of reverse engineering parts and use of non-OEM equipment.
30. Use of coker switch valves, with accidental increase in temperatures, inadequate purge pressure, dead-ending switch valves, foam over etc.

AUTOMATION BY OTHERS

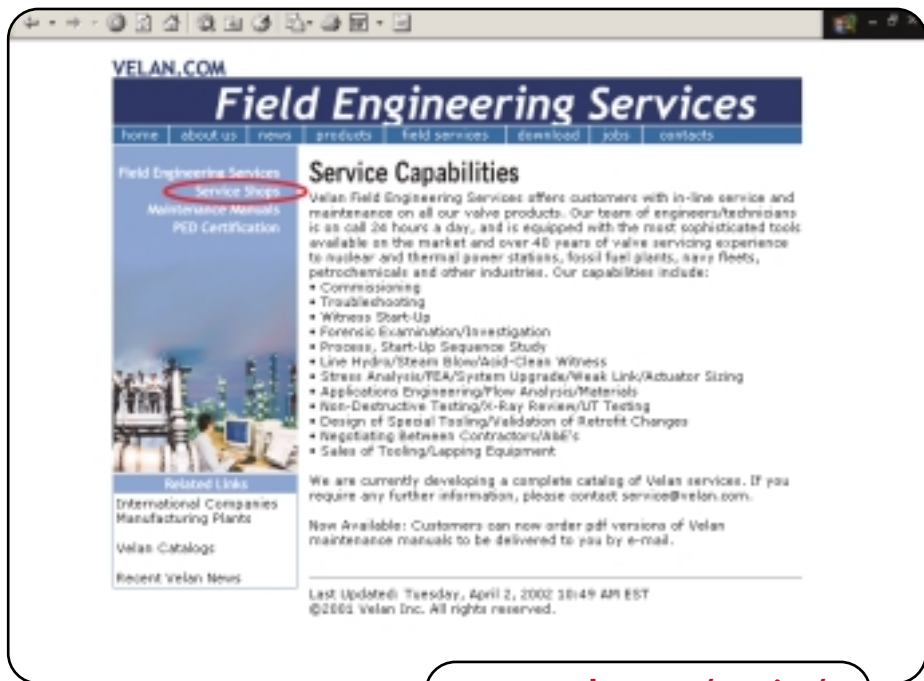
C. Automation of Velan valves by other than Velan manufacturing plant.

If the Customer elects to have the valve actuated by others, Velan shall not be responsible for the functioning of the actuator/valve assembly. The Velan warranty extends only to the valve itself and only to the extent that a warranty claim is not the result of damage to the valve or failure of the valve to operate properly due to incorrect sizing, selection or application of the actuator.

Upon request by the Customer, Velan will provide specific thrust, torque and valve dimensional data to enable the Customer to have the actuator properly sized and selected. The Valve Automation Data Forms on pages 7 and 8 are provided so that the Customer can provide application data pertaining to the valve in Part 1 of the form. Based on the data provided by the Customer, Velan will provide the torque, thrust and dimensional data indicated in Part 2 of the form.

Regardless of the accuracy of the information provided to us, Velan shall not accept any liability for warranty claims, consequential or other damages, unless the selection of the actuating device and the automation is carried out at a Velan manufacturing plant.

For a complete listing of Velan Authorized Modification/Service Shops please visit the Field Engineering Services section of velan's website at www.velan.com/service/, as shown below, or contact the Field Engineering Services Department.



www.velan.com/service/



www.valvediagnostics.com

VELAN FIELD ENGINEERING SERVICES CONTACT INFORMATION

Phone: (514) 748-7743, ext.: 2249 • Fax: (514) 342-2311 • email: service@velan.com

Please address all correspondence to Field Engineering Service Department.