







GUIDE VALVE LIMITED

"Better by Design"



FUGITIVE EMISSIONS CERTIFIED











Distributors/Agents

Global Supply Line are Guide Valve stockists, distributing to Australia, NZ & PNG, and can automate, service & test in our Adelaide Lloyd's 9001 facility, approved by Guide Valve.
Contact us: sales@globalsupplyline.com.au
Stock lists at our website: www.globalsupplyline.com.au

Mission Statement

It is our mission to effectively and continuously engage in methods of technology and innovation to meet the organizational goals of GVL and "Better By Design" products, while at the same time, striving to exceed the needs and expectations of our clients.

Fostering a company environment for overall safety, continuous improvement and cultivating cooperation and mutual respect towards our environment, employees, suppliers, and customers.

GUIDE VALVE LIMITED

CANADIAN HEAD OFFICE & PLANT



USA SALES OFFICE & WAREHOUSE



GUIDE VALVE
WUXI LIMITED



GVS® WELDED BODY BALL VALVES

2"– 4"



6" - 48"



GUIDE VALVE
WUXI LIMITED

API 6D & API-6A CERTIFICATIONS



American Petroleum Institute

2018-151 | Digital

Certificate of Authority to use the Official API Monogram

License Number: 6D-1822 **ORIGINAL**

The American Petroleum Institute hereby grants to

GUIDE VALVE WUXI LIMITED
Building M, No. 30 Wanquan Road
Xishan District
Wuxi, Jiangsu
People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6D** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6D-1822**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves, Plug Valves

QMS Exclusions: Servicing

Effective Date: JULY 16, 2024
Expiration Date: JULY 16, 2027

Senior Vice President of Global Industry Services

To verify the authenticity of this license, go to www.api.org/compositelist.



American Petroleum Institute

2018-151 | Digital

Certificate of Authority to use the Official API Monogram

License Number: 6A-2250 **ORIGINAL**

The American Petroleum Institute hereby grants to

GUIDE VALVE WUXI LIMITED
Building M, No. 30 Wanquan Road
Xishan District
Wuxi, Jiangsu
People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6A** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6A-2250**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Gate, Ball, Plug Valves at PSL 1, PSL 2, PSL 3, PSL 4

QMS Exclusions: Servicing

Effective Date: JULY 16, 2024
Expiration Date: JULY 16, 2027

Senior Vice President of Global Industry Services

To verify the authenticity of this license, go to www.api.org/compositelist.

GUIDE VALVE
WUXI LIMITED

API Q1 & APIQR-ISO CERTIFICATIONS



API American Petroleum Institute

REGISTRATION NO. Q1-3641

Certificate of Registration

The American Petroleum Institute certifies that the quality management system of

GUIDE VALVE WUXI LIMITED
Building M, No. 30 Wanquan Road
Xishan District
Wuxi, Jiangsu
People's Republic of China

has been assessed by the American Petroleum Institute and found to be in conformance with the following:

API Spec Q1, 9th Edition

The scope of this registration and the approved quality management system applies to the

Design and Manufacture of Valves for the Petroleum and Natural Gas Industry

API approves the organization's justification for excluding

Servicing

Effective Date:	**JULY 16, 2024**
Expiration Date:	**JULY 16, 2027**
Registered Since:	**JULY 16, 2018**

Anchal Liddar

Senior Vice President of Global Industry Services

API Spec Q1 Registered

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of API Spec Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*, and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. This certificate has been issued from API offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of API and must be returned upon request. **To verify the authenticity of this certificate, go to www.api.org/compositelist.**

2021-164 | 11.21 | Digital



QMS REGISTERED

Certificate of Registration

APIQR® REGISTRATION NUMBER
3983

This certifies that the quality management system of

GUIDE VALVE WUXI LIMITED
Building M, No. 30 Wanquan Road
Xishan District
Wuxi, Jiangsu
People's Republic of China

has been assessed by the American Petroleum Institute Quality Registrar (APIQR®) and found it to be in conformance with the following standard:

ISO 9001:2015

The scope of this registration and the approved quality management system applies to the

Design and Manufacture of Valves for the Petroleum and Natural Gas Industry

APIQR® approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date:	**JULY 16, 2024**
Expiration Date:	**JULY 16, 2027**
Registered Since:	**NOVEMBER 16, 2021**

Anchal Liddar

Senior Vice President of Global Industry Services

Accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management Systems

ANAB IAF

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of APIQR's Registration Program and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. Further clarifications regarding the scope of this certificate and the applicability of ISO 9001 standard requirements may be obtained by consulting the registered organization. This certificate has been issued from APIQR offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A., it is the property of APIQR, and must be returned upon request. **To verify the authenticity of this certificate, go to www.api.org/compositelist.**

QUALITY REGISTRAR

SIL-3 & ISO CERTIFICATIONS

ES Ltd.
Engineering safety

CERTIFICATE OF COMPLIANCE

Certificate Owner: **Guide Valve Limited**
51 Terecar Dr Unit 1
Woodbridge, ON L4L 0B5

The assessment concluded that the overall Functional Safety Lifecycle frame work employed by Guide Valve Limited (GVS) for the provision of the scoped shut-off valves are in accordance with the requirements of IEC 61508:2010 and thus satisfy the requirement for use within a Safety Related System as a Safety Integrity Level (SIL) capable element.

Systematic Capability: SC 3 (SIL 3)
Architecture Capability: Type A Device, Route 2H

Notes:

- Average Probability of Failure On Demand (PFDAvg) and Hardware Fault Tolerance must be verified for each application.
- The Safety Function is specified as the ball valve shall move to the designated safe position as per application design.

This certification is supported by:

- IEC 61508:2010 Part 1 and Part 2 Functional Safety Assessment (Route 1s) which concludes Systematic Capability (SC) up to an including SIL 3 documented in FSES reports ES_P250105_FS001 iss. 0 and ES_P250105_FS002 iss. 0.
- Failure Mode, Effect & Criticality Analysis (FMECA) which demonstrates Random Hardware Reliability and Architectural Constraints suitability (Route 2H) for use in a SIL 2 application in a 1oo1 configuration and SIL 3 application in a 1oo2 configuration documented in FSES report ES_P250105_FM001 iss. 0.

The scoped valves are as follows:

1. GVS Trunnion Mounted Soft Seated Ball Valves.
2. GVS Trunnion Mounted Metal to Metal Ball Valve.
3. GVS Special Trim Valves wet or dry.
4. GVS Triple Seated Ball Valves.
5. VCI Floating Type Valves.

Document No.: ES_P20105_CE001 Iss. 0
Date of Issue: 30th of August 2025
Expiry date: 30th of August 2030
ES Rep.: EUR ING Amir H. Akhlaghi BEng (Hons.) FS Eng (TÜV Rheinland) MSaRS MIET

Systematic Capability

The process associated with design, development and management of the manufacturing process for the scoped valves has met the requirements for SC 3 and thus has deemed the products suitable for use in a SIL 3 application. The intention of SC is to control and minimize systematic failures and to achieve sufficient integrity against such failures in design and manufacturing processes.

intertek
Total Quality. Assured.

CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Guide Valve Limited

Main Site: 51 Terecar Drive, ,
Woodbridge, Ontario, L4L 0B5, Canada

has been registered by Intertek as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

The design and manufacturing of valves.

Certificate Number:
0052985

Initial Certification Date:
06 September 2016

Date of Certification Decision:
18 August 2025

Issuing Date:
18 August 2025

Valid Until:
05 September 2028

ANAB ACCREDITED
intertek

Rathin Grover
President, Business Assurance

Intertek Testing Services NA,
Inc. dba Intertek,
4700 Broadmoor SE Suite 200 Kentwood,
Michigan 49512, United States

In the issuance of this certificate, Intertek assumes no liability to any party other than to the Client, and then only in accordance with the agreed upon Certification Agreement. This certificate's validity is subject to the organization maintaining their system in accordance with Intertek's requirements for systems certification. Validity may be confirmed via email at CertificateValidation@intertek.com or by scanning the code to the right with a smartphone. The certificate remains the property of Intertek, to whom it must be returned upon request.

FUGITIVE EMISSION CERTIFIED
API-641 & ISO 15848-1



API Standard 641, First Edition, 2016
Test Report
"Type Testing of Quarter-turn Valves for Fugitive Emissions"

Performed for

Guide Valve Limited

www.gvs-vci.com

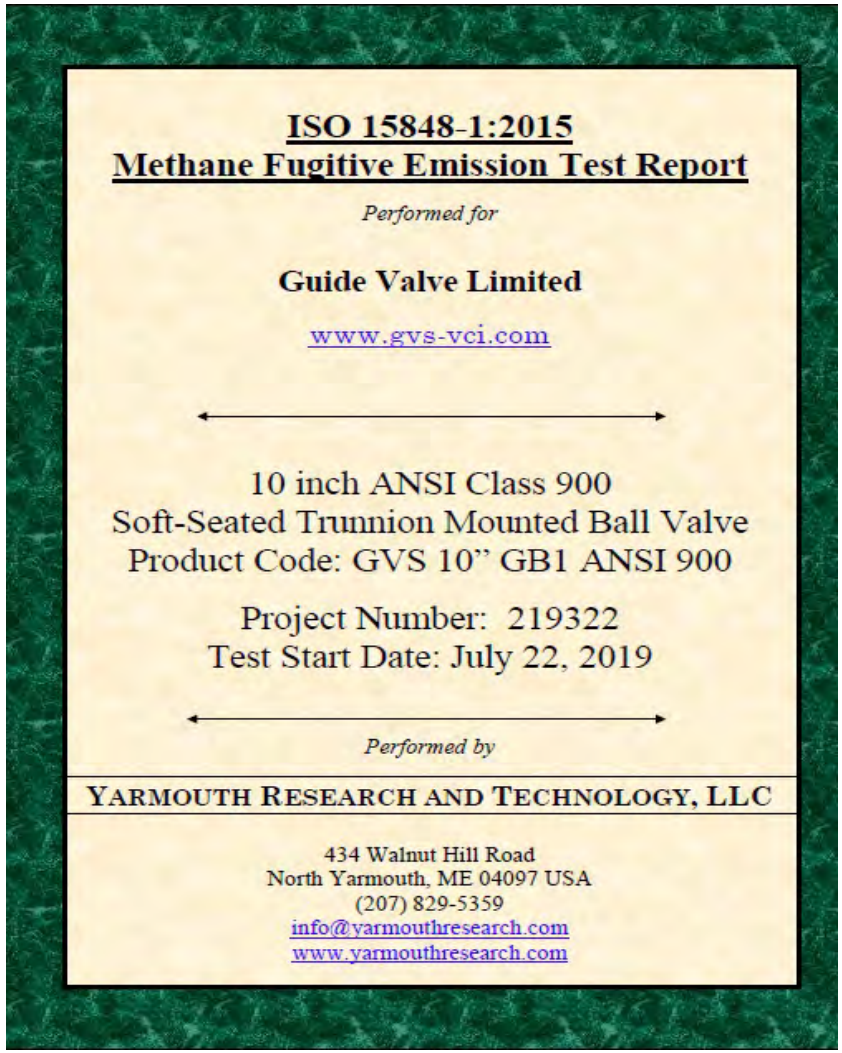
4 inch ANSI 2500 Trunnion Mounted Ball Valve
Product Code: 4" ANSI 2500 GB1

Project Number: 220106
Test Start Date: March 12, 2020

Performed by

YARMOUTH RESEARCH AND TECHNOLOGY, LLC

434 Walnut Hill Road
North Yarmouth, ME 04097 USA
(207) 829-5359
info@yarmouthresearch.com
www.yarmouthresearch.com



ISO 15848-1:2015
Methane Fugitive Emission Test Report

Performed for

Guide Valve Limited

www.gvs-vci.com

10 inch ANSI Class 900
Soft-Seated Trunnion Mounted Ball Valve
Product Code: GVS 10" GB1 ANSI 900

Project Number: 219322
Test Start Date: July 22, 2019

Performed by

YARMOUTH RESEARCH AND TECHNOLOGY, LLC

434 Walnut Hill Road
North Yarmouth, ME 04097 USA
(207) 829-5359
info@yarmouthresearch.com
www.yarmouthresearch.com

API 607 & 6FA FIRESAFE CERTIFICATES



SGS

Certificate No.: IN-SH-5801-23165

CONFORMITY CERTIFICATE FOR FIRE TESTING

(Acc. to API 6FA-2020 Standard for Fire Test for Valves)
(Acc. to API 607-2016 Standard for Fire Test for Valves)

SGS Reference No.:	IN-SH-5801-23165
Name and Address of License Holder :	GUIDE VALVE LIMITED Building M, No. 30 Wanquan Road, Xishan District, Wuxi,Jiangsu Prov, China
Name and Address of Manufacturer :	GUIDE VALVE LIMITED Building M, No. 30 Wanquan Road, Xishan District, Wuxi,Jiangsu Prov, China
Type of Valve:	Ball Valve
Description of Valve:	1PC. Ball Valve,GW/NPS8 Class600 LF2, Refer to Appendix 1 to this certificate
Drawing No.:	STD-23-0075
Test Report No. :	: J23-295-WT-01 & J23-295-WT-02
Qualified Range:	NPS 8 and larger; Class 600,800, 900
Valid until:	June 16, 2028

We hereby certify that the results of tests carried out under our witness on the industrial valve(s) below meeting the requirements in the standard mentioned above.

This certificate does not imply assessment of the production of the product reflects only our witness findings at the time and the place of test and does not refer to any other matters.

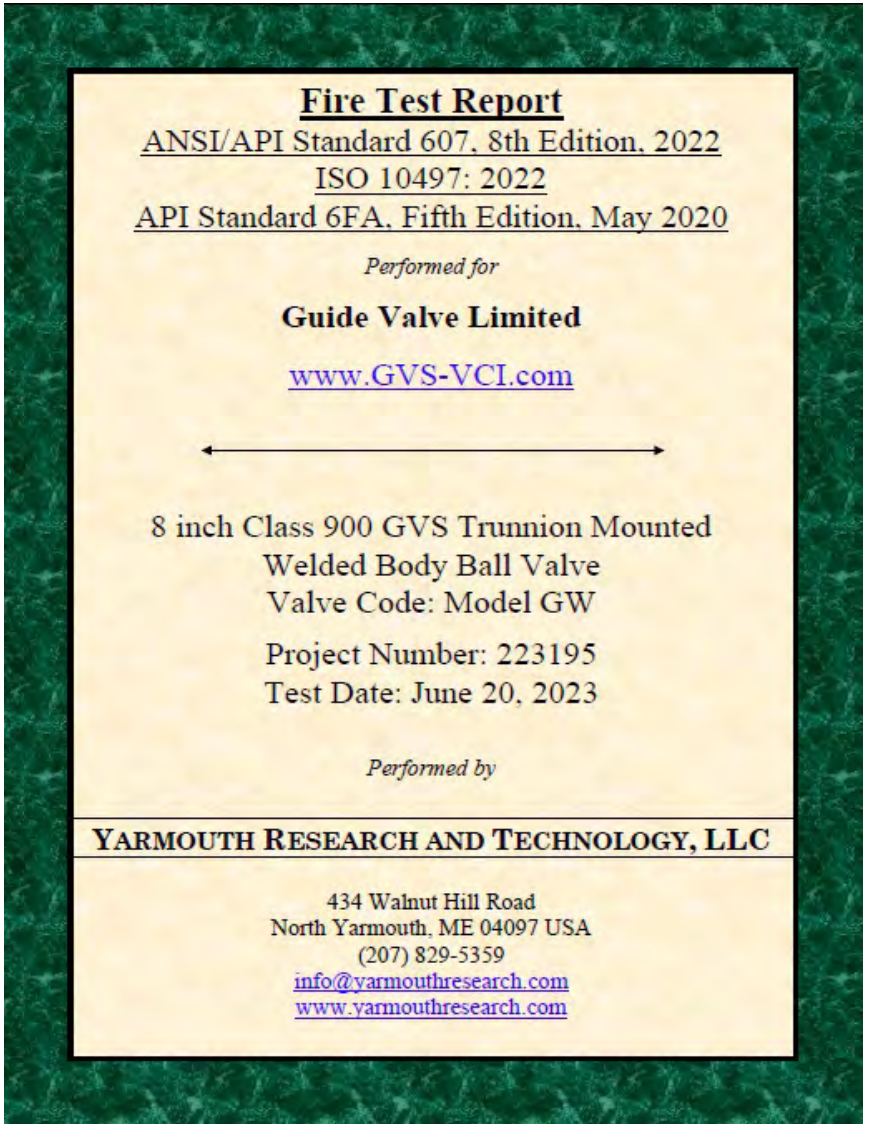
FOR AND ON BEHALF OF SGS-CSTC
STANDARDS TECHNICAL SERVICES CO., LTD.

AUTHORIZED SIGNATURE
Issued at Shanghai, China On June 19,2023

This document is issued, on the Client's behalf, by the Company under its General Conditions of Service printed overleaf. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

SGSPAPER
20872584



Fire Test Report

ANSI/API Standard 607, 8th Edition, 2022
ISO 10497: 2022
API Standard 6FA, Fifth Edition, May 2020

Performed for

Guide Valve Limited

www.GVS-VCI.com

8 inch Class 900 GVS Trunnion Mounted
Welded Body Ball Valve
Valve Code: Model GW

Project Number: 223195
Test Date: June 20, 2023

Performed by

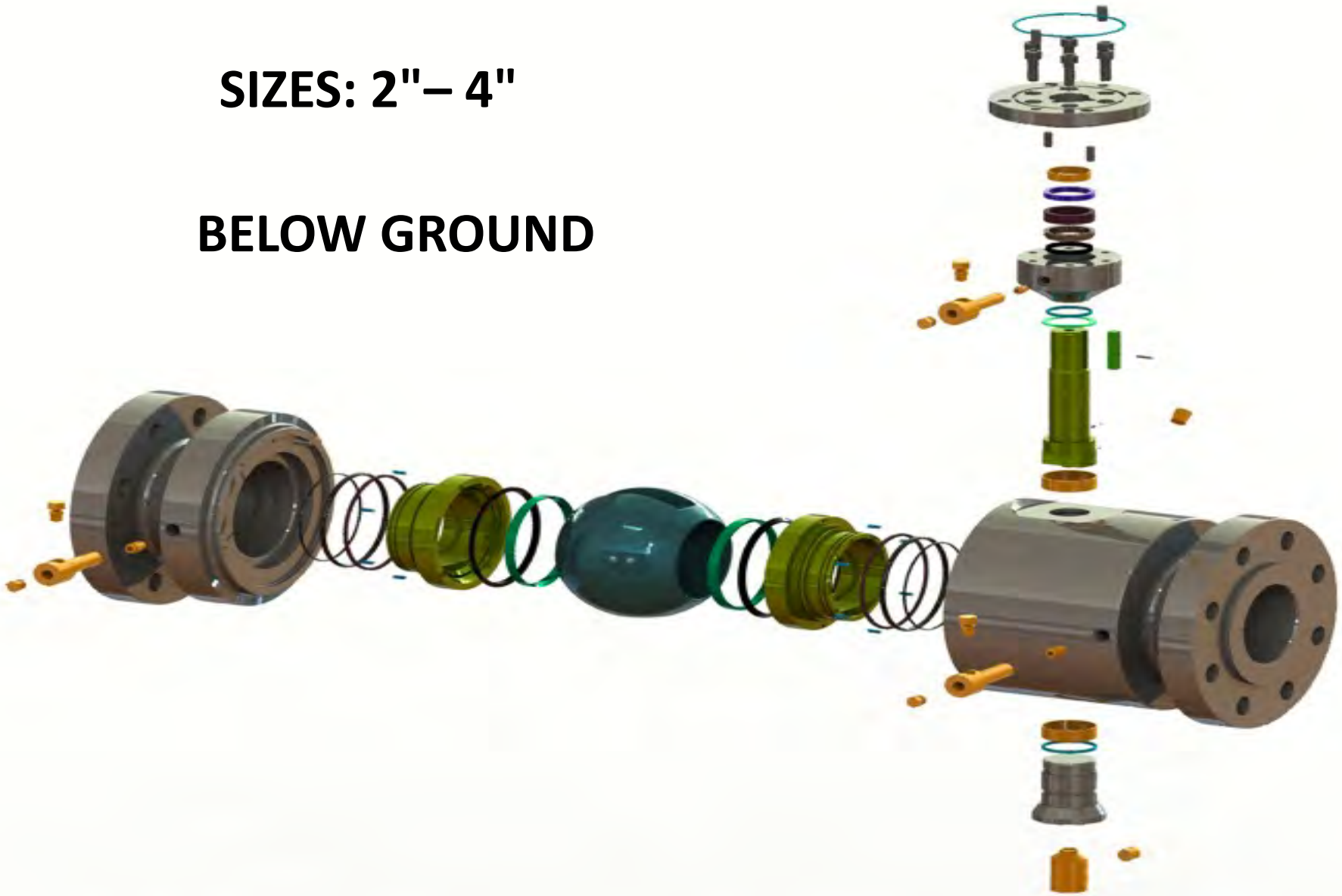
YARMOUTH RESEARCH AND TECHNOLOGY, LLC

434 Walnut Hill Road
North Yarmouth, ME 04097 USA
(207) 829-5359
info@yarmouthresearch.com
www.yarmouthresearch.com

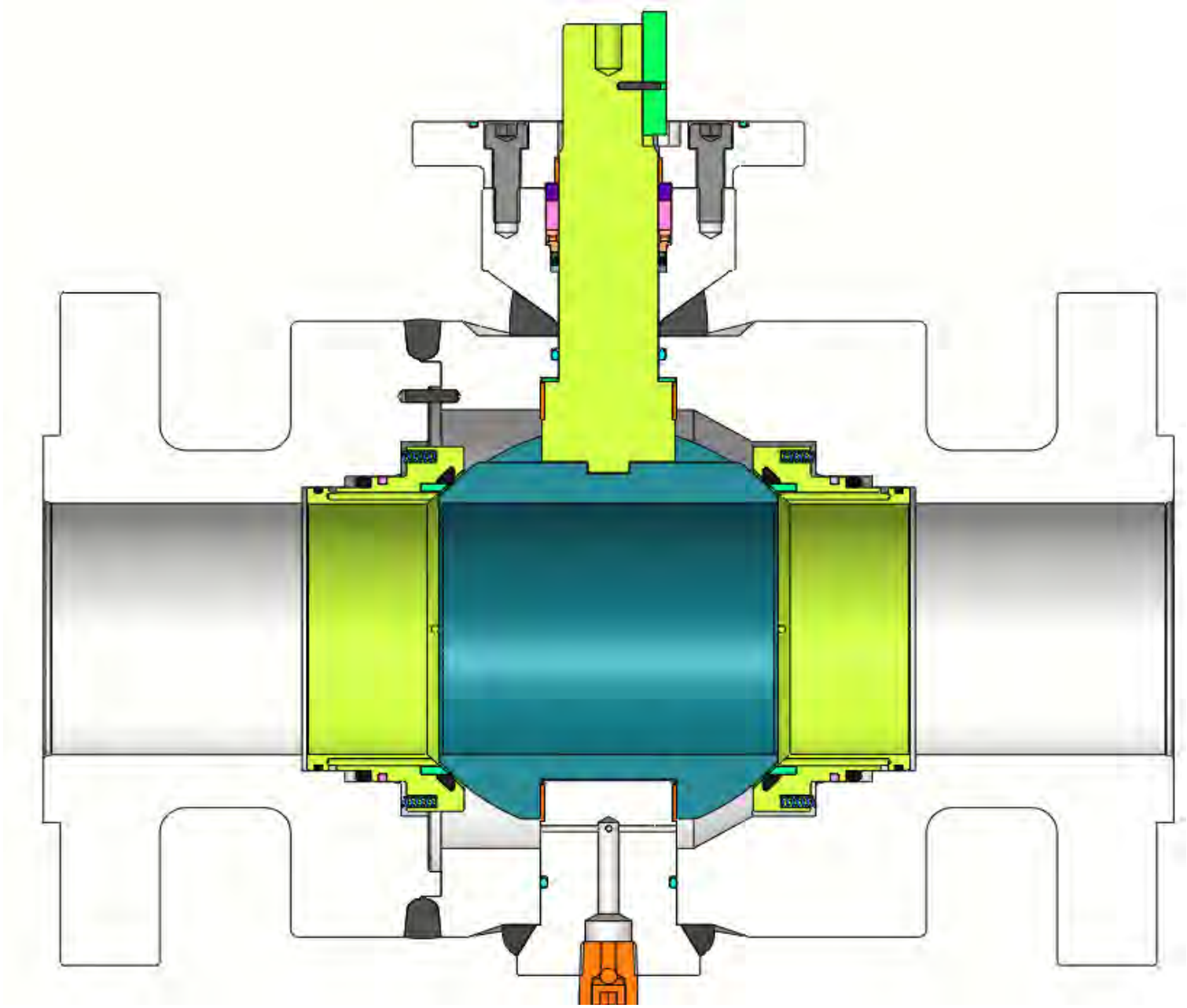
GW WELDED BODY

SIZES: 2"– 4"

BELOW GROUND



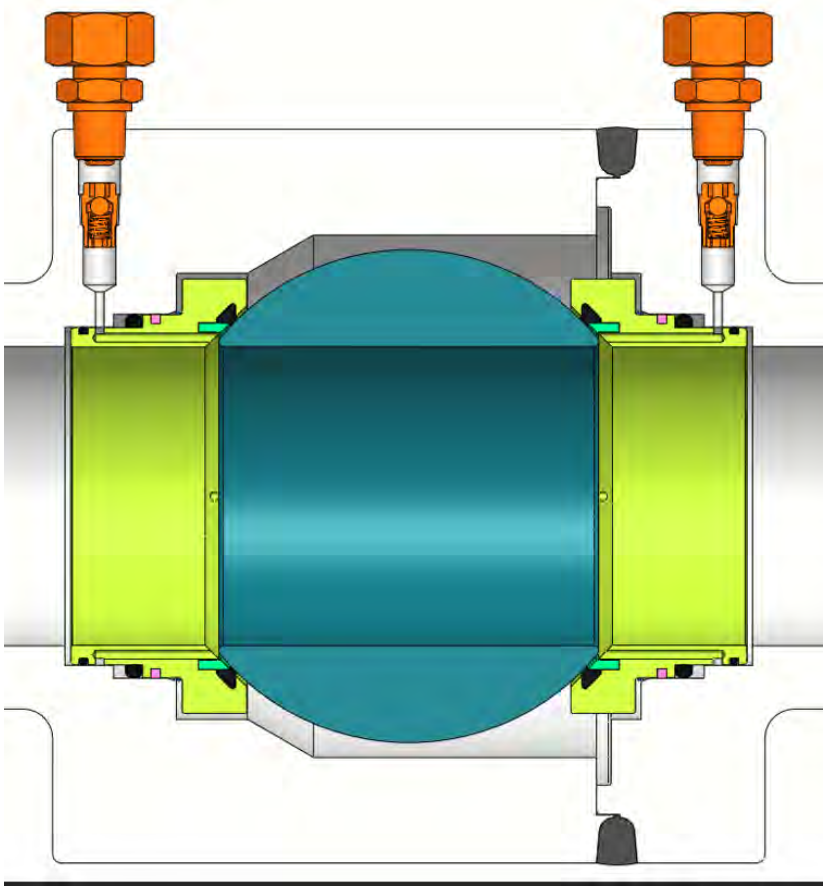
SIZES: 2"– 4"



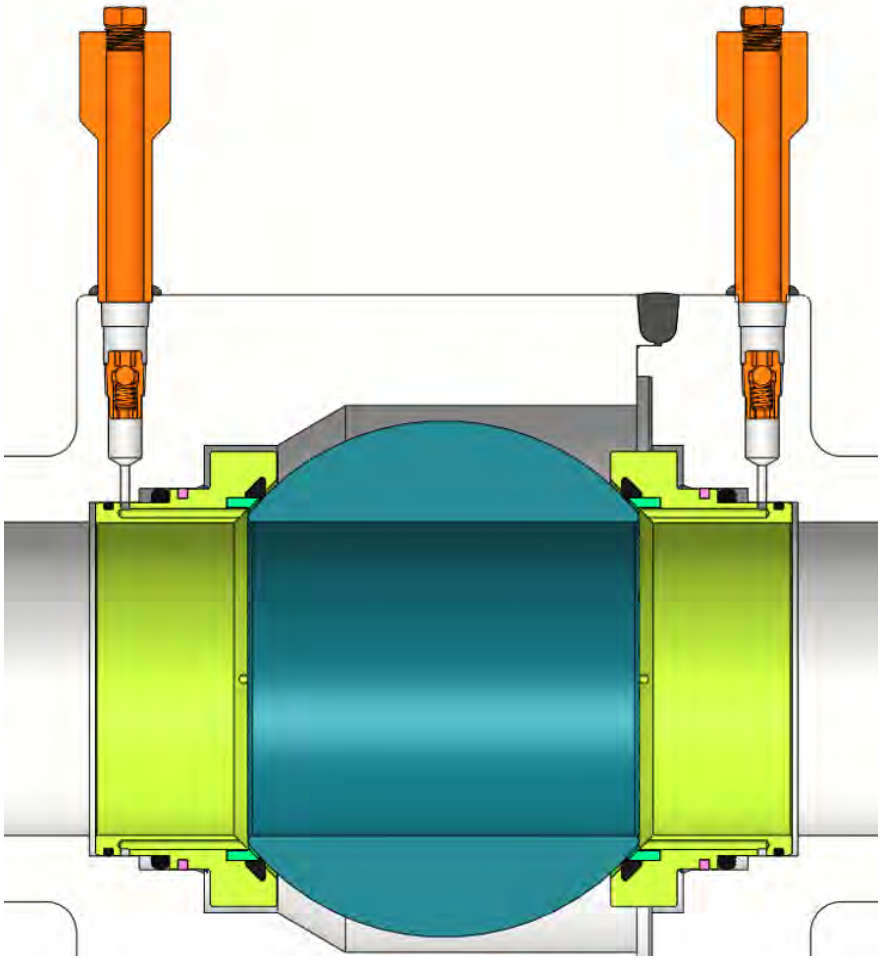
SEAT INJECTION SEALING DESIGN

SIZES 2" - 4" – WELDED BODY

ABOVE GROUND



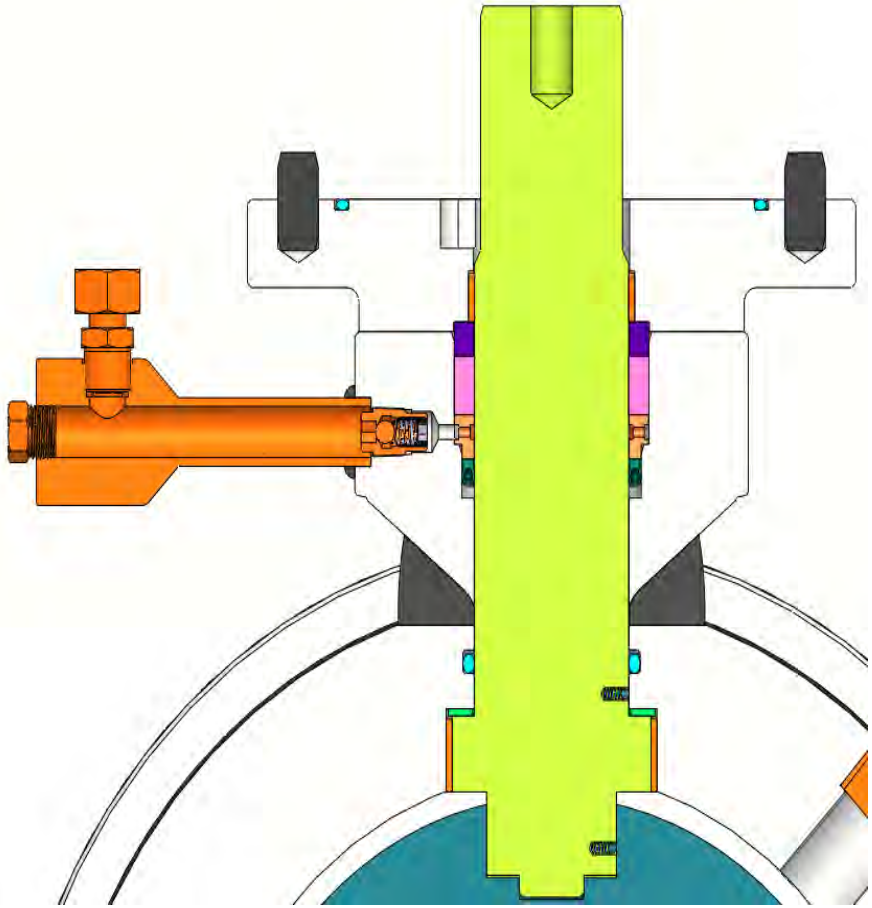
BELOW GROUND



STEM INJECTION SEALING DESIGN

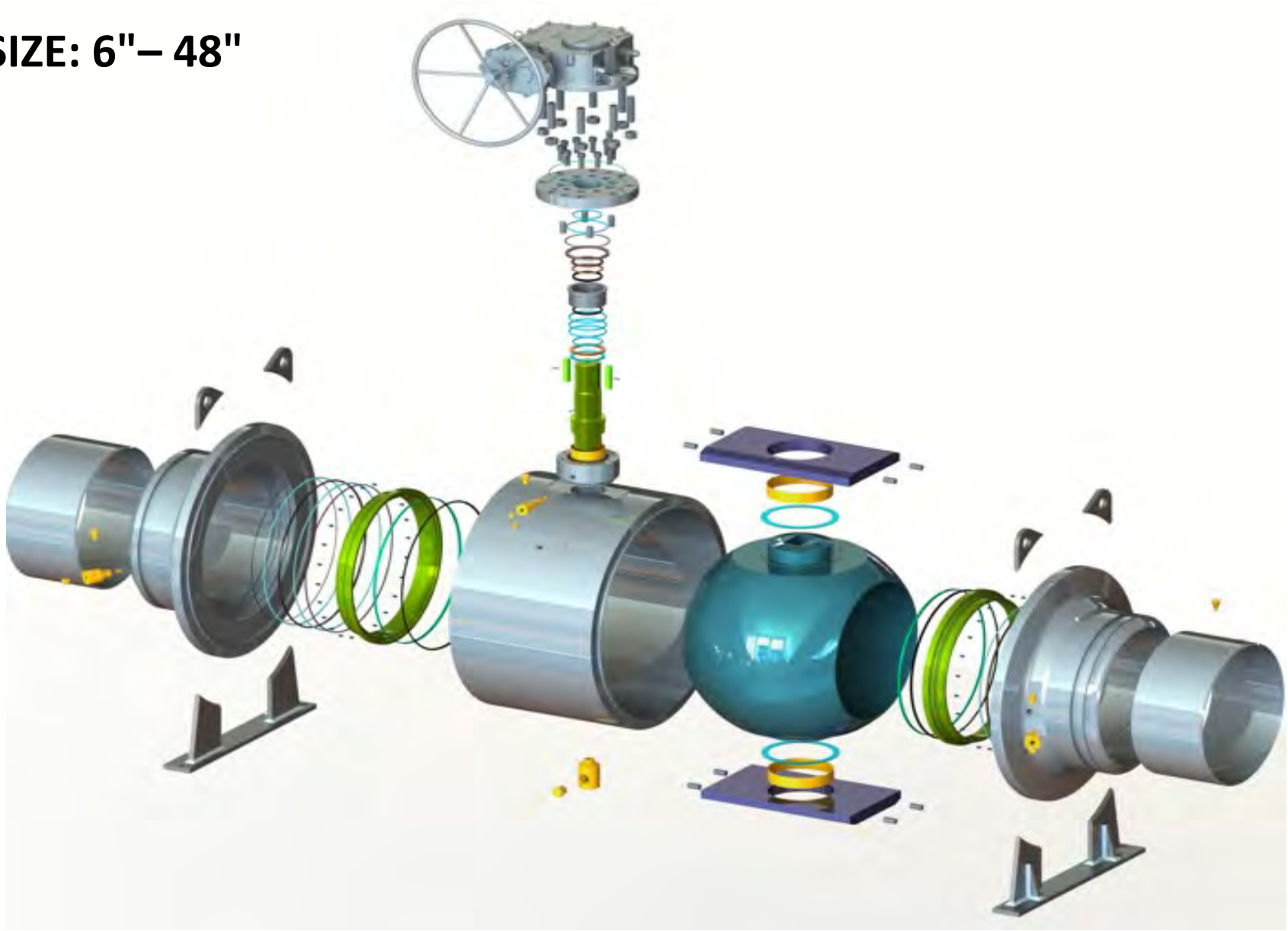
2"– 4"–WELDED BODY

ABOVE & BELOW GROUND

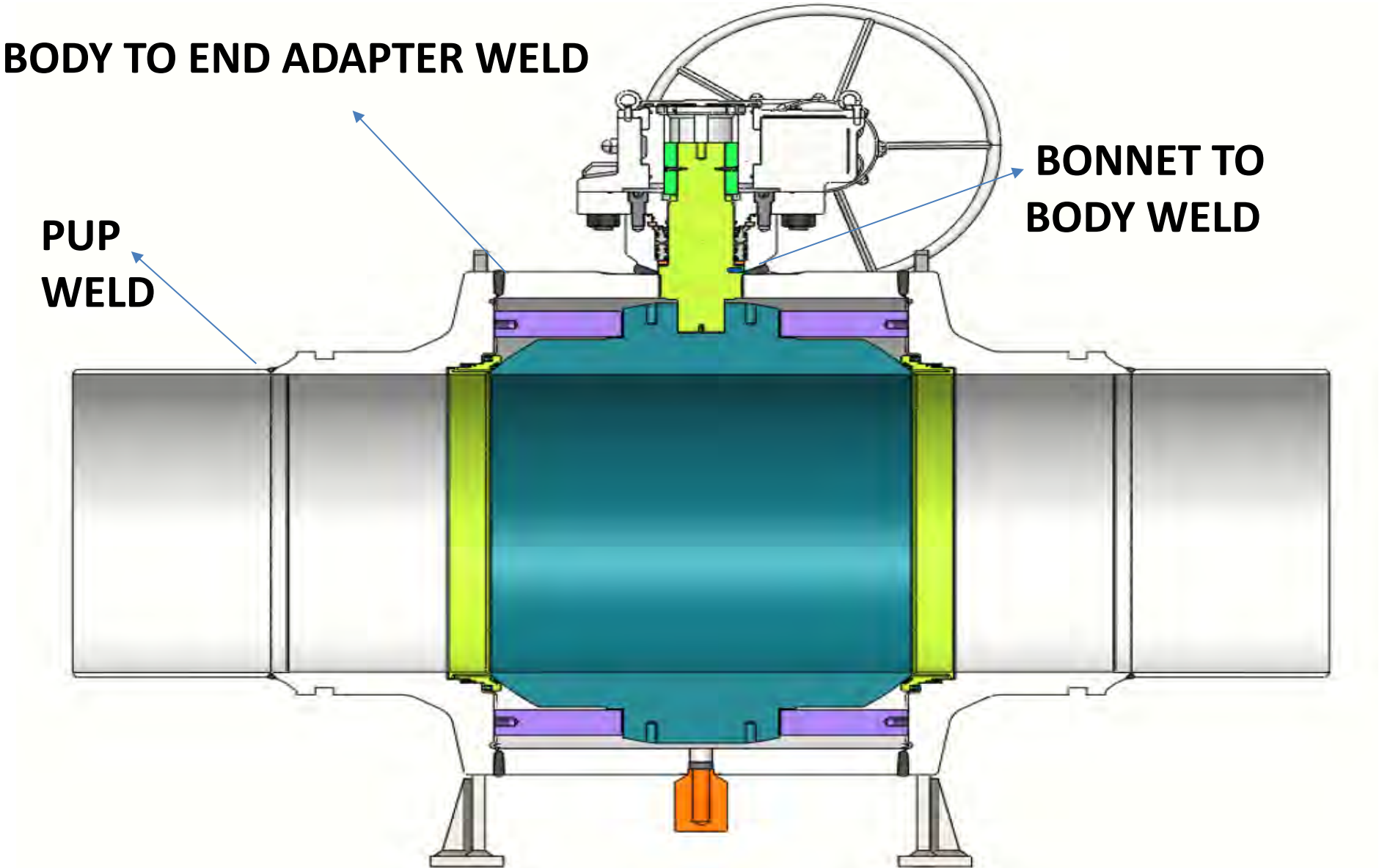


SIZES: 6"– 48"

SIZE: 6"– 48"



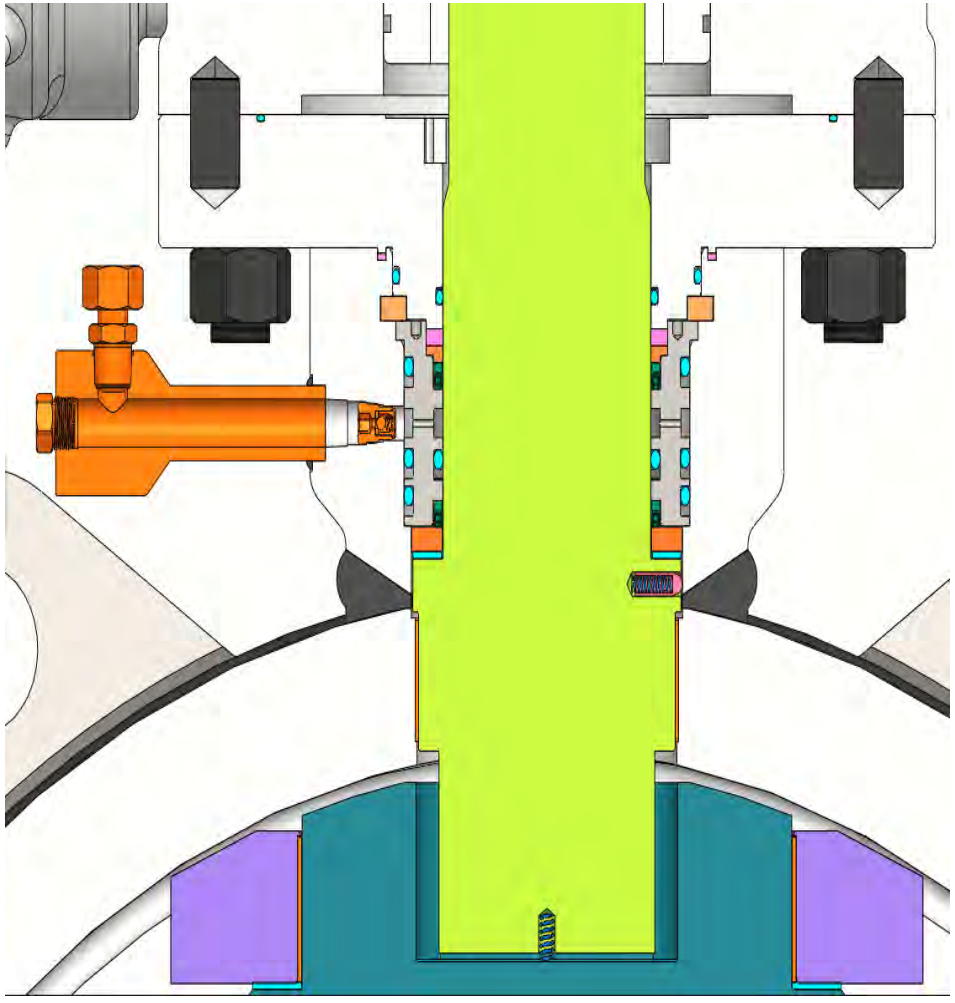
SIZES: 6"– 48" – WELDED BODY



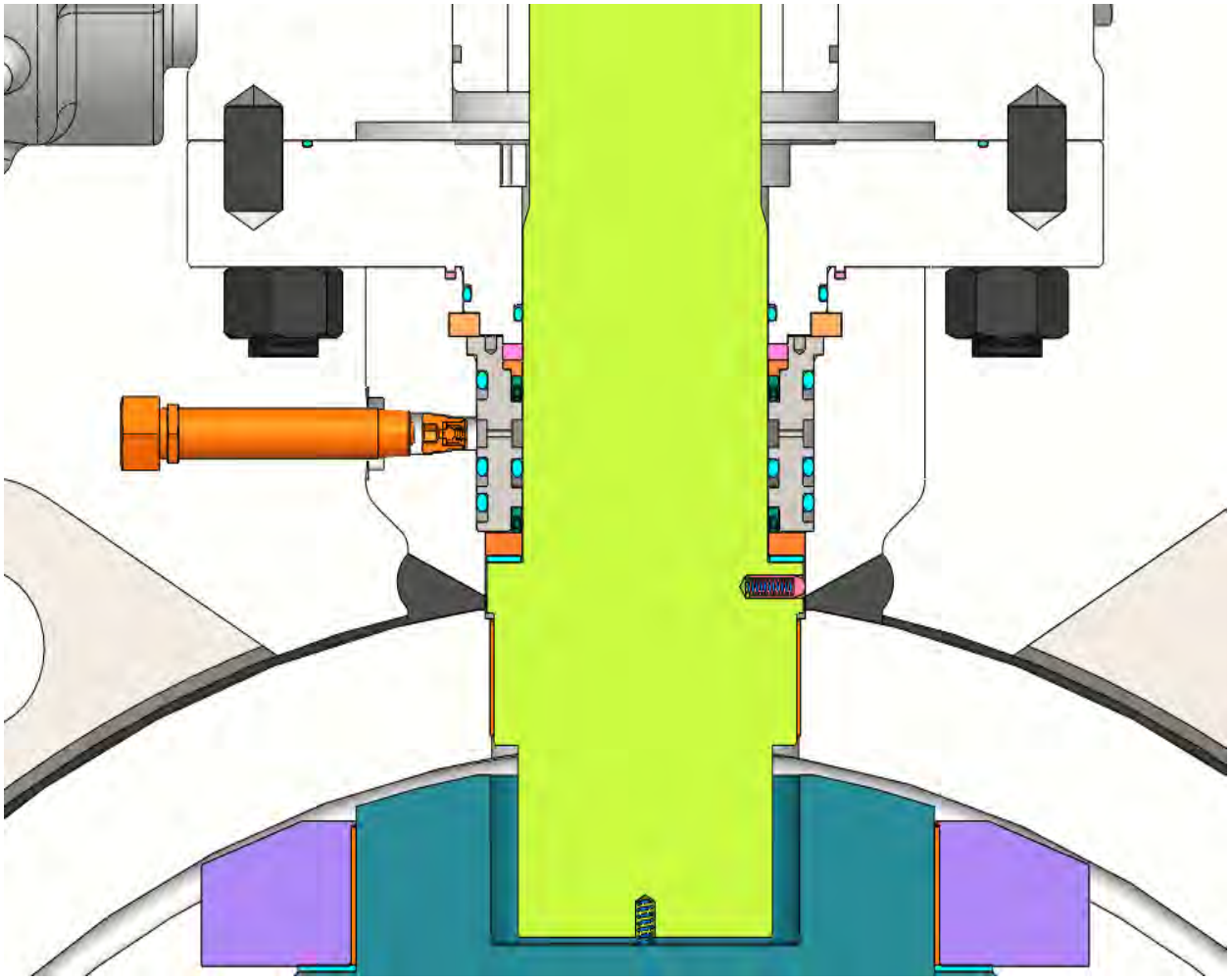
STEM INJECTION SEALING

SIZES: 6"– 48" – WELDED BODY

BELOW GROUND



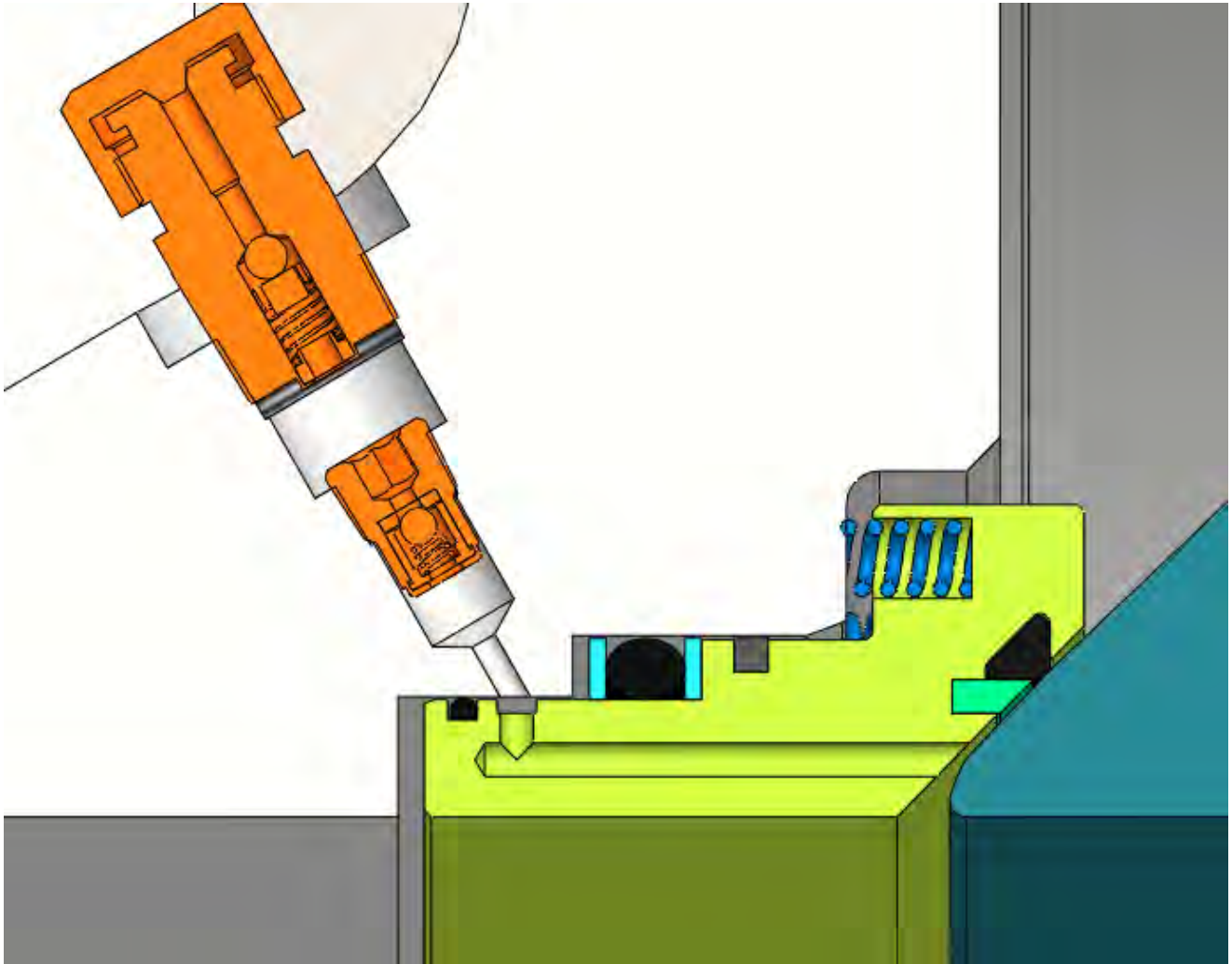
STEM INJECTION SEALING
SIZES: 6"– 48" – WELDED BODY
ABOVE GROUND



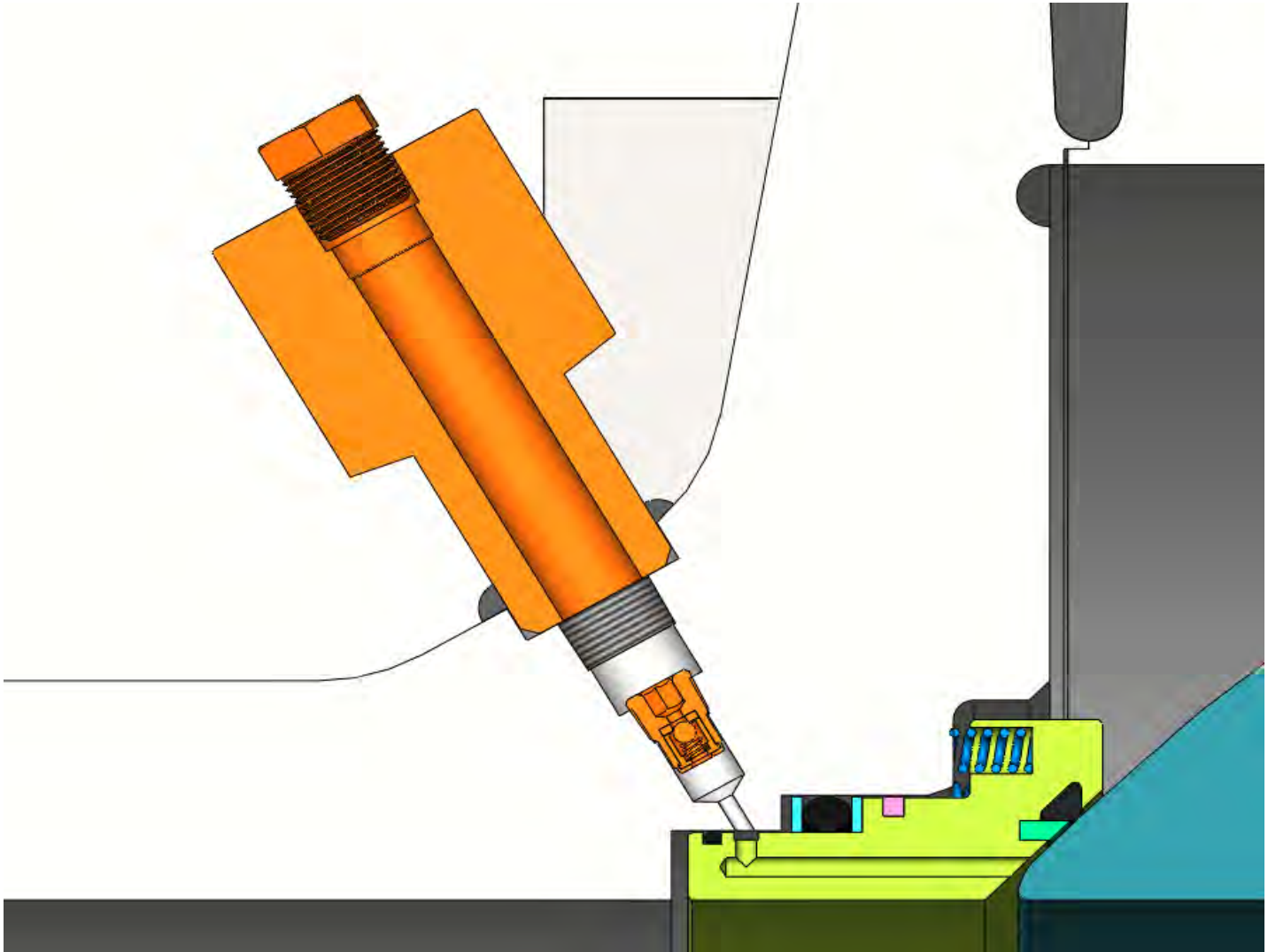
SEAT INJECTION SEALING

SIZES: 6"– 48 – WELDED BODY

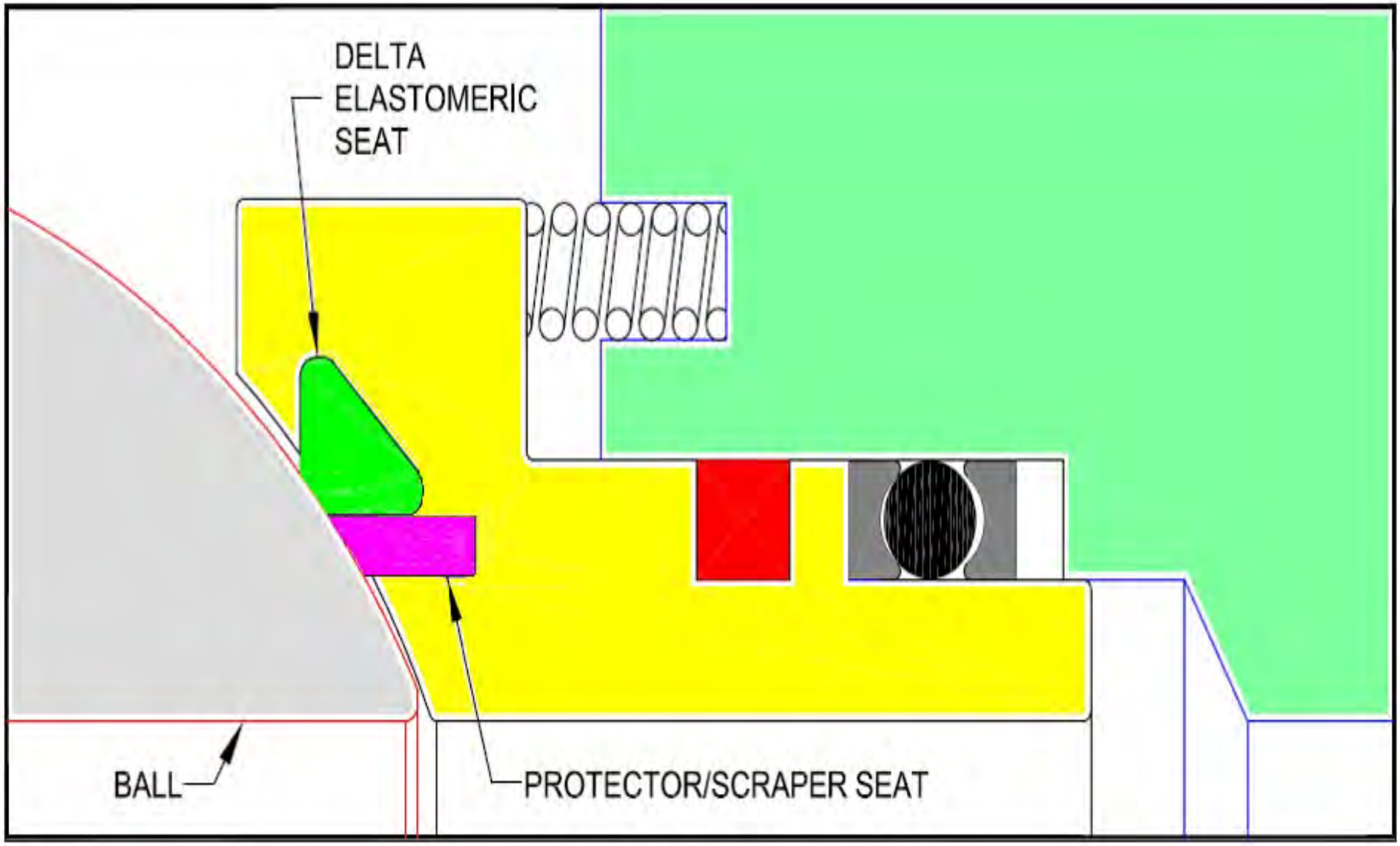
ABOVE GROUND



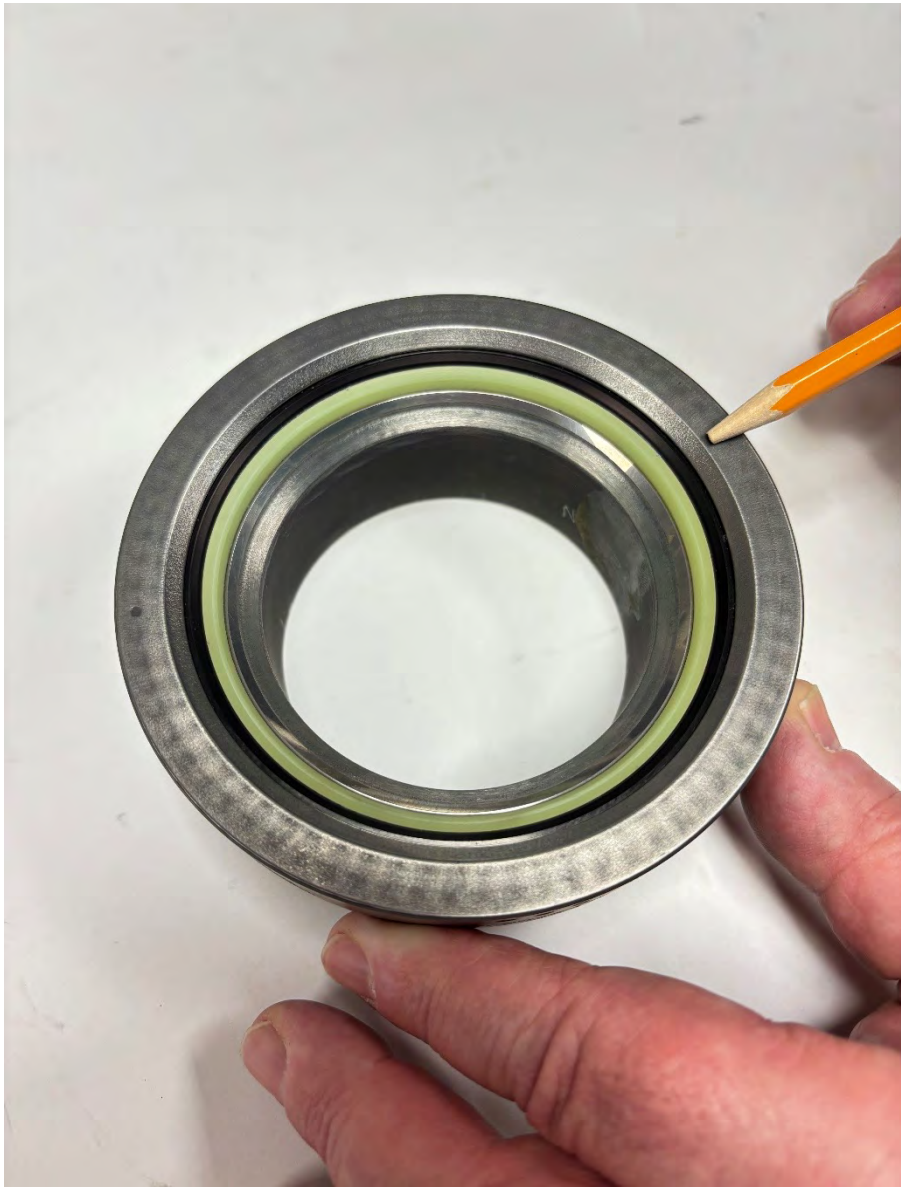
SEAT INJECTION SEALING
SIZES: 6"– 48 – WELDED BODY
BELOW GROUND

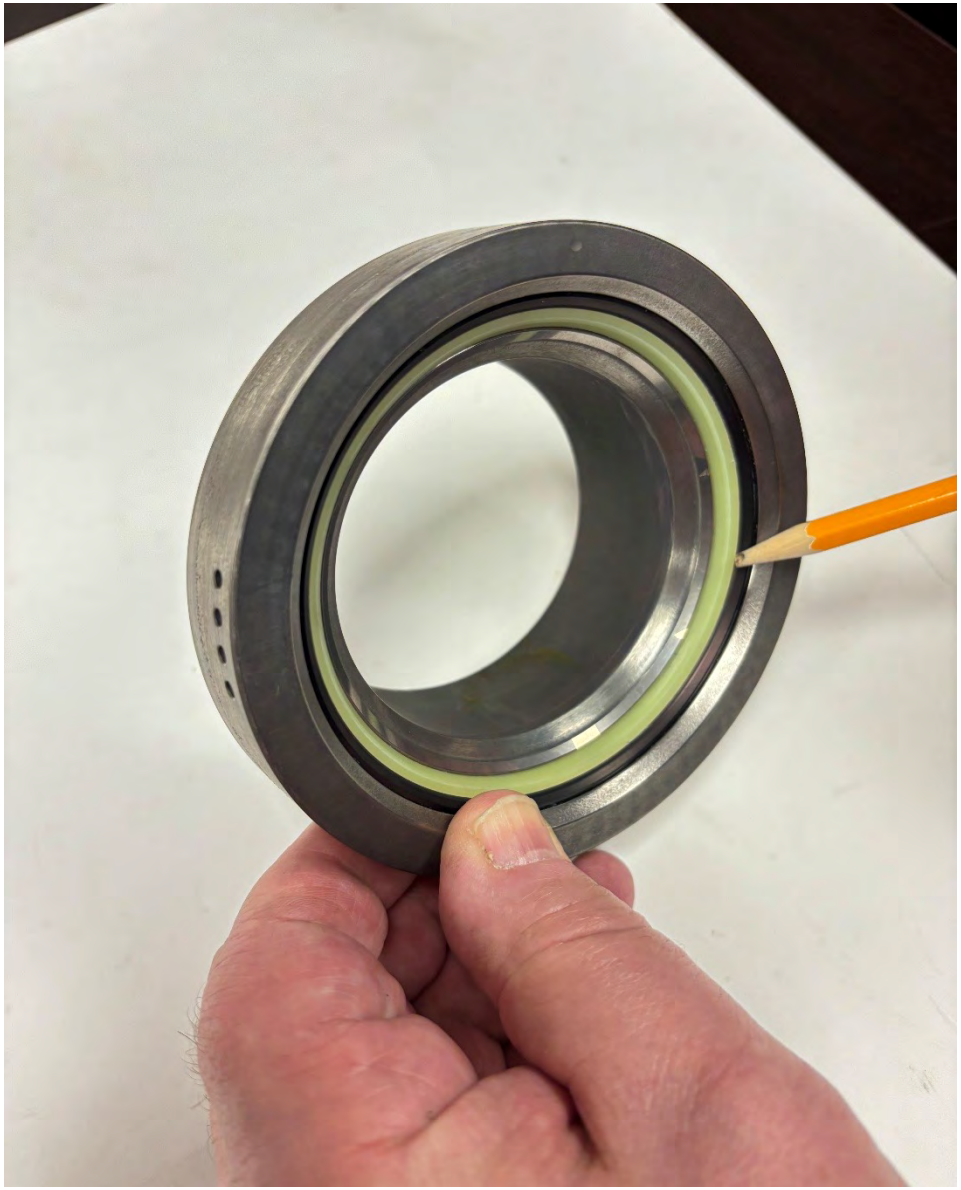


SEAT to BALL SEAL DESIGN

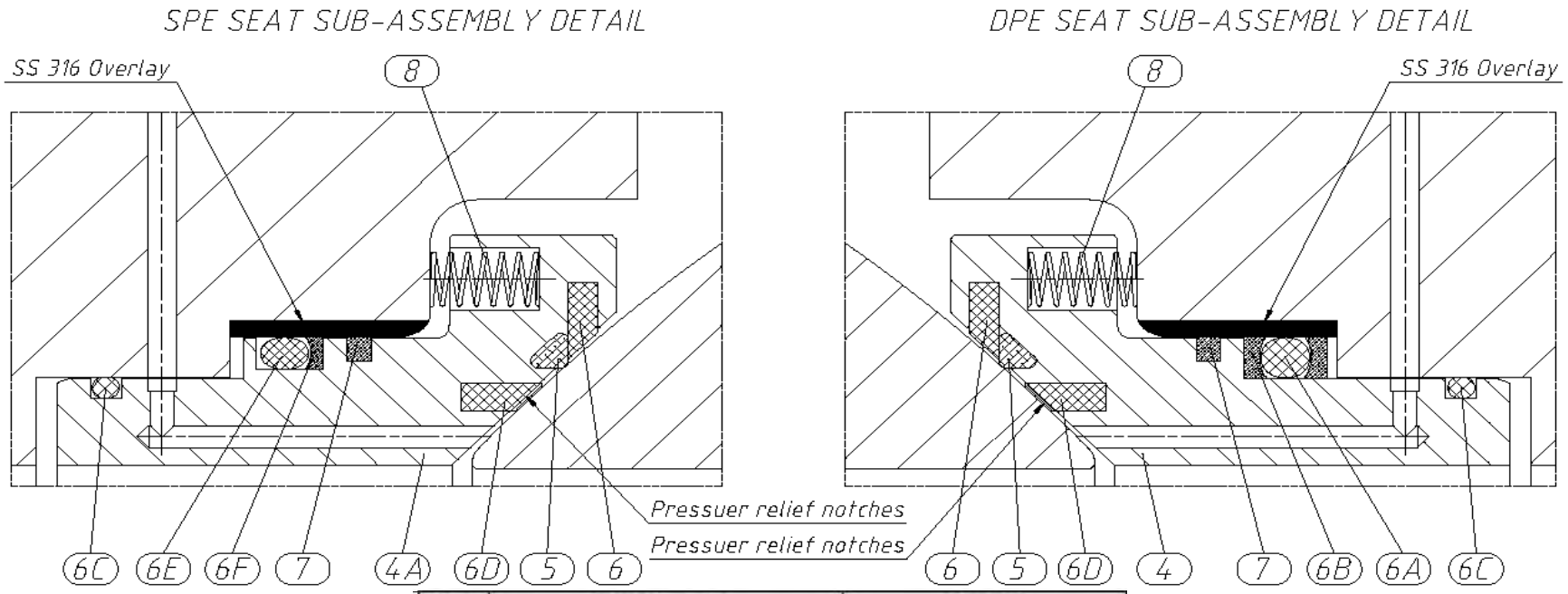


Protector / Scraper Seat





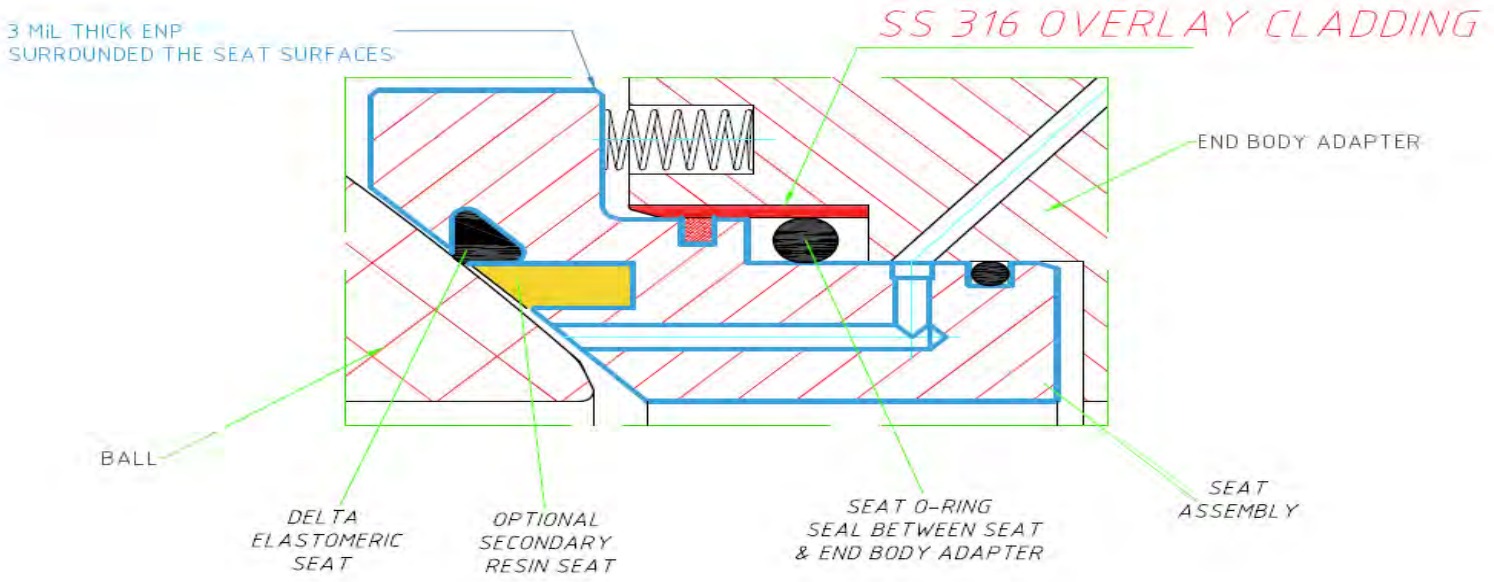
SEAT to BALL SEAL DESIGN
Sizes 30" and Larger



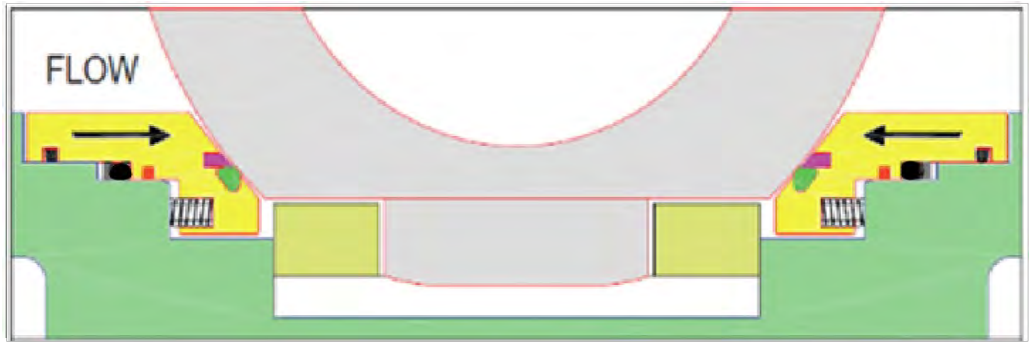
Item	Part Description	Material
004	DPE Seat	A350 LF2 Class 1 + ENP 3 mil
04A	SPE Seat	A350 LF2 Class 1 + ENP 3 mil
005	Seat delta ring	FKM LT AED
006	Metallic split ring	SS 316
06A	DPE Seat main O-ring	FKM LT AED
06B	DPE Seat back-up ring	RPTFE
06C	Seat grease O-ring	FKM LT AED
06D	Seat Protector	DEVLON V
06E	SPE Seat main O-ring	FKM LT AED
06F	SPE Seat back-up ring	RPTFE
007	Seat fire-safe seal	Braided flexible graphite string
008	Seat springs	Inconel X-750

STAINLESS STEEL OVERLAY CLADDING

Purpose of Stainless Steel Overlay Cladding in the Seat Pocket Area of the End Adaptor for Carbon Steel Body Valves that are intended for extended storage of time or potential project delays.
GVS recommends applying a corrosion resistant alloy cladding (SS-316)
in that specific surface area.
This is to assure the proper functionality of the seat seals to end body adaptor by the elimination of all or any surface rust in that specific location.



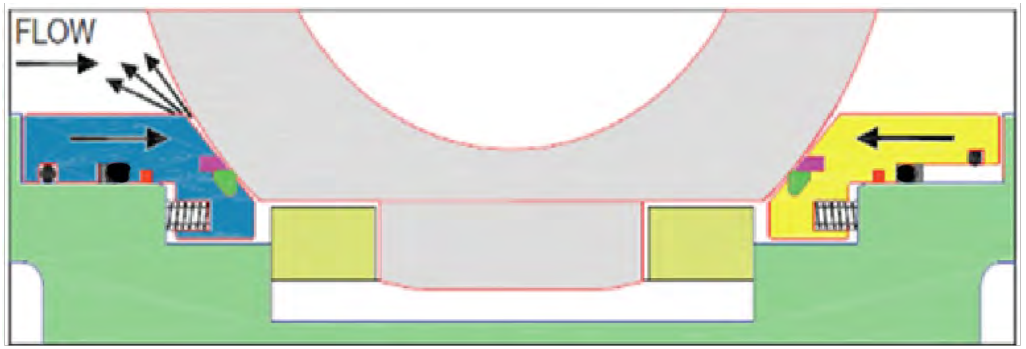
SEAT CONFIGURATIONS



Double Piston Effect

DPE x DPE = DIB 1

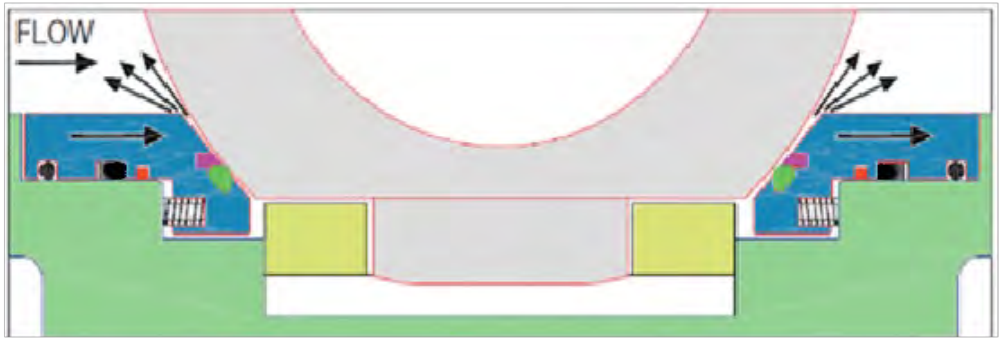
Double Block & Bleed



Single Piston x Double Piston Effect

SPE x DPE = DIB 2

Double Block & Bleed

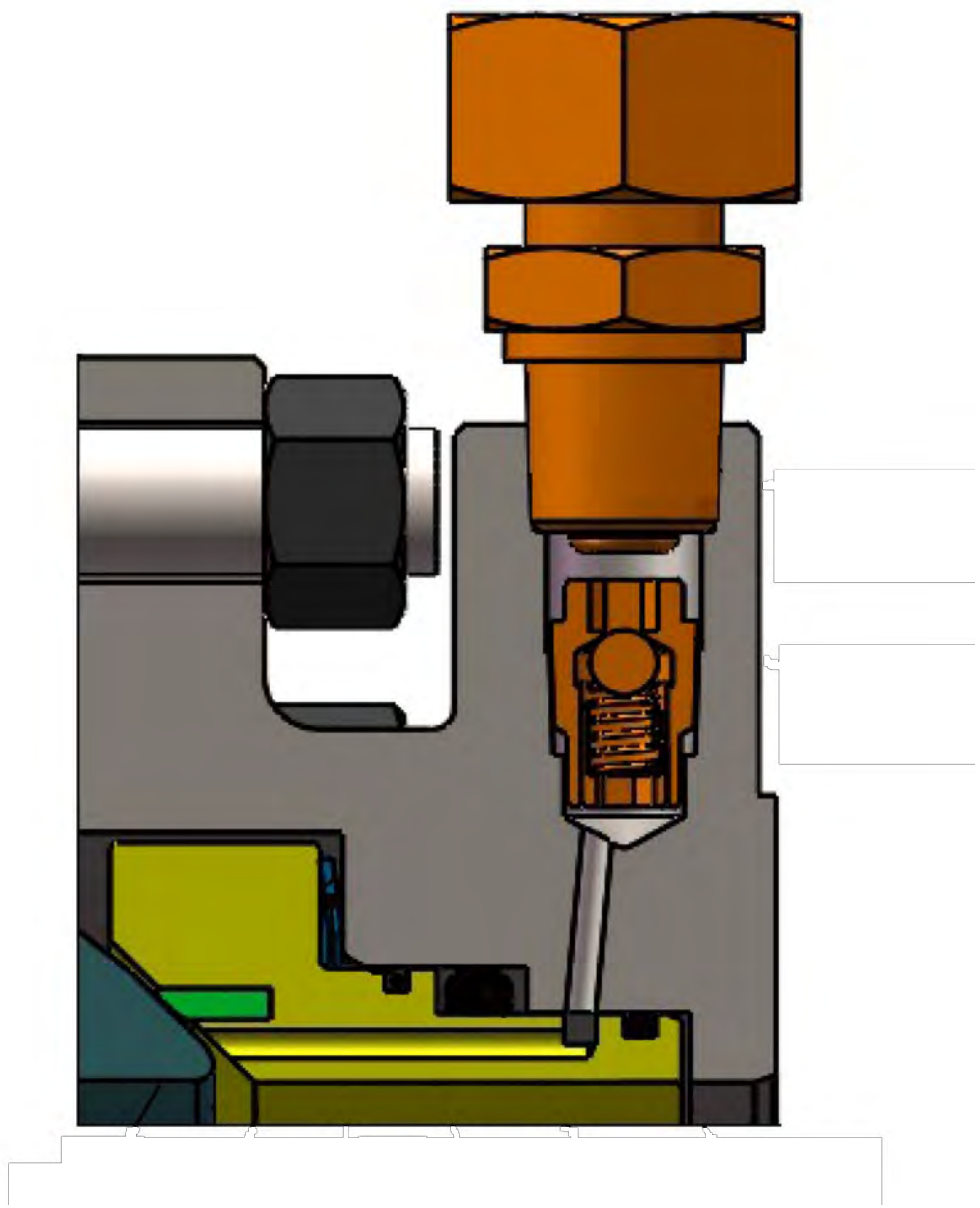


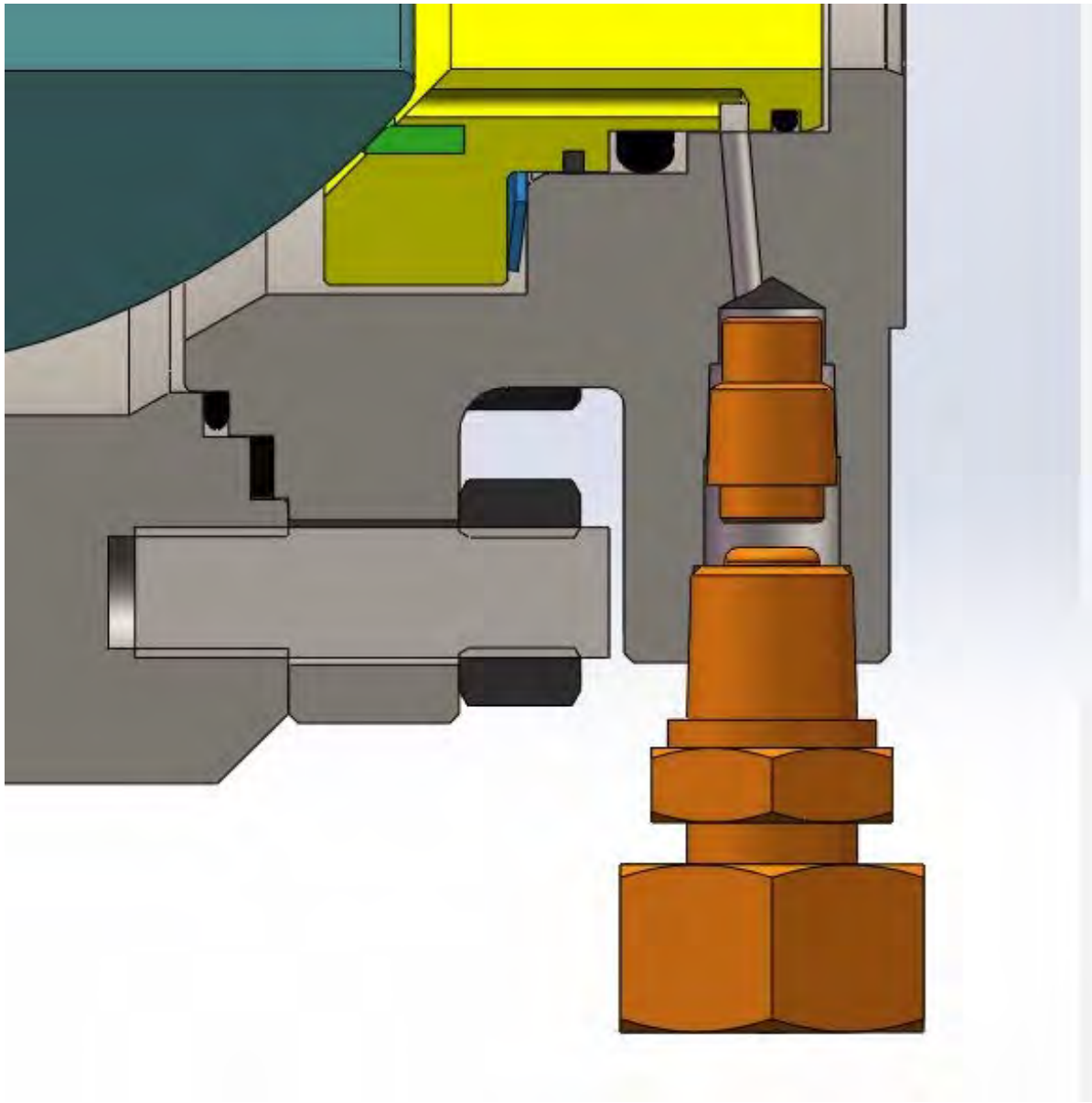
Single Piston x Single Piston Effect

SPE x SPE

Double Block & Bleed

EMERGENCY SEAT INJECTION PORTS (OPTIONAL)



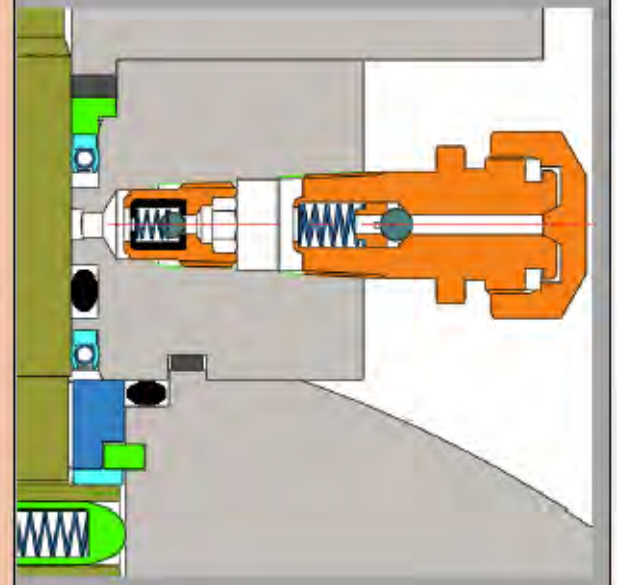


FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#1	**Tested valve size: 10" ANSI 900** 	Stem sealing design is consisted of lower lip seal, middle Elastomer O-ring, upper lip seal and fire safe graphite seal.	The body seals are Elastomer O-rings + graphite seal.	Fugitive emission certified to +200°C (+392°F)	ISO 15848-1 endurance class CO3 tightness class AM	ANSI 150 to ANSI 900	ISO 15848-1 certificate 219322 dated: Jul 22, 2019

Standardization (unless quoted otherwise):

This design is standardized on bolted body valve model GB2 trim codes 04, 15, 60, 62, 70 and 72, sizes 6" and larger, ANSI classes 150 to 900

(Qualified Stem diameter range: 37.5 mm to 150 mm.)

- Certified range codes 04, 60, 62, 70 and 72:
  ANSI 150: Size 6" to 30"
  ANSI 300: Size 6" to 30"
  ANSI 600: Size 6" to 30"
  ANSI 900: Size 6" to 24"

- Certified range code 15:
  ANSI 150: Size 6" to 24"
  ANSI 300: Size 6" to 24"
  ANSI 600: Size 6" to 24"
  ANSI 900: Size 6" to 16"

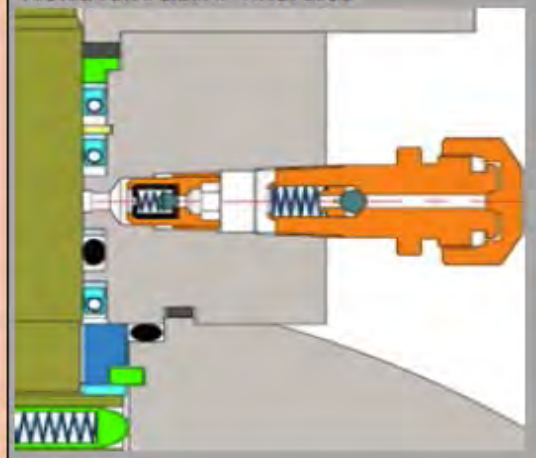
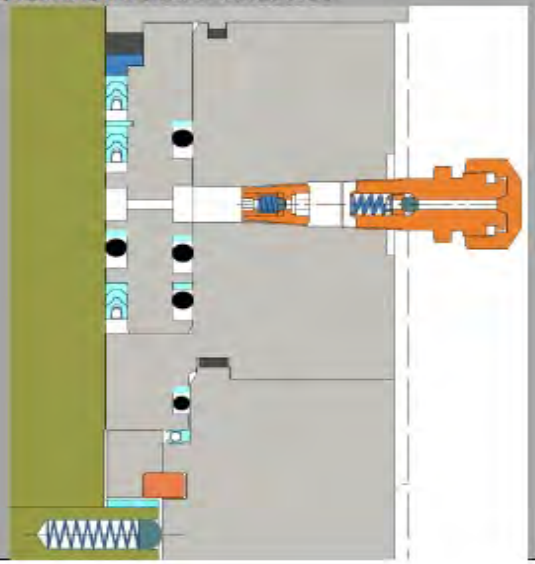
Note: This valve was additionally continued for cycle testing to 25,000 after fugitive emission certification was accomplished upon 2,500 cycles with tightness class AM.

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#2	Tested valve size: 4" ANSI 2500  And Tested valve size: 8" ANSI 1500 	Stem sealing design is consisted of lower lip seal, two upper lip seals and top fire safe graphite seal. The 8" ANSI 1500 valve has been certified with stem seals carrier with three Oring seals to stem bonnet. This design is certified without the middle O-ring so if required by service conditions, the Oring could be removed.	The body seals are spiral wound graphite filled gaskets.	4" ANSI 2500: Fugitive emission certified to +240°C (+464°F) 8" ANSI 1500: Fugitive emission certified according to ISO 15848-1 at +120°C (+248°F) And according to API 641-2nd at +120°C (+248°F)	4" ANSI 2500: API 641-1st 8" ANSI 1500: ISO 15848-1 endurance class CO3 tightness class BH and API 641-2nd	ANSI 150 to ANSI 2500	4" ANSI 2500: API 641 certificate: 220106 dated March 12, 020 8" ANSI 1500: API certificate: 316341 dated Dec 21, 2024 ISO certificate: 316272 Dec 21, 2024

Standardization (unless quoted otherwise):

These designs are standardized on bolted body valve model B2 trim codes 04, 15, 60, 62, 70 and 72, sizes 2" to 4" ANSI classes 900 to 1500, Model GB2 sizes 2" and larger ANSI 2500, and Model GB2 sizes 6" and larger ANSI 1500 and 2500.
Note: the standardization of the 8" ANSI 1500 certified design is with solid stem bonnet design without the stem bushing O-rings.

(4" ANSI 2500: Qualified Stem diameter range 28.5 mm to 114 mm.)
(8" ANSI 1500: Qualified Stem diameter range 63.5 mm to 254 mm.)

- Certified range codes 04, 60, 62, 70 and 72:
  ANSI 900: Size 3" to 4"
  ANSI 1500: Size 3" to 36"
  ANSI 2500: Size 2" to 16"

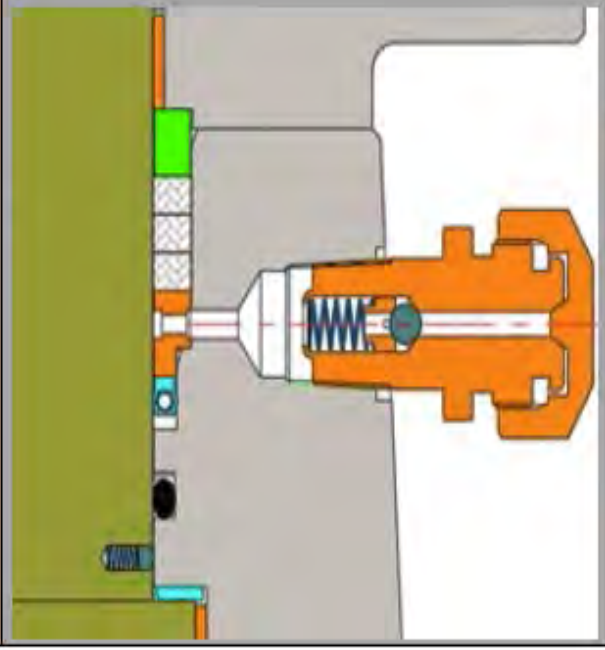
- Certified range code 15:
  ANSI 900: Size 3" to 4"
  ANSI 1500: Size 3" to 20"
  ANSI 2500: Size 2" to 8"

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

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GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#3	**Tested valve size: 2" ANSI 600** 	Stem sealing design is consisted of lip seal and one set of compression graphite packings.	The body seals are spiral wound graphite filled gaskets.	Fugitive emission certified according to ISO 15848-1 at +200°C (+392°F) And according to API 641 at +177°C (+350°F)	ISO 15848-1 endurance class CO3 tightness class AM and API 641-1st	ANSI 150 to 600	API 641 certificate: 221233 dated March 11, 2022 ISO 15848-1 certificate: 221232 dated March 17, 2022

Standardization (unless quoted otherwise):

This design is standardized on bolted body valve model B2 with code 04 sizes 2" to 4" ANSI 300 & 600 and on welded body valves model GW 2" to 4" ANSI 150 to 600 (***2-piece*** body valves)

(Qualified Stem diameter range: 12 mm to 48 mm.)

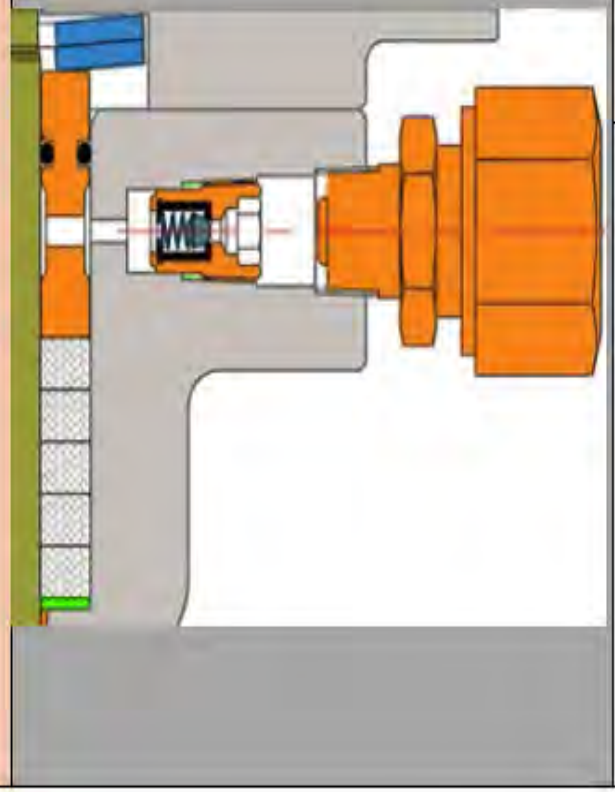
- Certified range bolted body model B2 codes 04:
  ANSI 300 to 600: Size 2" to 4"
- Certified range welded body model GW codes 04:
  ANSI 150 to 600: Size 2" to 4"

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUSAPPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#4	Tested valve size: 3" ANSI 600, 8" ANSI 1500 Pending 	Stem sealing design is consisted of multi-layer compression graphite packings live loaded with spring discs.	The body seals are spiral wound graphite filled gaskets only.	Fugitive emission certified to +350°C (+662°F) According to both API 641-1st and ISO 15848-1	API 641-1st And ISO 15848-1 endurance class CO2 tightness class CH	ANSI 150 to ANSI 600 And to ANSI 1500 Pending	API certificate: 219548 dated Jan 07, 2020 ISO certificate: 219547 dated Jan 10, 2019

Standardization (unless quoted otherwise):

This design is standardized on bolted body valve model B1 and GB1 code 14 sizes 2" and larger ANSI classes 150 to 2500

(Qualified Stem diameter range: 16.4 mm to 65.6 mm, and to 189.6 mm Pending)

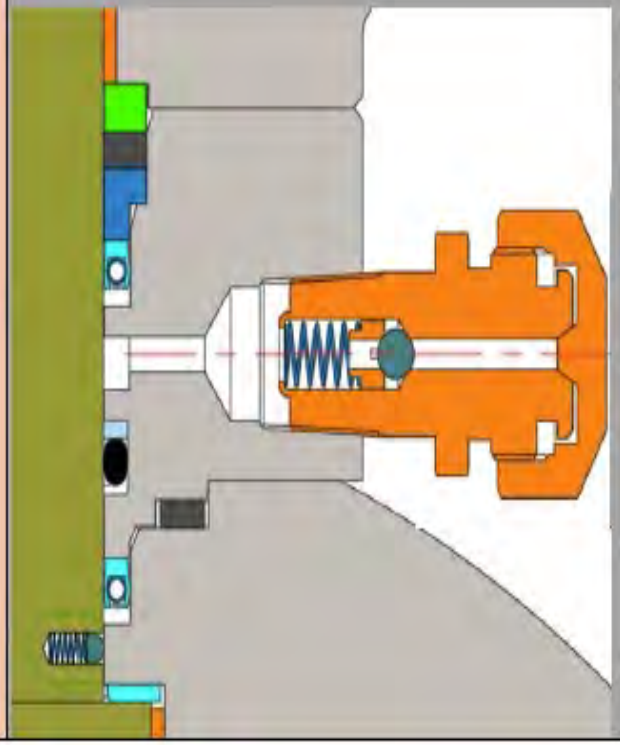
- Certified range model B1 codes 14:
  ANSI 150: Size 2" to 10" (up to 24" pending)
  ANSI 300: Size 2" to 10" (up to 24" pending)
  ANSI 600: Size 2" to 10" (up to 24" pending)
  ANSI 900: Size 2" to 16" (pending)
  ANSI 1500: Size 2" to 16" (pending)

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#5	**Tested valve size: 2" ANSI 1500** 	Stem sealing design is consisted of lower lip seal[1], upper lip seal and graphite seal.	The body seals are spiral wound graphite filled gasket.	Fugitive emission certified according to ISO 15848-1 at +120°C (+248°F) And according to API 641-2nd at +121°C (+250°F)	ISO 15848-1 endurance class CO3 tightness class AM and API 641-2nd	ANSI 150 to ANSI 1500	API certificate: M 3242451 dated Oct 08, 2024 ISO certificate: M 324 246 1 dated Oct 14, 2024

Standardization (unless quoted otherwise):

This design is standardized on bolted body model B2 code 04 sizes 2" to 4" ANSI 150, and sizes 2" to 4" reduced port ANSI 300 and 600 and sizes 2" to 4" ANSI 300 and 600 codes 15, 60, 62, 70,72 sizes 2" to 4" ANSI 150 to 600, and. (***3-pc body design***)

(Qualified Stem diameter range: 15 mm to 60 mm.)

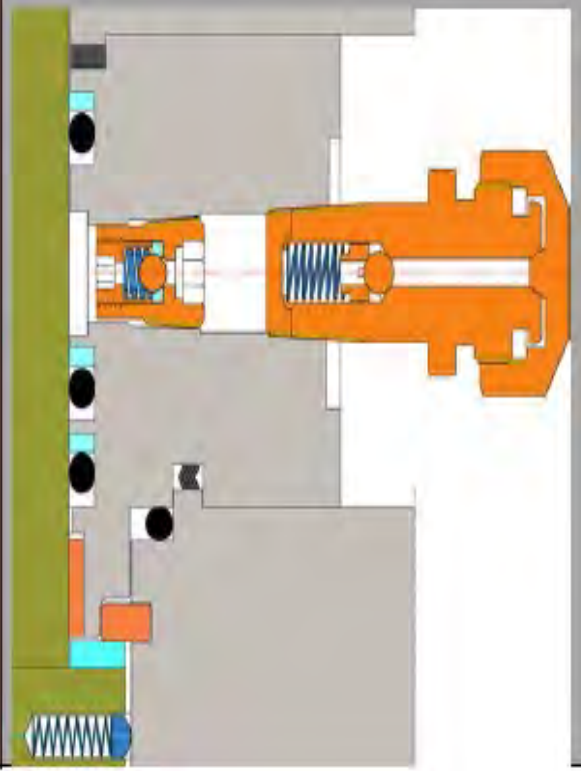
- Certified range model B2 and B3 codes 04, 15, 60, 62, 70, 72:
  ANSI 150 to 600: Sizes 2" to 4"

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#6	Tested valve size: 8" ANSI 1500 and 3" ANSI 1500 	Stem sealing design is consisted of three O-rings and fire safe graphite seal.	The body seals are Oring + spiral wound graphite filled gasket.	Fugitive emission certified according to API 641-2nd at +121°C (+250°F)	API 641-2nd	ANSI 150 to ANSI 1500	IN-SUZ-5805-25016 dated Dec 01, 2025

Standardization (unless quoted otherwise):

This design is standardized on bolted body model B2 code 00 sizes 2" to 4" ANSI 150 to 1500 and model GB2 code 00 sizes 6" to 24" ANSI 150 to 600.

(Qualified Stem diameter range: 17.5 mm to 150 mm.)

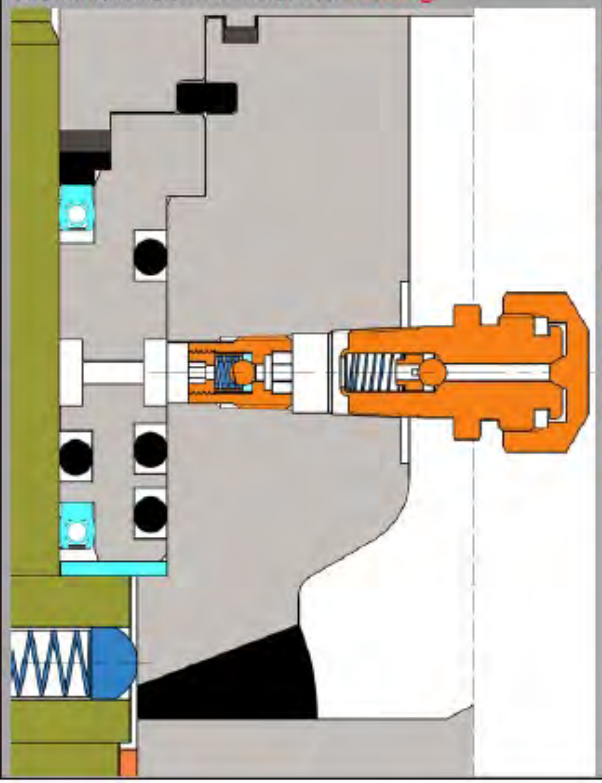
- Certified range model B2 codes 00:
  ANSI 150 to 1500: Sizes 2" to 4"
  ANSI 150 to 600: Sizes 6" to 24"

FUGITIVE EMISSION STEM SEALING SYSTEM FOR VARIOUS APPLICATIONS

GUIDE VALVE LIMITED

GVS® Trunnion Mounted Ball Valves Fugitive Emission Certified designs

Rev. 06, Date: Aug 04, 2026

No.	Test Valve / Stem Design Sketch	Stem Seal Design	Body Seal Design	Certified Temperature	Standard(s)	Qualified ANSI Class	Certificate Number
#7	**Tested valve size:16" ANSI 600** Pending 	Stem sealing design is consisted of three O-rings and fire safe graphite seal. This design utilizes a stem seals carrier with three Oring seals to stem bonnet.	Not applicable, fully welded body design.	Pending	API 641-2nd And ISO15848-1	ANSI 150 to 600	Pending

Standardization (unless quoted otherwise):

This design is standardized on fully welded body valves model GW code 04 or 04_9 sizes 6" and larger all ANSI classes.

(Qualified Stem diameter range: 45 mm to 180 mm. Pending)

- Certified range model GW codes 04 and 04_9:
  ANSI 150: Sizes 6" to 42"
  ANSI 300: Sizes 6" to 42"
  ANSI 600: Sizes 6" to 42"

Notes:

1-The Lip seals materials are PTFE, RTFE, PEEK, PHB Filled PTFE, + Elgiloy, depending on the pressure, temperature and service conditions.

2-The elastomeric material selection must respect the temperature range as specified in fugitive emission certification. Example for line 1 FKM with minimum +200C temperature range.

3- the lower temperature limit of the elastomeric seals must be defined at valve design and material selection. Example for western Canadian ambient the upper elastomeric seal must be suitable for -51°C.


VCI

PREPARATION FOR TESTING









STEM EXTENSION



STEM EXTENSION





42" ANSI CLASS 600



36 " ANSI CLASS 600



First Ball Valve Produced in N. America

Completed on November 28. 2002.

GVS Ltd, announced the first G.E. Nuovo Pignone Pipeline Ball Valve produced in North American under our exclusive manufacturing licensing agreement.







Total valve production, assembly, fabrication, testing, creation including pup valve ends, stem extension and complete coating performed in Cambridge, Ontario, Canada.

Our initial order covered 36" Class 900 Welded Body, Trunnion Style Full Ported Pipeline Ball Valves produced for Alliance Pipeline Ltd, in accordance with specification CSA Z245.15, API 6D, and Alliance valve specifications.

GUIDE VALVE
USA LIMITED

Ball VALVES MANUFACTURED FOR SPECIAL APPLICATIONS

- CO_2 Valves
- Hydrogen Valves
- Amine Valves
- Acid Gas Valves
- Full Cryogenic Valves
- Slurry & High Temperature Metal to Metal Seated Valves
- Severe Service Valves
- Specially Designed Valves to meet client's requirements

