

# PEKOS VALVES



MANUFACTURING | R+D | TECHNOLOGY | STOCK ON LINE





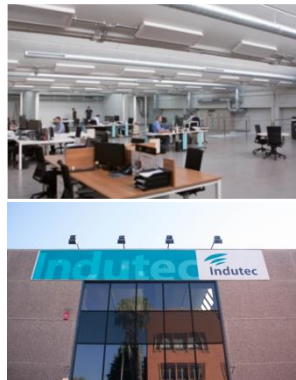
# The Group



[www.pekosgroup.eu](http://www.pekosgroup.eu)



Export, sales and  
project advice  
service.



Technical solutions  
for end users.



Technical solutions  
for end users.

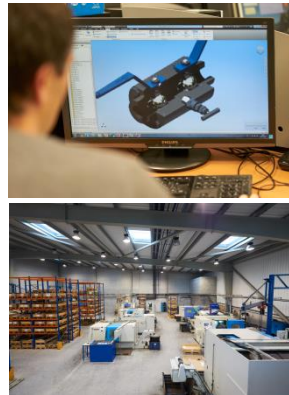


Valve automation,  
logistics and stocks.

## MANUFACTURING



Ball valves manufacturing  
and R&D+i.



Machining workshop



Safety Relief valve  
manufacturer.



## Quality ball Valves

Designed, produced, and certified  
to meet the international standards

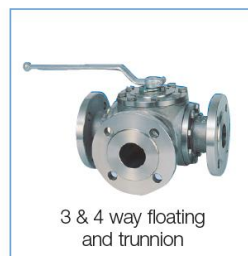
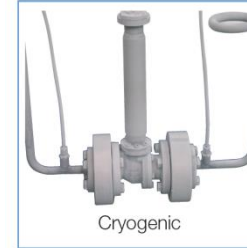


[www.pekos.es](http://www.pekos.es)



# Product Manufacturing Range

[www.pekos.es](http://www.pekos.es)



# Pekos Valves

## Company Profile | Company Locations

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### PEKOS VALVES SALES NETWORK MAP

 Local Partner





# Pekos Valves

## Company Profile | Automatic Warehouse & On-line Stock

- ✓ 5 vertical warehouse and 4 robotized warehouse
- ✓ At [www.pekos.es](http://www.pekos.es) all our distributors can check, online, stock availability:
- ✓ More than 50.000 valves configurations and materials
- ✓ 8.500 Euro-pallets of valves and actuators at your service.
- ✓ 20-22 M€ stock on finished valves and spare parts for quick service



**Increase in speed management, remote manageability and overall functionalities.**

# Pekos Valves Company Profile |



- Pekos is **supplying to more than 80 countries** around the globe
- Stable increase in sales,
- Qualified staff,
- Complete range of product
- Qualified investments in hardware, software and R+D+i.
- Always following the industrial market development.

# Pekos Valves Company Profile | Corporate Video



### 2 PIECE FLOATING

#### GENERAL FEATURES

- Split body
- Full bore
- Soft/Metal seat
- Bidirectional
- Antistatic stem
- Anti blow out stem
- Auto adjustable packing
- Self cavity pressure relief
- Fire safe
- Low emission design
- Spring loaded seat system available

#### STANDARDS

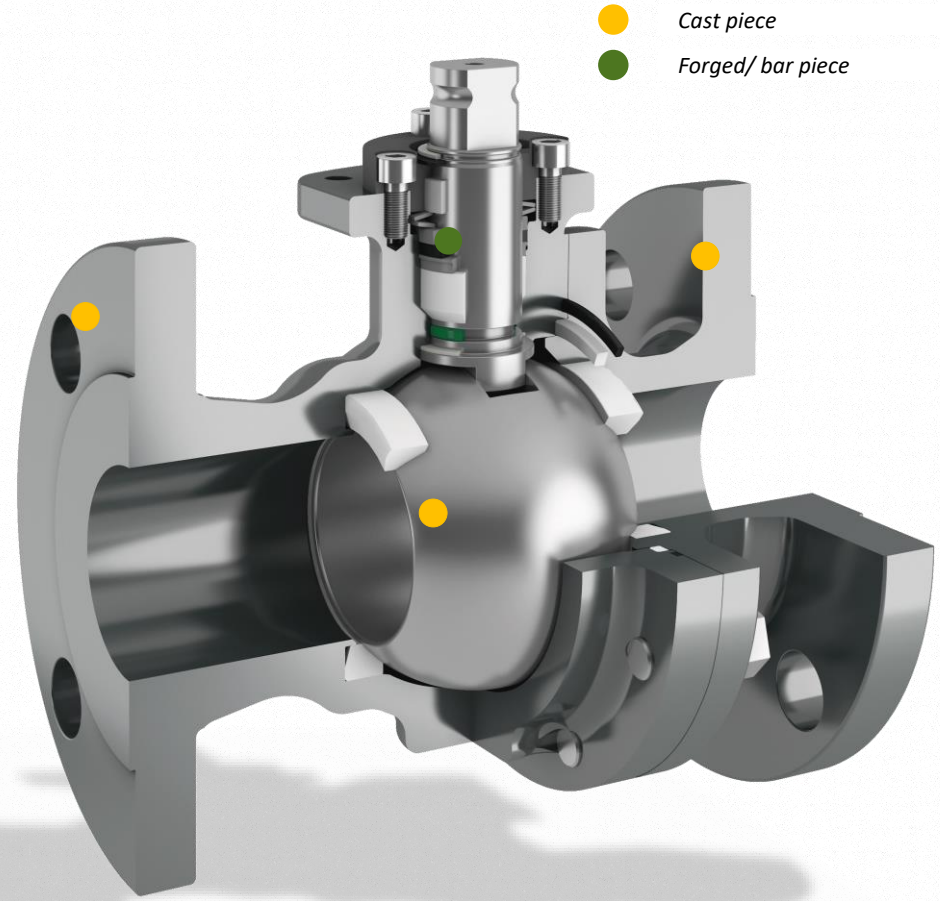
- Top flange ISO 5211
- Flanges EN 1092-01
- Face to face EN 558 series 1, 14 and 15 (former F1, F4 and F5)
- Testing EN 12266, ISO 5208
- Design EN 12516, ISO 17292
- Fire Safe API 607, ISO 10497
- Material according NACE MR 0175

#### APPROVALS

- PED 2014/68/EU
- TÜV AD- 2000 Merkblatt W0
- FIRE SAFE
- SIL 3 Capable (IEC 61508:2010)
- TA-LUFT
- EN 161/264
- ISO 15848-1
- DVGW - EN 13774
- ATEX (2014/34/EU)

■ DN 15-50	PN63-100
■ DN 15-125	PN25- 40
■ DN 15-200	PN10- 16

■ ½" - 4"	Class 300
■ ½" - 2"	Class 600
■ ½" - 8"	Class 150

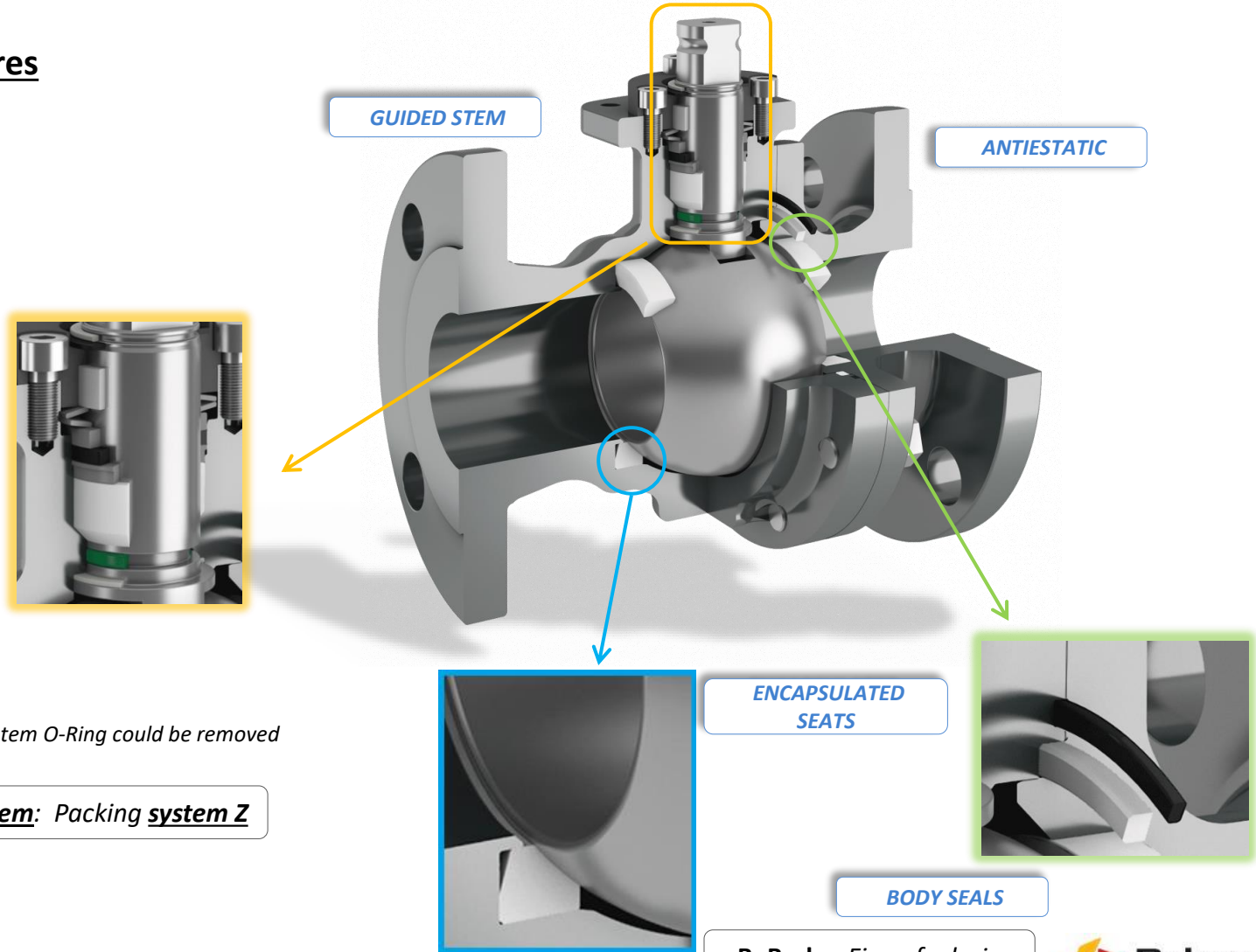


# Pekos Valves | Product Range

## Floating Ball

### Pekos design Features

- Z stem
- Seat
- Body gaskets



*Security stem O-Ring could be removed*

**A. Stem:** Packing system Z

**B. Body:** Firesafe design

### Seat Options

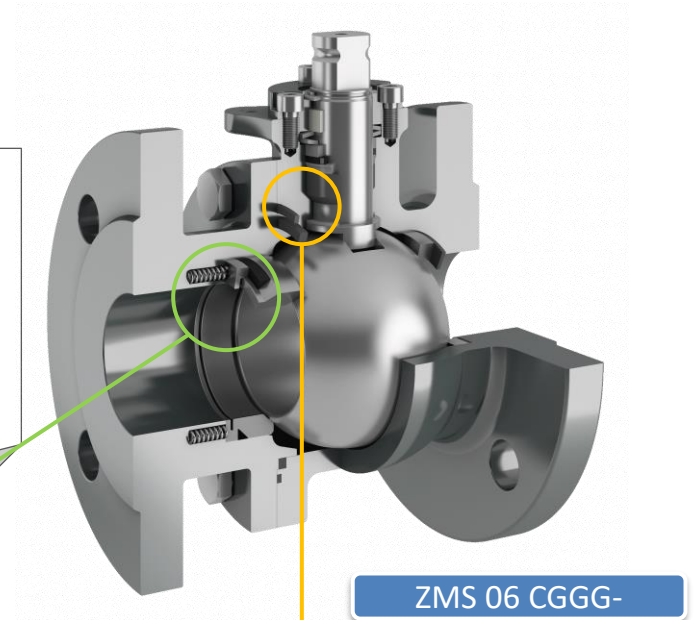
#### SOFT

INTEGRAL  
O-Ring  
SPRING

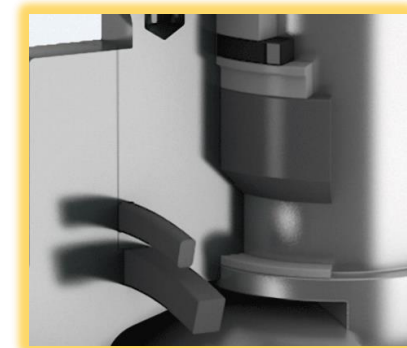
#### METALLIC

1 PIECE (O-Ring)  
SPRING  
PROTECTED

- High temp
- Fluid not compatible with std. O-Rings
- Optional: protected seat, scrapper
- Stem extension type depending on working Temp. :
  - Standard:  $350^{\circ}\text{C} \leq \text{Temp.} \leq 400^{\circ}\text{C}$
  - Security:  $\text{Temp.} > 400^{\circ}\text{C}$



Spring loaded seat on the end cap with metallic ring seats..



For high temp. ( $>220^{\circ}\text{C}$  graphite seals)

# Pekos Valves | Product Range

## Reduced Bore - Side Entry Reduced Bore

### GENERAL FEATURES

- Floating /Guided
- One piece body/ End Entry
- Reduced Bore
- Soft seat / Metal seat
- Bidirectional
- Antistatic stem
- Anti blow out stem
- Auto adjustable packing
- Self cavity pressure relief
- Fire safe
- Low emission design

### STANDARDS

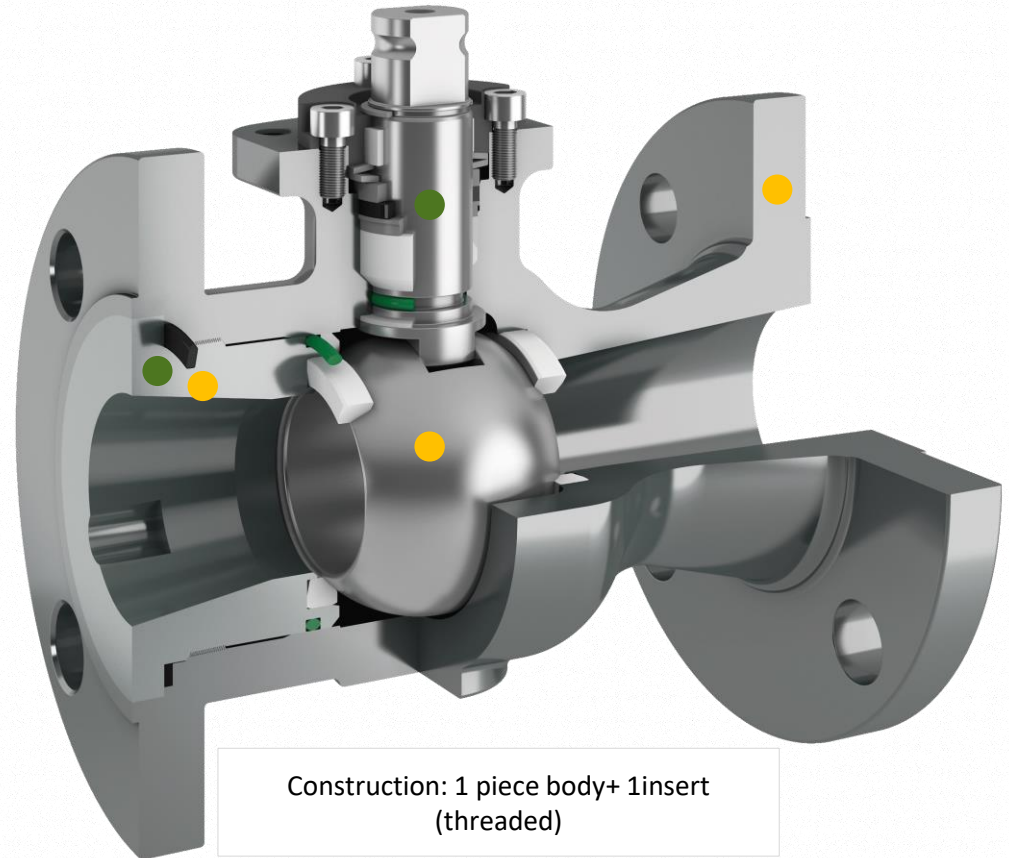
- Top flange ISO 5211
- Flanges ANSI 16.5
- Face to face ANSI 16.10
- Material according NACE MR 0175
- Testing ISO 5208, API 6D
- Design ANSI B16.34, ISO 17292, API 6D
- Fire safe API 607, ISO 10497

### APPROVALS

- PED 2014/68/EU
- FIRE SAFE
- TA-LUFT
- ISO 15848-1
- ATEX (2014/34/EU)
- API 6D
- SIL 3 CAPABLE (IEC 61508)

ZRB 16 TTGVV

- Cast piece
- Forged/ bar piece



# Pekos Valves | Product Range

## 3 Piece Forged

### GENERAL FEATURES

- Floating ball
- Full and Reduced Bore
- Soft seat / Metal Seated
- Bidirectional
- Antistatic stem
- Anti blow out stem
- Auto adjustable packing
- Self cavity pressure relief
- Fire safe
- In line packing maintenance

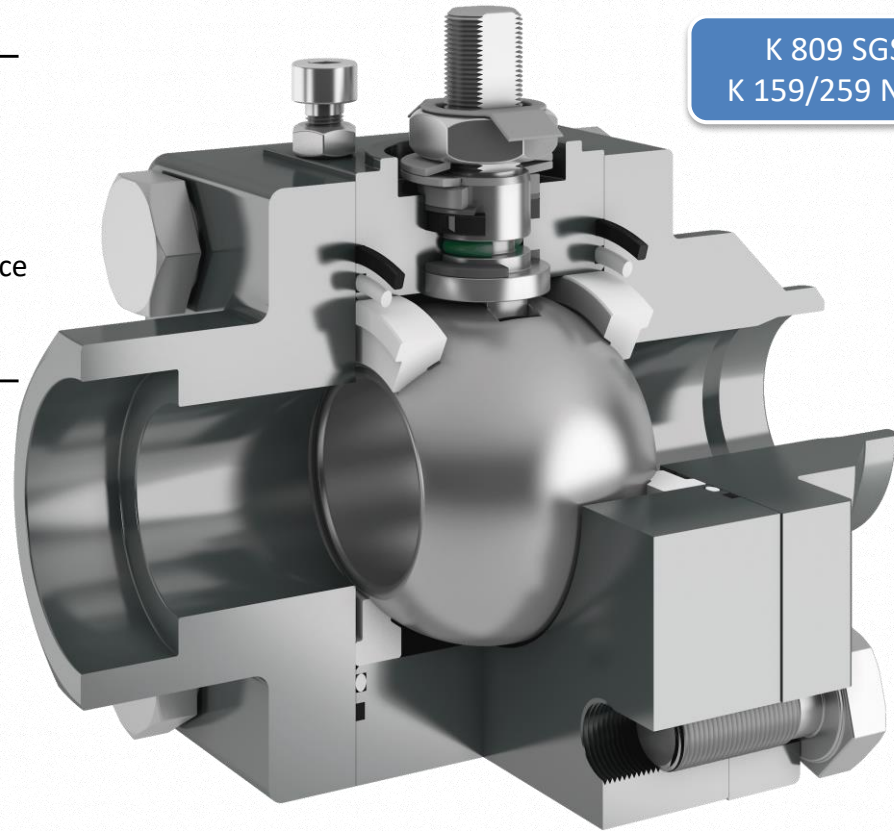
### STANDARDS

- Top flange ISO 5211
- Testing ISO 5208, API 598 , API 6D\* (not design)
- Design ANSI B16.34.
- Material according NACE MR 0175
- Fire safe API 607, ISO 10497

### APPROVALS

- PED 2014/68/EU
- FIRE SAFE
- ATEX (2014/34/EU)
- SIL 3 CAPABLE (IEC 61508)
- EN161 / EN 16678
- ISO 15848 \*

\*AH Available upon request for ZK type



K 809 SGSGV  
K 159/259 NGGVV

- ¼" - 1" | Class 2500
- ¼" - 2" | Class 900-1500
- ¼" - 1 ½" | Class 800
- 2" - 2 ½" | Class 600
- 3" - 4" | Class 400

### END CONNECTIONS

- Screwed NPT, BSPP, BSPT
- Socket weld ANSI 16.11
- Butt weld ANSI 16.25
- Nipples P.E., BW
- Flanged ANSI 16.5



# Pekos Valves | Product Range

## Wafer

### GENERAL FEATURES

- Floating ball
- Full bore
- End entry
- Soft seat / Metal seat
- Bidirectional
- Fire safe
- Anti blow out stem
- Autoadjustable packing
- Self cavity pressure relief
- Antistatic stem

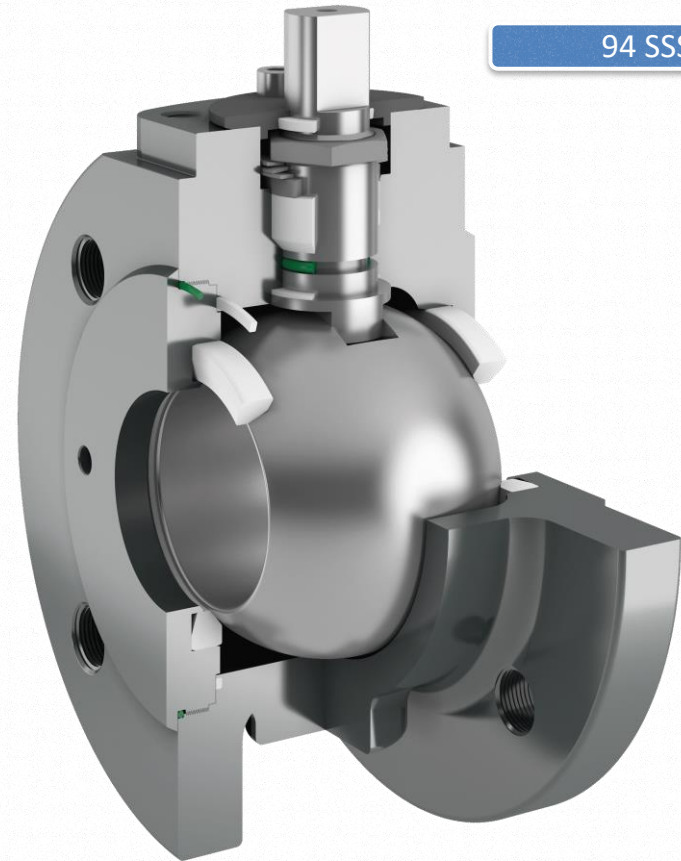
### STANDARDS

- Top flange ISO 5211
- Flanges EN 1092-01
- Testing EN 12266, ISO 5208
- Design EN 12516 , ISO 17292
- Fire safe API 607, ISO 10497

### APPROVALS

- PED 2014/68/EU
- FIRE SAFE
- TA-LUFT
- EN 161/23553
- ISO 15848-1
- SIL 3 CAPABLE (IEC 61508)
- ATEX (2014/34/EU)
- TÜV Ad-Merkblatt W0

94 SSSV



■ DN 15-80 | PN40

■ DN 15-100 | PN16

■ ½" - 4" | Class 150

# Pekos Valves | Product Range

## Tank Bottom

### GENERAL FEATURES

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- Full Bore
- Soft Seat
- Floating ball
- Anti blow out stem
- Inclined Stem
- Auto-adjustable packing

### STANDARDS

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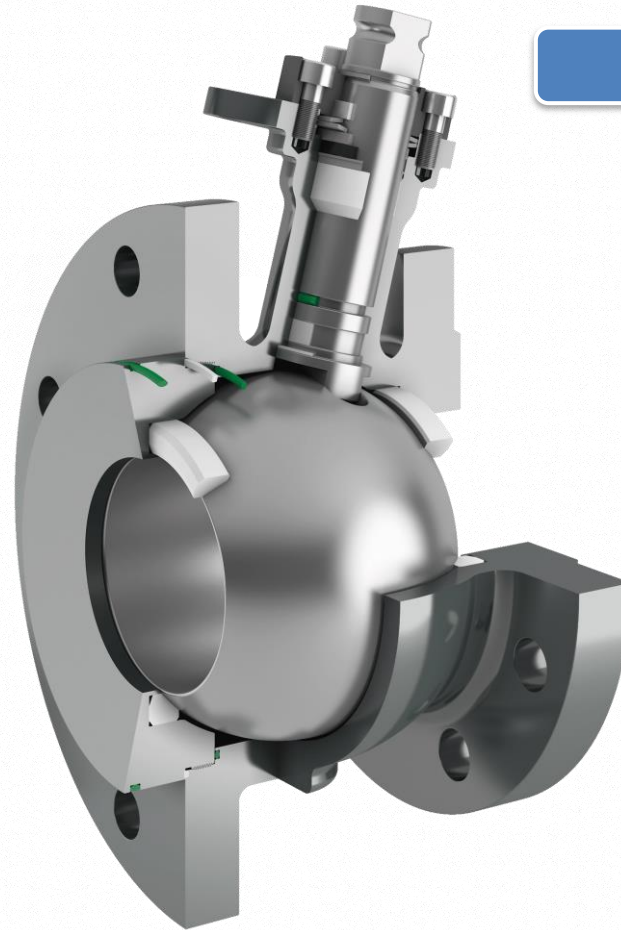
- Top flange ISO 5211
- Flanges EN 1092-01
- Testing EN 12266, ISO 5208
- Design EN 12516, ISO 17292
- Fire Safe API 607, ISO 10497

### APPROVALS

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- PED 2014/68/EU
- TÜV Ad-Merkblatt W0)
- TA-LUFT
- SIL (IEC 61508:2010)**
- ISO 15848-1**
- ATEX (2014/34/EU)
- FIRE SAFE

ZI 54 TTTVV



■ DN 40-150 | PN16  
■ DN 40-250 | PN10

# Pekos Valves | Product Range

## 3 & 4 Ways

### GENERAL FEATURES

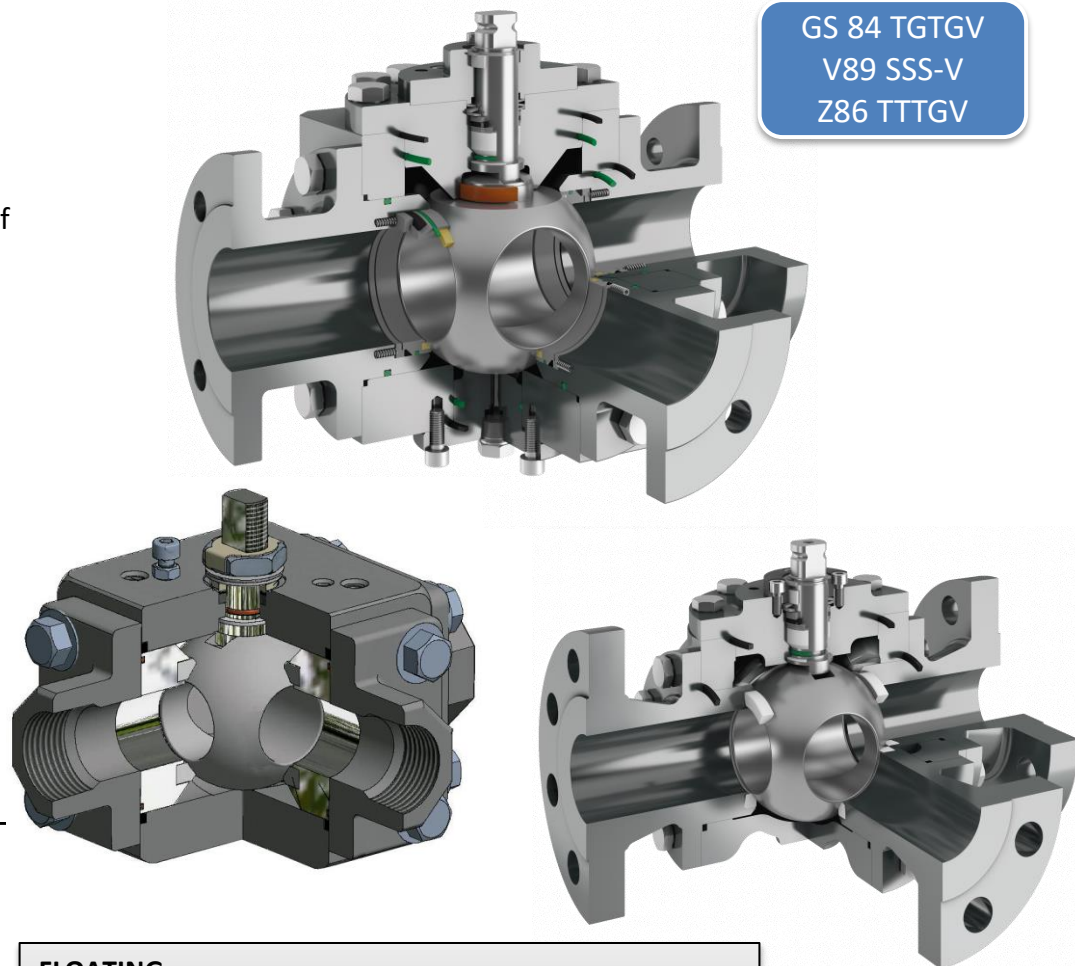
- Floating Ball
- Guided ball
- Trunnion
- Split Body
- Full bore
- Soft seat
- L,T or X Bore
- Antistatic stem
- Anti blow out stem
- Four seats
- Self cavity pressure relief
- Auto adjustable packing
- Fire Safe Design

### STANDARDS

- Top flange ISO 5211
- Flanges ANSI 16.5
- Face to face standard Pekos
- Material according NACE MR 0175
- Testing ISO 5208, API 598
- Design ANSI B16.34, ISO 17292, API 6D

### APPROVALS

- PED 2014/68/EU
- TA-LUFT
- ISO 15848
- ATEX (2014/34/EU)
- API 6D
- SIL3 Capable (ICE 61508)



#### FLOATING

- DN15 ½" - DN100 4" | PN16-100 Class 600/300
- DN15 ½" - DN200 8" | PN16 Class 150

#### TRUNNION

- DN250 10" - DN600 24" | PN16 Class 150
- DN150 6" - DN600 24" | PN40 Class 300

### IV. GUIDED BALL

#### GENERAL FEATURES

- Full bore
- Soft seat / Metal seat
- Self cavity pressure relief
- Bidirectional
- Fire safe
- Anti blow out stem
- Auto adjustable packing
- Antistatic stem
- Low emission design

#### STANDARDS

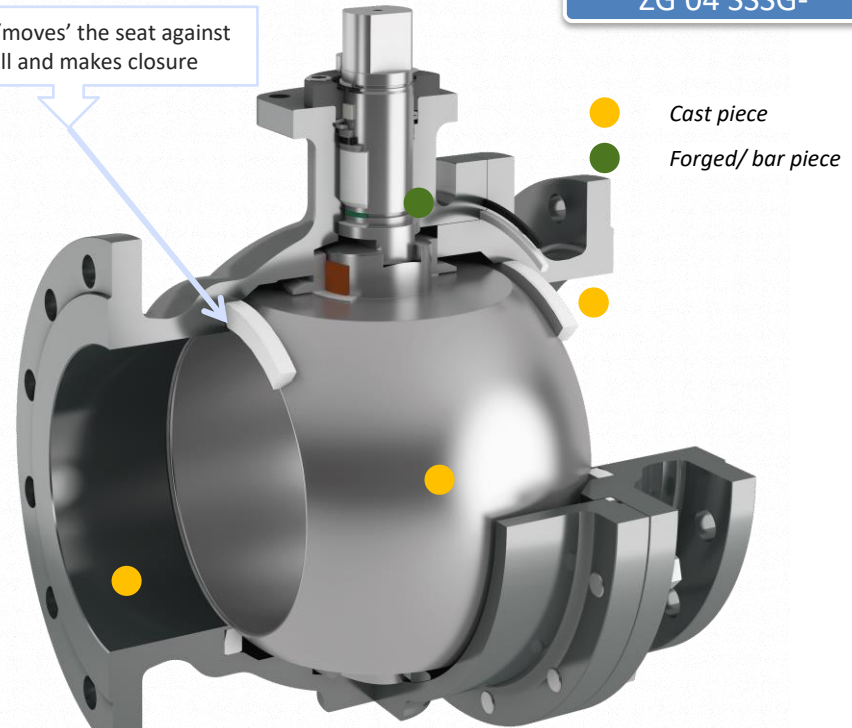
- Top flange ISO 5211
- Flanges ANSI 16.5
- Face to face ANSI 16.10
- Testing ISO 5208, API 598, API 6D
- Material according NACE MR 0175
- Design ANSI B16.34, ISO 17292, API 6D
- Fire Safe API 607, ISO 10497, API 6FA

#### APPROVALS

- PED 97/23/CE
- FIRE SAFE
- TA-LUFT
- ISO 15848
- ATEX (94/9/CE)
- API 6D
- SIL 3 Capable(ICE 61508)
- EN 161/264

ZG 04 SSSG-

Pressure 'moves' the seat against the ball and makes closure



≥DN 150/6" PN40/300# TO BE CONFIRMED DEPENDING ON WORKING CONDITIONS

■ DN 150 - 300 | PN 10 - 40

■ 6" - 12" | Class 150-300

# Pekos Valves | Product Range

## Full trunnion Split body

ZGS 16 SSSGV

### GENERAL FEATURES

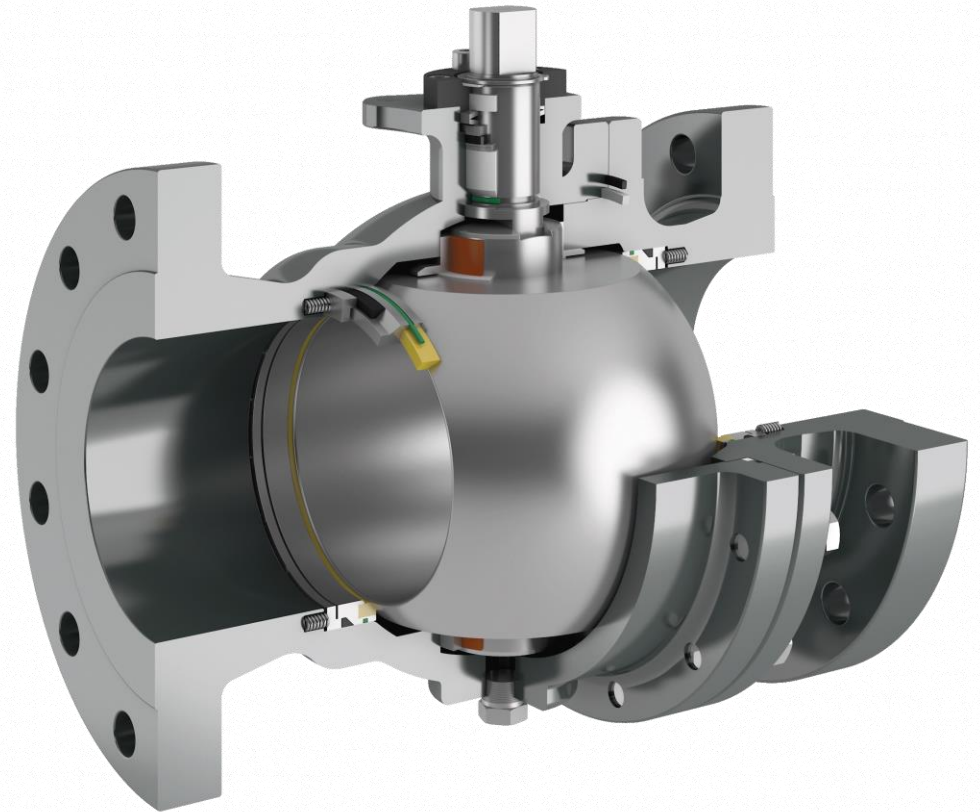
- Full bore
- Soft seat/Metal Seated
- Self cavity pressure relief
- Bidirectional
- Fire safe
- Anti blow out stem
- Auto adjustable packing
- Double block and bleed
- Antistatic stem
- Spring loaded seat system
- Low emission design

### STANDARDS

- Top flange ISO 5211
- Flanges EN 1092-01
- Face to face EN 558 series 1, 2, 15 (Former F5)
- Testing EN 12266, ISO 5208, API 598
- Design EN 12516, ISO 17292
- Fire Safe API 607, ISO 10497

### APPROVALS

- PED 2014/68/EU
- TÜV AD- 2000 Merkblatt
- FIRE SAFE
- SIL 3 CAPABLE (IEC 61508)
- TA-LUFT
- EN 161/23553
- ISO 15848-1
- DVGW - EN 13774
- ATEX (2014/34/EU)



■ DN 50 - 300 | PN 10 - 40

■ 2" - 12" | Class 150-300

# Pekos Valves | Product Range

## Full Trunnion 3 piece split body

### GENERAL FEATURES

- Full bore / Reduced bore
- Soft seat / Metal seat
- Self cavity pressure relief
- Split Body
- Bidirectional
- Fire safe
- Anti blow out stem
- Auto adjustable packing
- Double block and bleed
- Antistatic stem
- Spring loaded seat system
- Low emission design
- In line packing maintenance

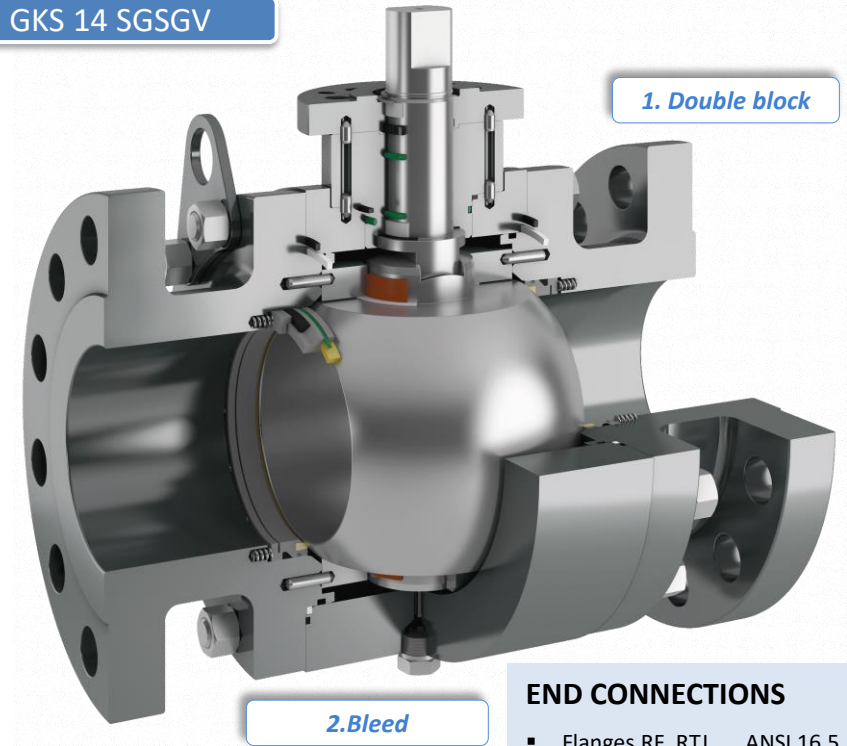
### STANDARDS

- Top flange ISO 5211
- Face to face ANSI 16.10
- Testing ISO 5208, API 598
- Material according NACE MR 0175
- Design ANSI B16.34, ISO 17292, API 6D
- Fire Safe API 607, ISO 10497
- Flanges ANSI 16.5

### APPROVALS

- PED 97/23/CE
- FIRE SAFE
- TA-LUFT
- ISO 15848
- ATEX (94/9/CE)
- API 6D
- SIL3 Capable (IEC 61508)
- DVGW

GKS 14 SGSGV



1. Double block

2. Bleed

### END CONNECTIONS

- Flanges RF, RTJ ANSI 16.5
- Socket weld ANSI 16.11
- Butt weld ANSI 16.25

- DN 15 - 300 | PN 400
- DN 15 - 400 | PN 250
- DN 15 - 500 | PN 160
- DN 15 - 600 | PN10-100

- ½" - 12" | Class 2500
- ½" - 16" | Class 1500
- ½" - 20" | Class 900
- ½" - 24" | Class 150-600

# Pekos Valves | Product Range

## Cryogenic

### GENERAL FEATURES

- Floating / Guided ball
- Full Trunnion, DBB
- Full bore / Reduced bore
- Soft seat / Metal seated
- Spring loaded seat system
- Antistatic Stem
- Anti blow out stem
- Auto adjustable packing
- Self cavity pressure relief
- Fire safe
- Service Temp. to – 196°C

### STANDARDS

- Top flange ISO 5211
- Flanges EN 1092-01
- Face to face - EN 558 series 1, 14, 15 (Former F1,F4,F5)
- Testing EN 12266, ISO 5208
- Design EN 12516 , ISO 17292
- Fire safe API607, ISO 10497

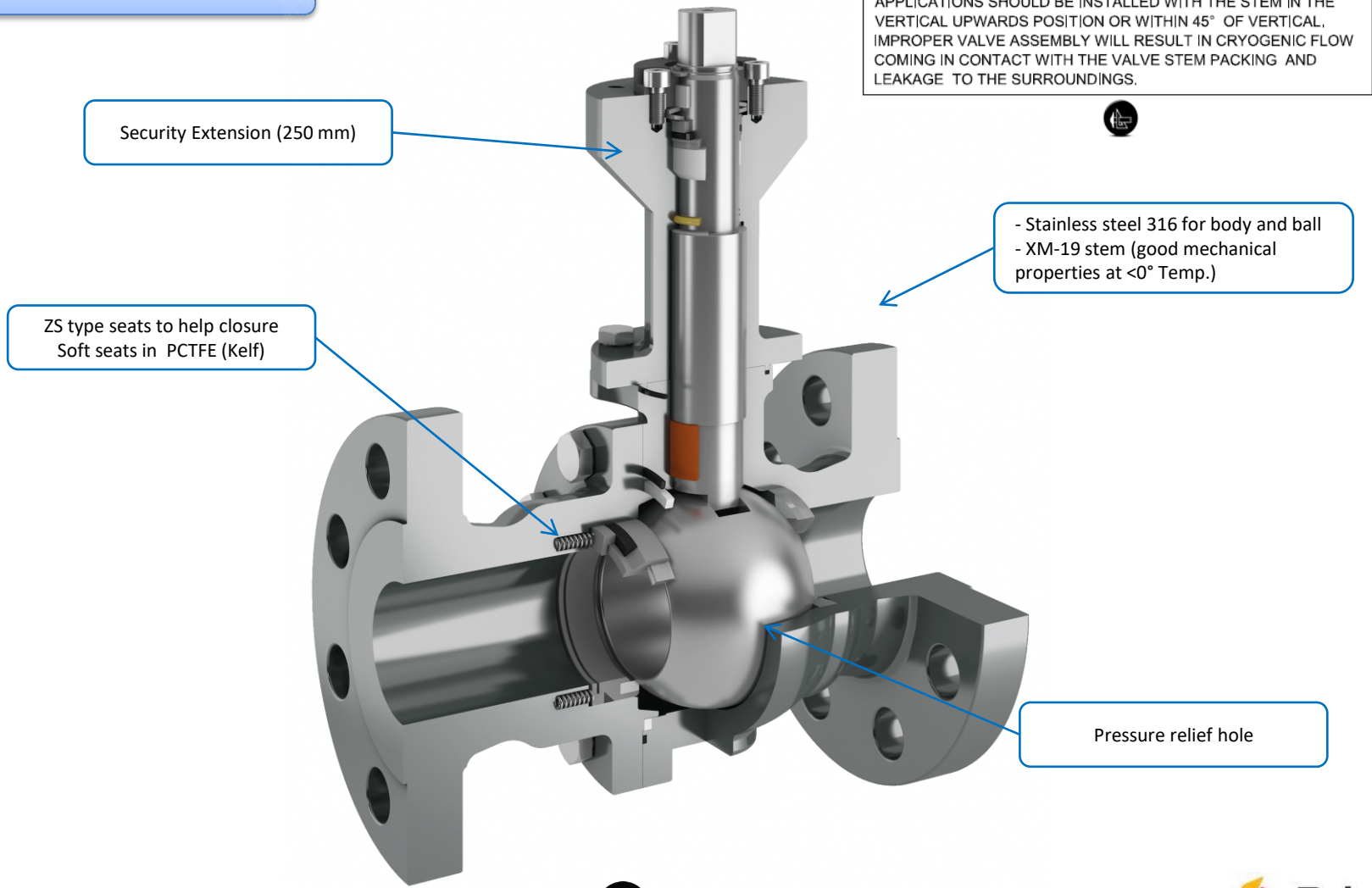
### APPROVALS

- PED 2014/68/EU
- FIRE SAFE
- BS 6364
- ATEX (2014/34/EU)
- SIL 3 CAPABLE (IEC 61508)
- TA Luft
- ISO 15848**

ZFOSU 16 KTTGN  
ZFGKOSU 16 KTTGN



### X. CRYOGENIC VALVES



Security Extension (250 mm)

ZS type seats to help closure  
Soft seats in PCTFE (Kelf)

- Stainless steel 316 for body and ball  
- XM-19 stem (good mechanical properties at  $<0^\circ$  Temp.)

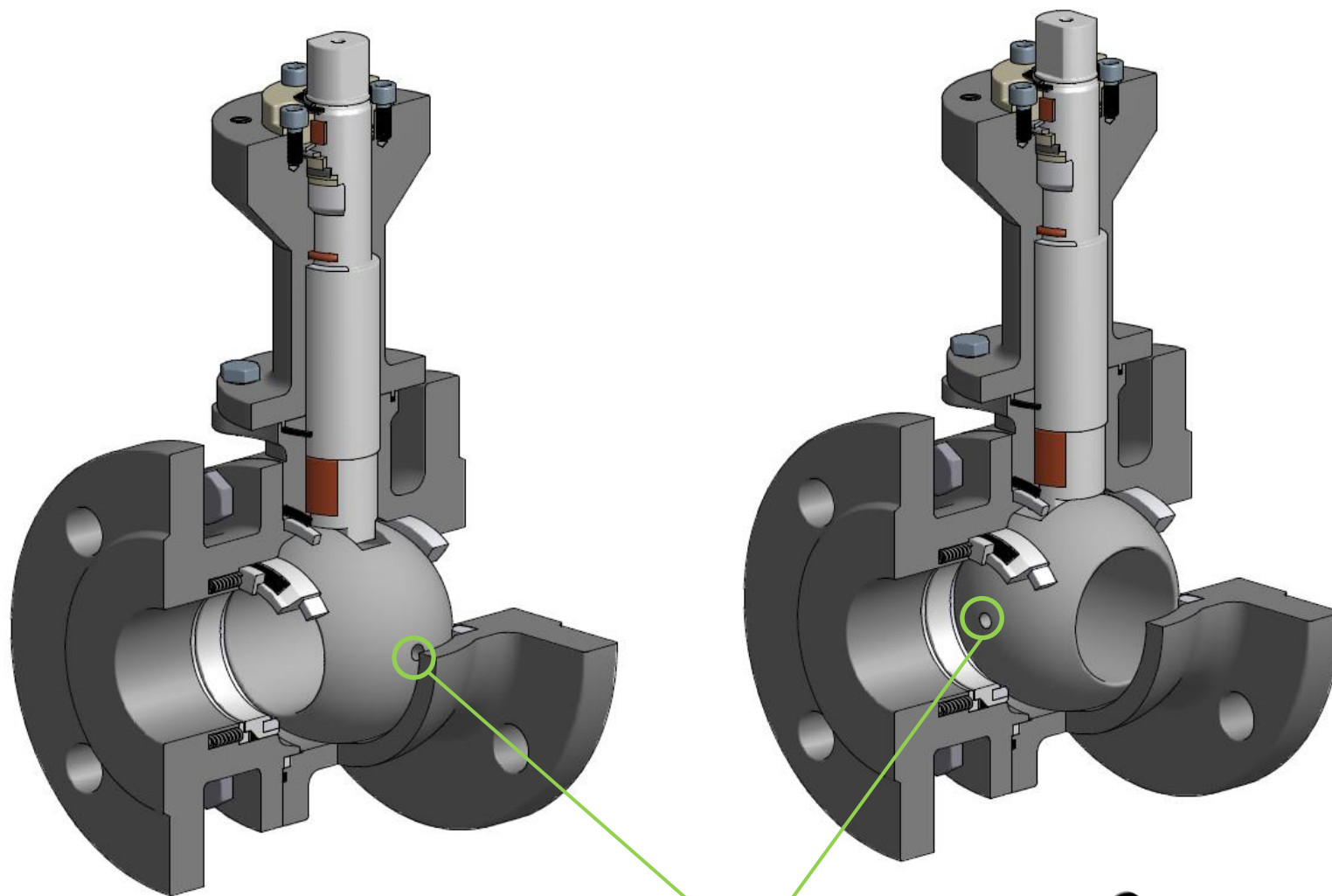
Pressure relief hole

CRYOGENIC WITH EXTENSION STEM VALVES FOR NON-COLD-BOX APPLICATIONS SHOULD BE INSTALLED WITH THE STEM IN THE VERTICAL UPWARDS POSITION OR WITHIN 45° OF VERTICAL. IMPROPER VALVE ASSEMBLY WILL RESULT IN CRYOGENIC FLOW COMING IN CONTACT WITH THE VALVE STEM PACKING AND LEAKAGE TO THE SURROUNDINGS.



# Pekos Valves | Product Range

## Cryogenic



***Pressure relief hole:*** Allows to depressurize in case that temperature increases and the pressure inside the ball is to high

# Pekos Valves | Product Range

## Other Designs

### CRYOGENIC 3PC FORGED – ZFKOU806

#### ➤ 3 PF CRYOGENIC AND HIGH TEMP.

- ✓ FLOATING VALVES WITH WIDE RANGE OF TEMPERATURES
- ✓ CRYOGENIC -196°C
- ✓ HIGH TEMPERATURES
- ✓ SOFT SEATED
- ✓ METAL SEATED FOR ABRASSIVE MEDIA OR/& HIGH TEMPERATURE
- ✓ LEAKAGE RATE V
- ✓ TA-LUFT & ISO 15848-1 CLASS **AH CO2**
- ✓ EN 161, EN23553 AND EN16678.
- ✓ HIGH PERFORMANCE AND NUMBER OF OPERATIONS WITH Z STEM DESIGN



ZFKOU 806 KTTGN CL800 1/4"-1 1/2" SW/BW/BSPP/NPT/FLANGED  
 CL600 2"-2 1/2"  
 CL400 3"



#### General features

- Allows in-line maintenance
- Degreased
- Fire Safe Design
- Three pieces.
- Full bore.
- Soft seat.
- Unidirectional.
- Anti Blow out proof stem.
- Autoadjustable packing.
- Anti static device.
- Self-cavity pressure relief.

#### Official approvals

- ATEX 2014/34/UE
- PED 2014/68/UE
- SIL 3 CAPABLE
- BS6364
- TA-LUFT
- ISO 15848-1

#### Standards

- Top flange ISO 5211
- Socket-welding ends B16.11
- Materials according to NACE MRO175

PRESSURE (bars) --- BODY  
— INTERNALS

TEMPERATURE °C

IBO 15848-1

TA-LUFT I VOI M44

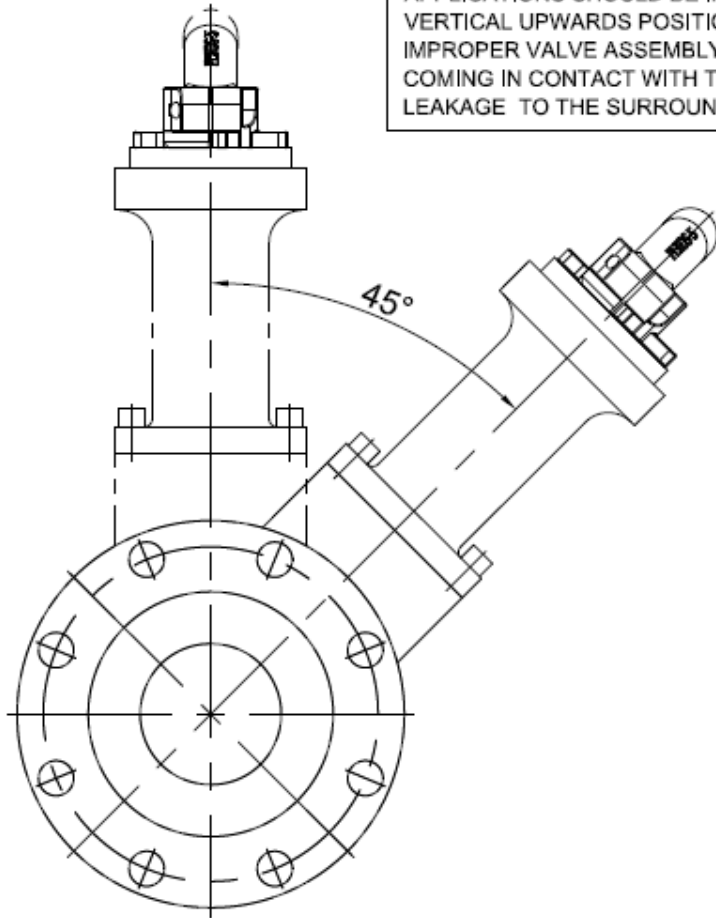
TIGHTNESS: AH  
 ENDURANCE: CO3



# Pekos Valves | Product Range

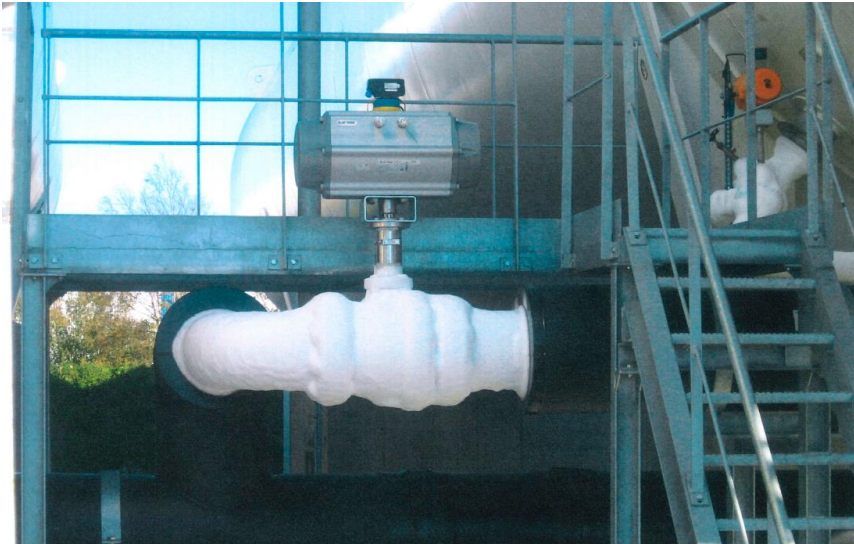
## Cryogenic

CRYOGENIC WITH EXTENSION STEM VALVES FOR NON-COLD-BOX APPLICATIONS SHOULD BE INSTALLED WITH THE STEM IN THE VERTICAL UPWARDS POSITION OR WITHIN 45° OF VERTICAL. IMPROPER VALVE ASSEMBLY WILL RESULT IN CRYOGENIC FLOW COMING IN CONTACT WITH THE VALVE STEM PACKING AND LEAKAGE TO THE SURROUNDINGS.



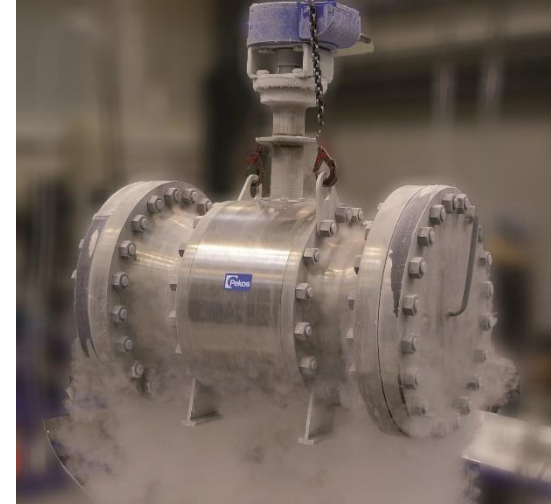
# Pekos Valves | Product Range

## Cryogenic



# Pekos Valves | Product Range

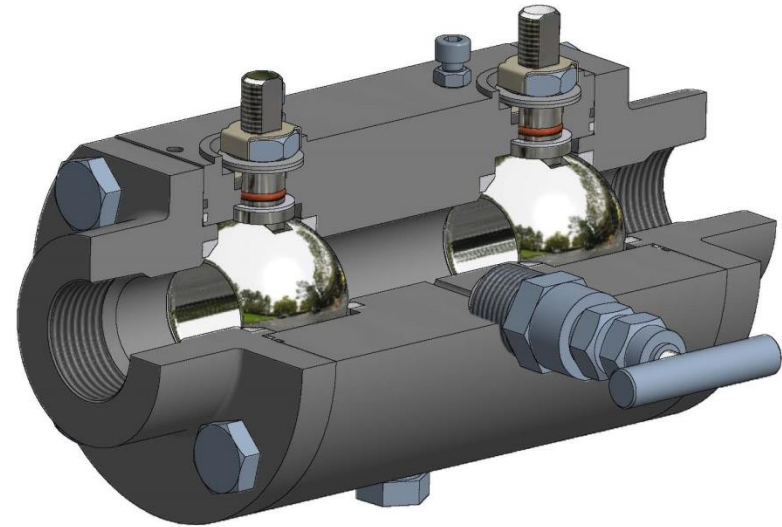
## Cryogenic



### GENERAL FEATURES

- Robust Trunnion design 1 piece body with two balls.
- Low, Medium & High pressure
- Double block and bleed feature.- DBB
- Full bore and Reduced bore optional
- Upstream & downstream closure
- Bleed or 3<sup>rd</sup> valve assembled

ZDBBK36 SSSGV



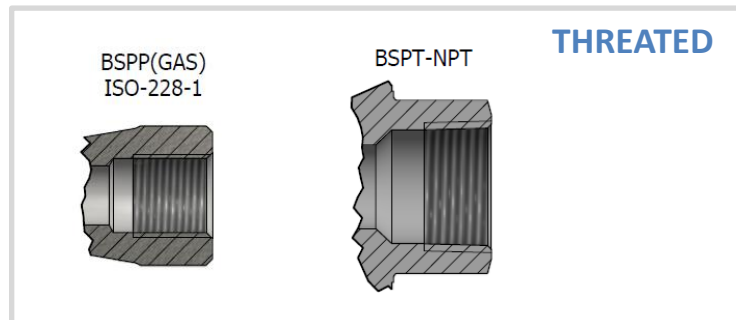
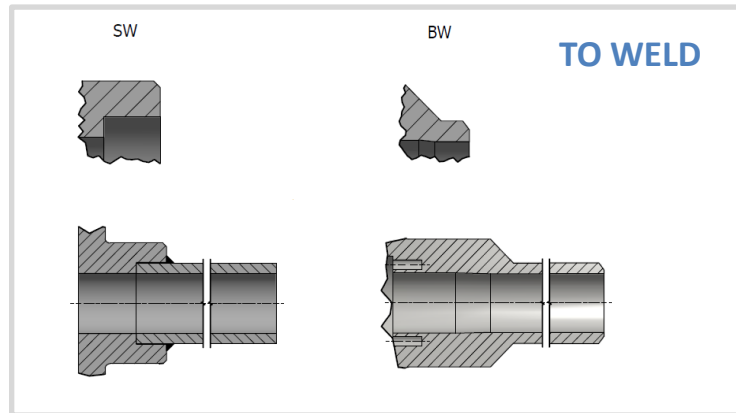
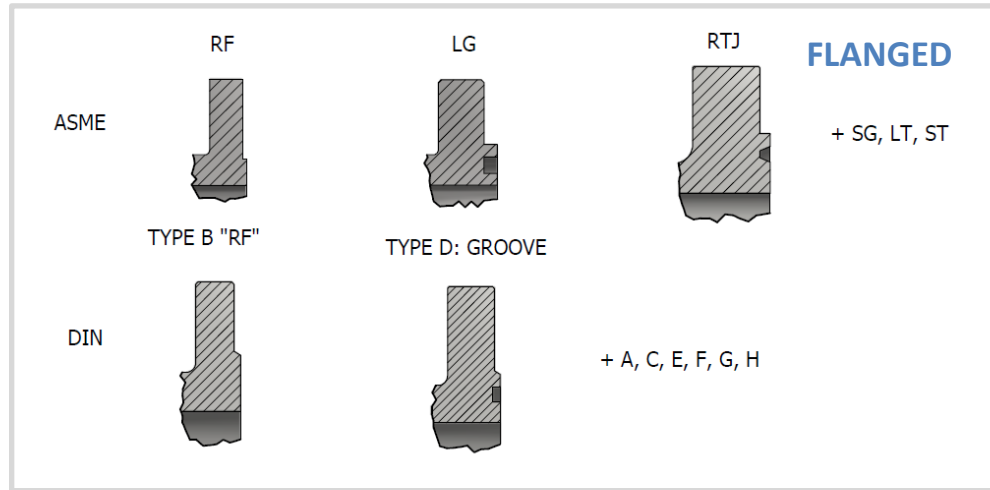
- FLOATING DN 15 - 50 | PN 400
- TRUNNION
  - DN 15 - 300 | PN 400
  - DN 15 - 400 | PN 250
  - DN 15 - 500 | PN 160
  - DN 15 - 600 | PN10-1000

- FLOATING ½" - 2" | Class 2500
- TRUNNION
  - ½" - 12" | Class 2500
  - ½" - 16" | Class 1500
  - ½" - 20" | Class 900
  - ½" - 24" | Class 150-600

# Pekos Valves | OPTIONS

1. ENDS
2. LOCKING DEVICES MANUAL
3. STEM EXTENSIONS
4. JACKETS
5. INJECTORS

1. **ENDS**
2. LOCKING DEVICES
3. MANUAL
4. STEM EXTENSIONS
5. JACKETS
5. INJECTORS



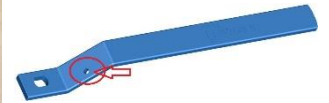
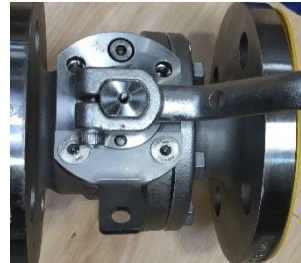


1. ENDS
2. **LOCKING DEVICES**  
**MANUAL**
3. STEM EXTENSIONS
4. JACKETS
5. INJECTORS

## Spring Self-Locking system



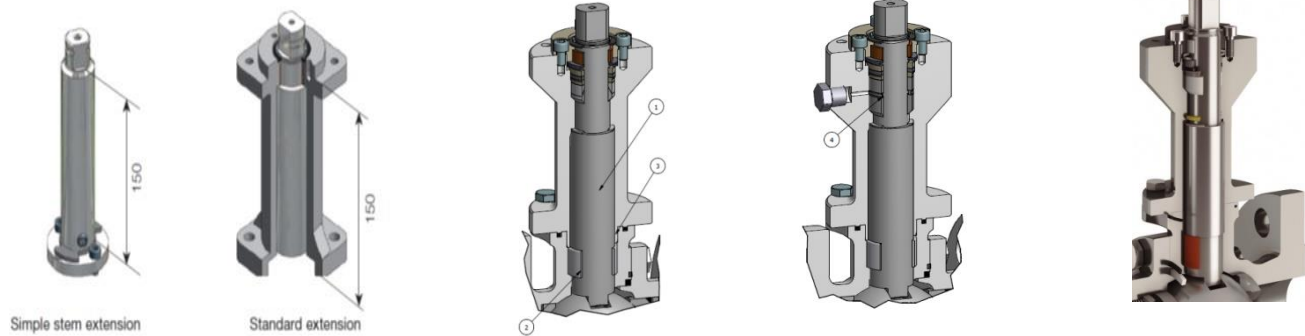
## Extra plate to lock with lever (Type S0 & S1 small sizes <DN40)



## Locking device already standard on levers (Type S2 ≥DN40 and bigger)

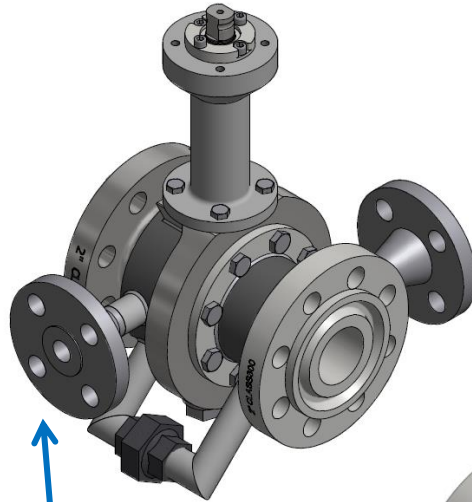


1. ENDS
2. LOCKING DEVICES
3. **STEM EXTENSIONS**
4. JACKETS
5. INJECTOR



SIMPLE	STANDARD	SECURITY	SECURITY with FUGITIVE DETECTOR	CRYOGENIC (< -50°C)
<ul style="list-style-type: none"> <li>Length 150mm</li> <li>Without ISO 5211</li> <li>No Packing in the stem extension.</li> <li>No gasket between valve &amp; s.extension.</li> </ul>	<ul style="list-style-type: none"> <li>Length 150mm</li> <li>With ISO 5211</li> <li>No Packing in the stem extension.</li> <li>No gasket between valve &amp; s.extension.</li> </ul>	<ul style="list-style-type: none"> <li>Length 150mm</li> <li>With ISO 5211</li> <li>Packing in top of the stem extension, no packing in valve.</li> <li>Gasket between valve &amp; s.extension.</li> </ul>	<ul style="list-style-type: none"> <li>Length 150mm</li> <li>With ISO 5211</li> <li>Double Packing in top of the stem extension.</li> <li>Grease injector or fugitive detector between the two packings in the stem extension.</li> <li>Gasket between valve &amp; s.extension.</li> </ul>	<ul style="list-style-type: none"> <li>Length 250mm</li> <li>With ISO 5211</li> <li>Packing in top of the stem extension.</li> <li>Gasket between valve &amp; s.extension.</li> </ul>
Material we keep in stock and standard manufacturing.			Not in stock.	Standard for cryogenic valves (< -50°C) only.

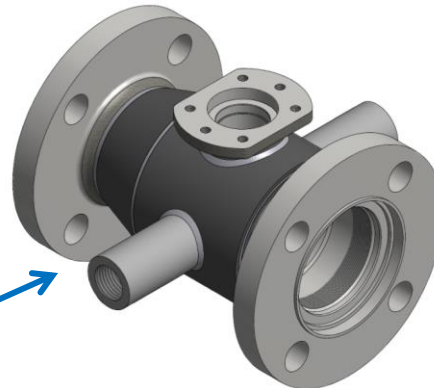
FULL JACKET IN Z VALVE



## Welded Heatin Jacket:

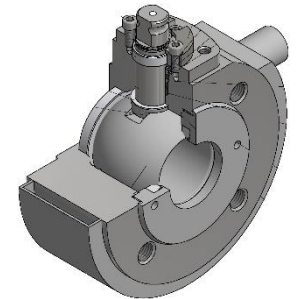
- Tailor-made solution
- Welded metal shapes externally to valve's body
- End connections flexible possibilities:
  - Threaded
  - Flanged
  - Different locations
- Possible to be face-to-face, either on one piece body or Split body connection both chambers.

Flanged or threaded connection



FULL JACKET IN ZRB VALVE

Chamber connection



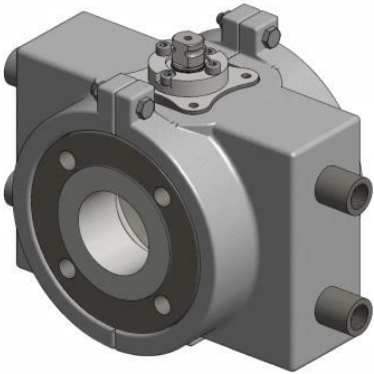
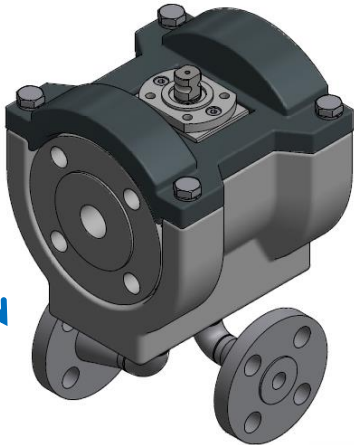
WAFER VALVE

# Pekos Valves | HEATING JACKETS

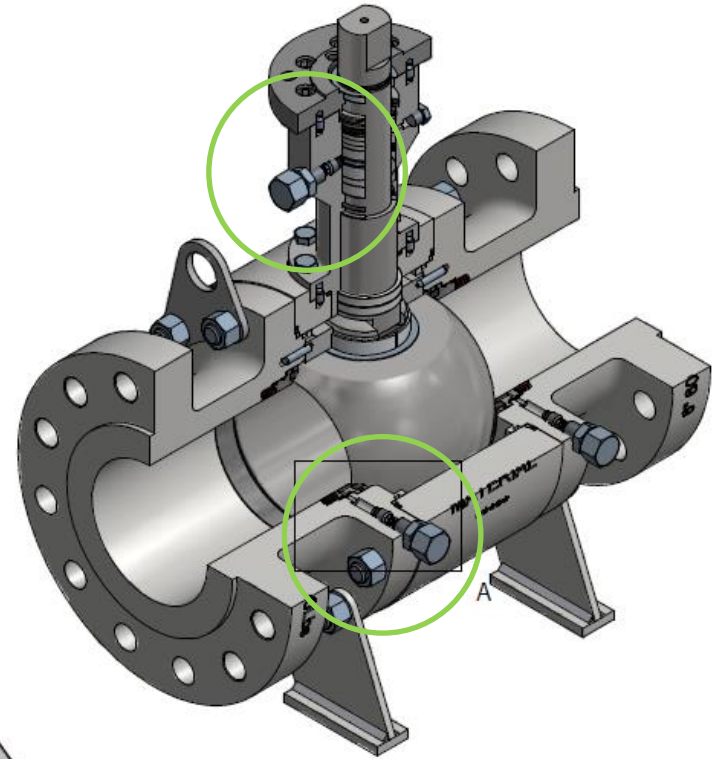
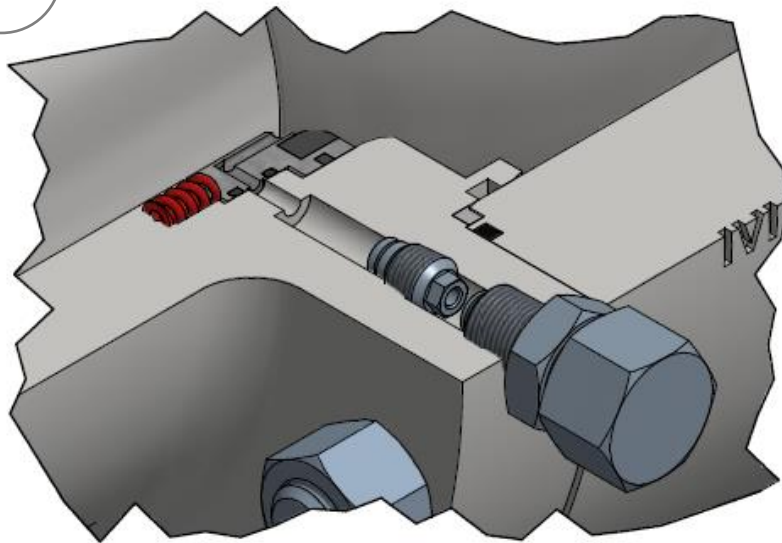
## CLAMP-ON

Flanged or threaded connection

- CLAMP ON features:**
- Split body
  - Removal for maintenance
  - Possible to use on another valve same design
  - Face to face
  - Excellence heat transfer equally



1. ENDS
2. LOCKING DEVICES  
MANUAL
3. STEM  
EXTENSIONS
4. JACKETS
5. **INJECTORS**



*Also available: O-Ring  
protected injectors*



ISO 9001 : 2015

# Certificates



ISO 14001 : 2015

DOWNLOAD



PED 2014/68/EU

DOWNLOAD



[www.pekos.es](http://www.pekos.es)



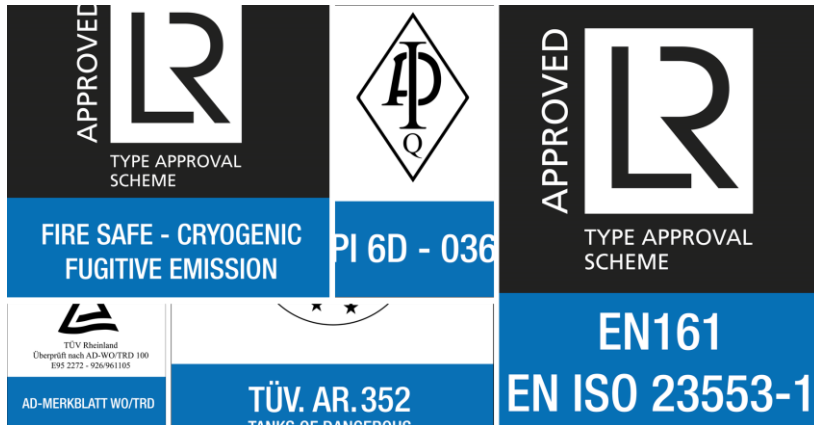
## COMPANY CERTIFICATES

ISO 9001:2015  
API MONOGRAM  
PED 2014/68/EU  
ISO 14001: 2015  
ISO 45001: 2018



## PRODUCT CERTIFICATES

1. ATEX 2014/34/EU
2. AD Merkblatt
3. Firesafe
4. TA Luft/ VDI 2440/ ISO 15848-1
5. EN 161/ EN 23553 (old EN264)
6. Cryogenic BS-6364
7. TR CU
8. Sanitary approval (Russian)
9. SIL IEC 61508 part 1 & 2. 3 capable
10. DVGW (DIN EN 13774 gas distribution)
11. CRN Canada
12. NSF-61
13. DNV Type approval
14. Materials





## DESIGN / MANUFACTURING

- ✓ EN 12516-1:2018, EN 1983:2013, EN 1092-1:2019
- ✓ API 6D 24TH, ASME B16.34:2017, for ANSI VALVES
- ✓ ISO 17292:2015,
- ✓ DIRECTIVE 2014/68/EU PED
- ✓ Directive 2014/34/EU ATEX
- ✓ ASME B16.34:2017
- ✓ ASME B16.5:2017
- ✓ EN ISO 17292:2015
- ✓ ISO 5211/2018



## TESTS/STANDARDS

- ✓ EN 12266
- ✓ API 598
- ✓ API 6D
- ✓ ISO 5208
- ✓ BS 6755-1





# Quality Control

[www.pekos.es](http://www.pekos.es)

## DESTRUCTIVE TESTS

### RAW MATERIALS

- ✓ Hardness test
- ✓ Impact test

## NON-DESTRUCTIVE TESTS

- ✓ Ferritscope
- ✓ PMI
- ✓ Dye penetrant
- ✓ Magnetic particle
- ✓ Radiography
- ✓ Ultrasonic test

### FINISHED PRODUCT

- ✓ Hydrostatic/ pneumatic test
- ✓ Roughness control
- ✓ Dimensional control
- ✓ Vacuum pump
- ✓ Antistatic device control
- ✓ Painting control
- ✓ Cryogenic test
- ✓ Fugitive emissions test
- ✓ Marking



*In-house tests*

# Pekos Valves | Test Finished Product

- FINISHED PRODUCT**
- ✓ Hydrostatic/ pneumatic test
  - ✓ Roughness control
  - ✓ Dimensional control
  - ✓ Vacuum pump
  - ✓ Antistatic device control
  - ✓ Painting control
  - ✓ Cryogenic test
  - ✓ Fugitive emissions test
  - ✓ Marking

**1. Hydrostatic/ pneumatic test**

100% of our valves are pressure tested to applicable regulations/directives and customer requirements.



## FINISHED PRODUCT

- ✓ Hydrostatic/ pneumatic test
- ✓ Roughness control
- ✓ Dimensional control
- ✓ Vacuum pump
- ✓ Antistatic device control
- ✓ Painting control
- ✓ Cryogenic test
- ✓ Fugitive emissions test
- ✓ Marking



## 8. Fugitive emissions test

Upon request, we can measure the tightness of the different sealings of the valve.

*(Sniffer method: Helium shows low viscosity when passing through tight capillaries. It tends to look for any way out)*

## 9. Valve marking

All our valves are correctly identified by using a customized nameplate and/ or a laser mark over the flanges.

# Quality Control

[www.pekos.es](http://www.pekos.es)

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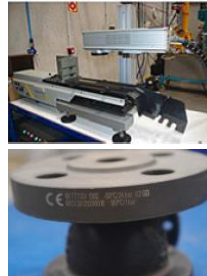
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# Automation

[www.pekos.es](http://www.pekos.es)



- ✓ **CONTROL PANEL**
- ✓ **EN 161 & EN 23553 / EN 16678**
- ✓ **PST**
- ✓ **FIRE PROTECTION**

Special coating for automation components to ensure their performance when fire:

- ✓ UL-1709
- ✓ Protection 1093°C / 2000°F up to 30 minutes

## Application Types

*Surface Coating;* is applied directly over all external surfaces of the parts which are going to be protected against the fire. The coating is fixed to the surfaces permanently.



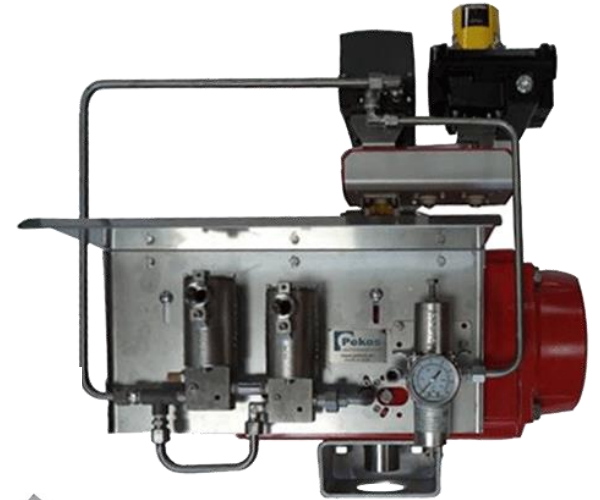
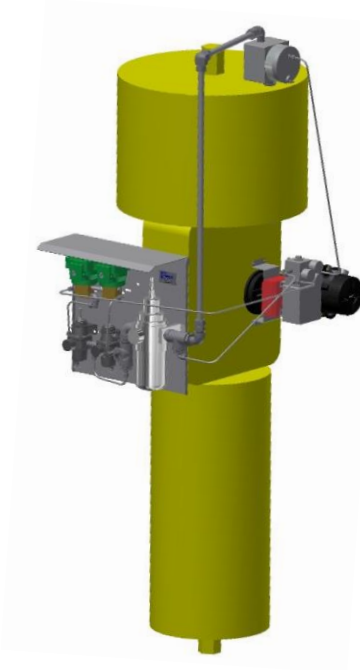
*Modular System K-GUARD:* The modular system K-GUARD® consists of two parts which cover and protect the equipment. Both parts are made 100% of K-MASS® and are adapted to the external shape of the equipment, reducing all the possible gaps between protected parts and K-MASS®.





# Pekos Valves | Test Finished Product

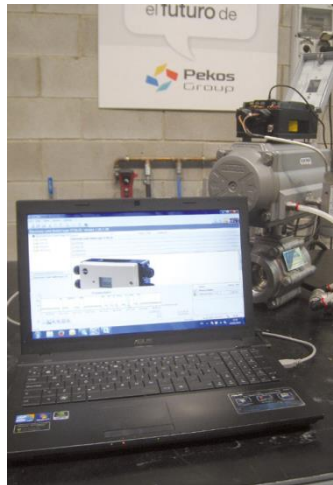
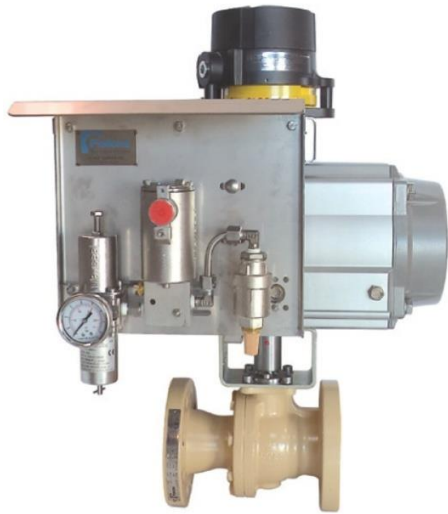
- ✓ Customize Control Panels depending on customers' requirements (1001, 1002, 2002, 2003).
- ✓ 3D design.
- ✓ Automation center know-how.



## CERTIFIED ASSEMBLY FOR AUTOMATIC SHUT-OFF ACCORDING TO EN 161, EN 16678 & EN 23553 (FORMER EN 264) WORKING CONDITIONS

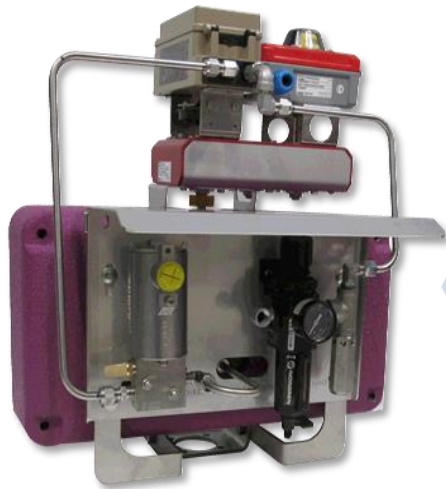
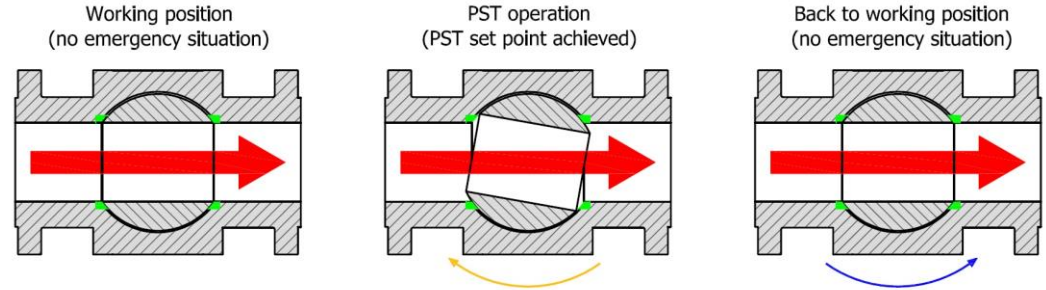
Automation main requirements:

- ✓ Safety factor: 250% (EN 161).
- ✓ Closing <1 second (EN 161).
- ✓ Valve max. Shut-off pressure: 5 bar for EN 161; 63 bar for EN 16678; 50 bar for EN 23553.
- ✓ The actuator must close considering the maximum valve shut-off pressure with the minimum air supply available.
- ✓ The solenoid valves must be operative considering  $\pm 15\%$  of the nominal voltage.



## Partial Stroke Test (PST) SIL3 Capability

- ✓ Avoid possible failures ensuring valve availability
- ✓ Rotate the ball 10% to close position without affecting the flow



### Local Control Mode

- ✓ Manual PST via Solenoid



### Remote Control Mode

- ✓ Smart Positioner
- ✓ Communication Protocol (HART, PROFIBUS, etc..)

# Pekos Valves | Certificates



## COMPANY CERTIFICATES

- ✓ ISO 9001
- ✓ ISO 14001
- ✓ API Q1
- ✓ PED 2014/68/EU

## PRODUCT CERTIFICATES

- ✓ ATEX 2014/34/EU
- ✓ AD Merkblatt
- ✓ Firesafe
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- ✓ DVGW (DIN EN 13774 gas distribution)
- ✓ CRN Canada
- ✓ NSF-61
- ✓ Materials

# Pekos Valves | Approvals



# Pekos Valves | Official Approvals

- Repsol ..... (Spain)
- SABIC..... (Spain)
- OMV .....(Austria)
- PETROM ..... (Romania)
- ORLEN, SYNTHOS & LOTOS ..... (Poland)
- LA ROCHE ..... (Switzerland)
- BOREALIS ..... (Sweden)
- KEMIRA & NESTE-OIL..... (Finland)
- SLOVNAFT ..... (Slovakia)
- SONATRACH, BERKINE... (Argelia)
- PETROPERU..... (Peru)
- YPF..... (Argentina)



Membru OMV Grup



NESTE OIL



Kemira



- HYUNDAI ..... (South Korea)
- Qatar Petroleum ..... (Qatar)
- China Petroleum..... (China)
- Sasol Technology ..... (South Africa)
- Medoil ..... (Libya)
- Petroleum Development Oman -PDO....(Oman)
- KOC ..... (Kuwait)
- NIGC, NIOEC & KALA NAFT..... (Iran)
- ADNOC: ZADCO, ADGAS..... (UEA)
- ENPPI, EGPC, PETROJET & PETROZEIT.... (Egypt)
- SURUHANJAYA TENAGA ..... (Malaysia)



شركة تنمية نفط عمان  
Petroleum Development Oman



SASOL  
reaching new frontiers



إحدى شركات مؤسسة البترول الكويتية  
A Subsidiary of Kuwait Petroleum Corporation

✓ VOPAK	Germany, Netherlands, Belgium
✓ TOTAL and TOTAL Chemicals	United Kingdom, Spain, Belgium
✓ LUKOIL	Russia, Bulgaria
✓ ABB	Canada
✓ ALSTOM	Spain and France
✓ SAMSUNG ENG	South Korea
✓ GASCO	UAE
✓ INA	Croatia
✓ SAUDI ARAMCO	Saudi Arabia
✓ BOUROUGE - BOREALIS	UAE
✓ ZADCO	UAE
✓ YPFB	Bolivia
✓ VIETNAM PETROLEUM	Vietnam
✓ PETRO GAL	Portugal
✓ BASF	China, Spain, Germany, Belgium
✓ SOLVAY	Italy, Spain, Germany, France
✓ AIR LIQUIDE	France, Belgium, Germany, Egypt
✓ YARA	Germany, Norway, Australia
✓ ROMGAZ	Romania



- ✓ PDVSA
  - ✓ EGYPT GAS
  - ✓ PETROBRAS
  - ✓ ENI
  - ✓ BP
  - ✓ STATOIL
  - ✓ WINTERSHALL
  - ✓ MAERSK OIL
  - ✓ CNOOC
  - ✓ NESTLE
  - ✓ GENERAL ELECTRIC - GE
  - ✓ SIEMENS
  - ✓ ALSTOM
  - ✓ DSM
  - ✓ AKZO NOBEL
  - ✓ TATA STEELS
  - ✓ ARCELOR MITTAL
  - ✓ CEPESA, PETRONOR
  - ✓ EVONIK
- Venezuela  
Egypt  
Brazil  
Italy  
Algeria, UK  
Norway, UK  
Germany, Lybia  
Denmark  
China  
UK, Spain, Germany, Switzertland  
Ireland, UK  
Sweedeen, Germany  
UK, Spain  
Netherlands, Spain  
Netherlands, Spain  
Netherlands  
Romania, Spain, Germany  
Spain  
Germany

# Pekos Valves On Field

[www.pekos.es](http://www.pekos.es)



# Pekos Valves On Field



OIL APPLICATION

FLOATING BALL VALVE TYPE



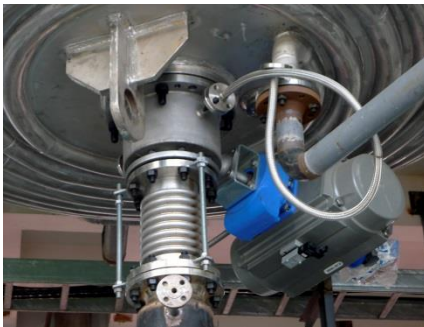
OIL APPLICATION

FULL TRUNNION 3 PCS VALVE TYPE



GAS PIPELINE DIST. APPLICATION

TRUNION VALVE TYPE



TANK FARM APPLICATION

TANK BOTTOM AUTOM. VALVE TYPE



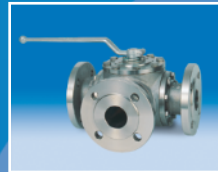
CHEMICAL ADDITIVES APPLICATION

3 WAY VALVE TYPE



LNG APPLICATION

CRYOGENIC VALVE TYPE



**WHEN YOU NEED  
THE WAY YOU NEED THEM**