

BALL VALVES SOFT AND METAL SEATED

PRODUCTION RANGE

Nominal diameter :

DN6÷DN1400

NPS1/4" ÷ NPS56"

Temperature :

-196°C ÷ +700°C;



Nominal pressure :

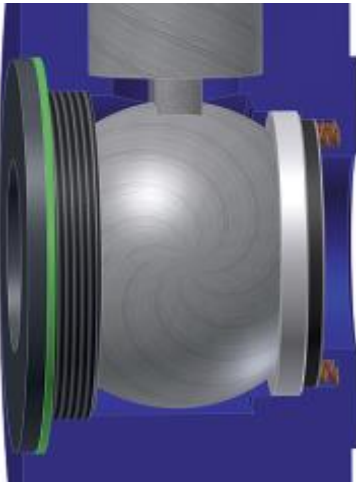
PN6÷PN420

CLASS150÷2500

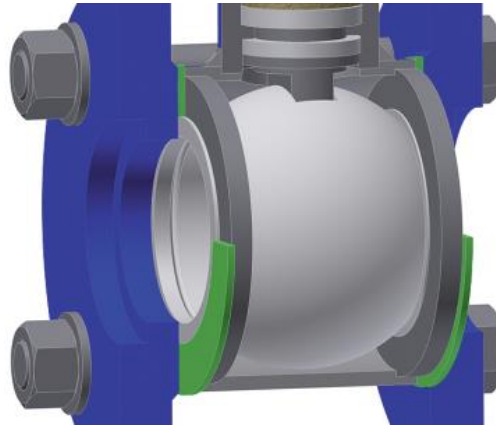


FLOATING BALL

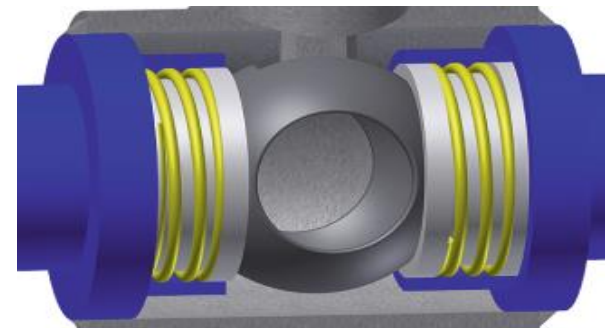
**single side
compensation**



double side compensation



**Double side spring
compensation**



SEALINGS



- PTFE
- PTFE with glass fibre
- PTFE with graphite
- PEEK
- PTFE + o-ring
- GRAPHITE
- METAL - METAL
- METAL + PTFE + o-ring



WORKING RANGE OF MATERIALS ON SEALINGS

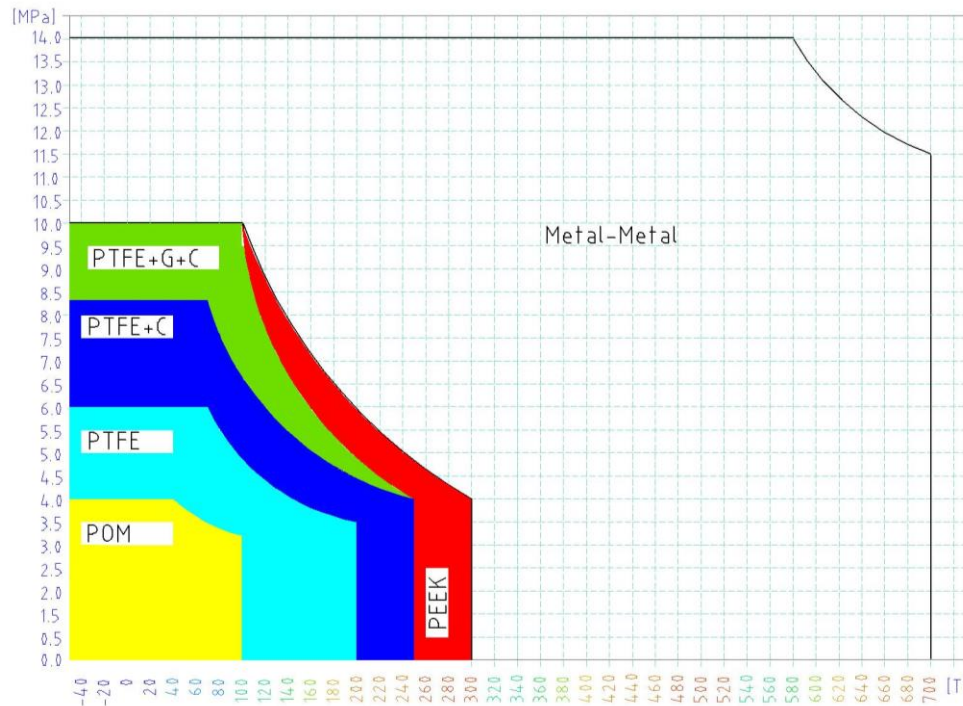
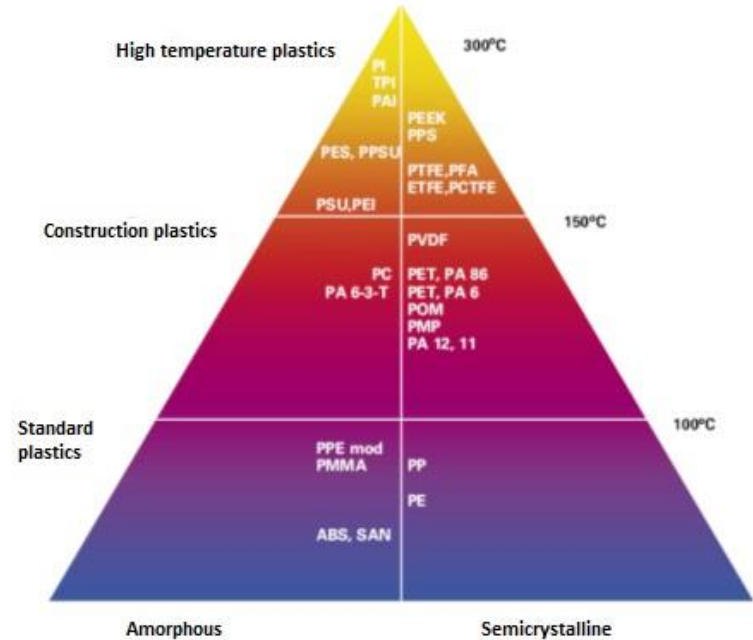


Diagram of working parameters for example ball valve.

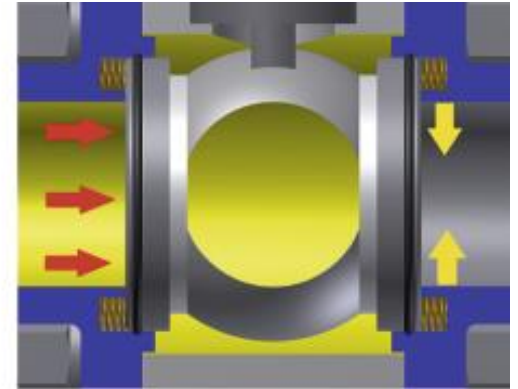
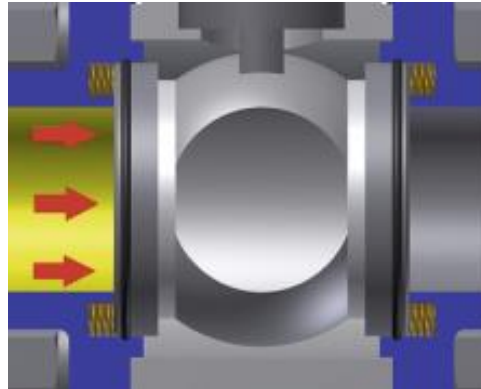


Classification of plastics.

BALL – SEALING

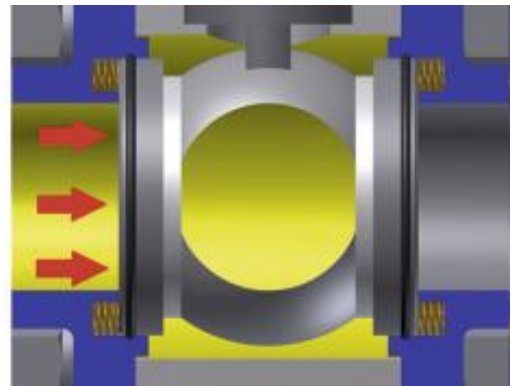
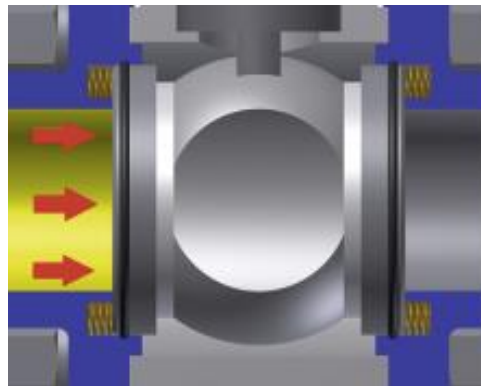
Single Piston Effect (SPE)

„single sealing”



Double Piston Effect (DPE)

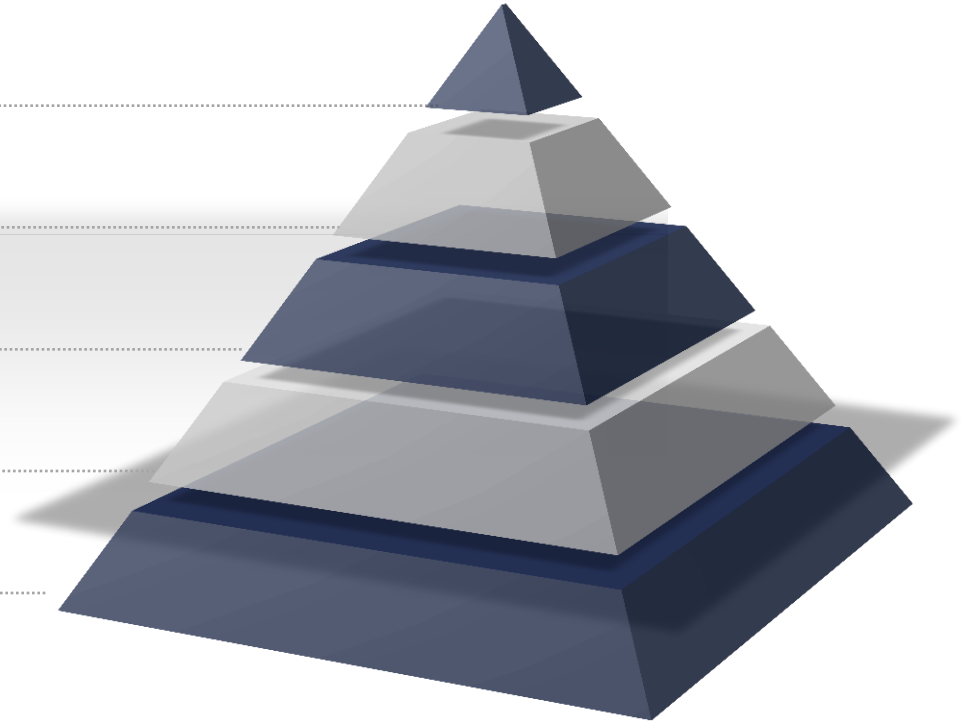
„double sealing”



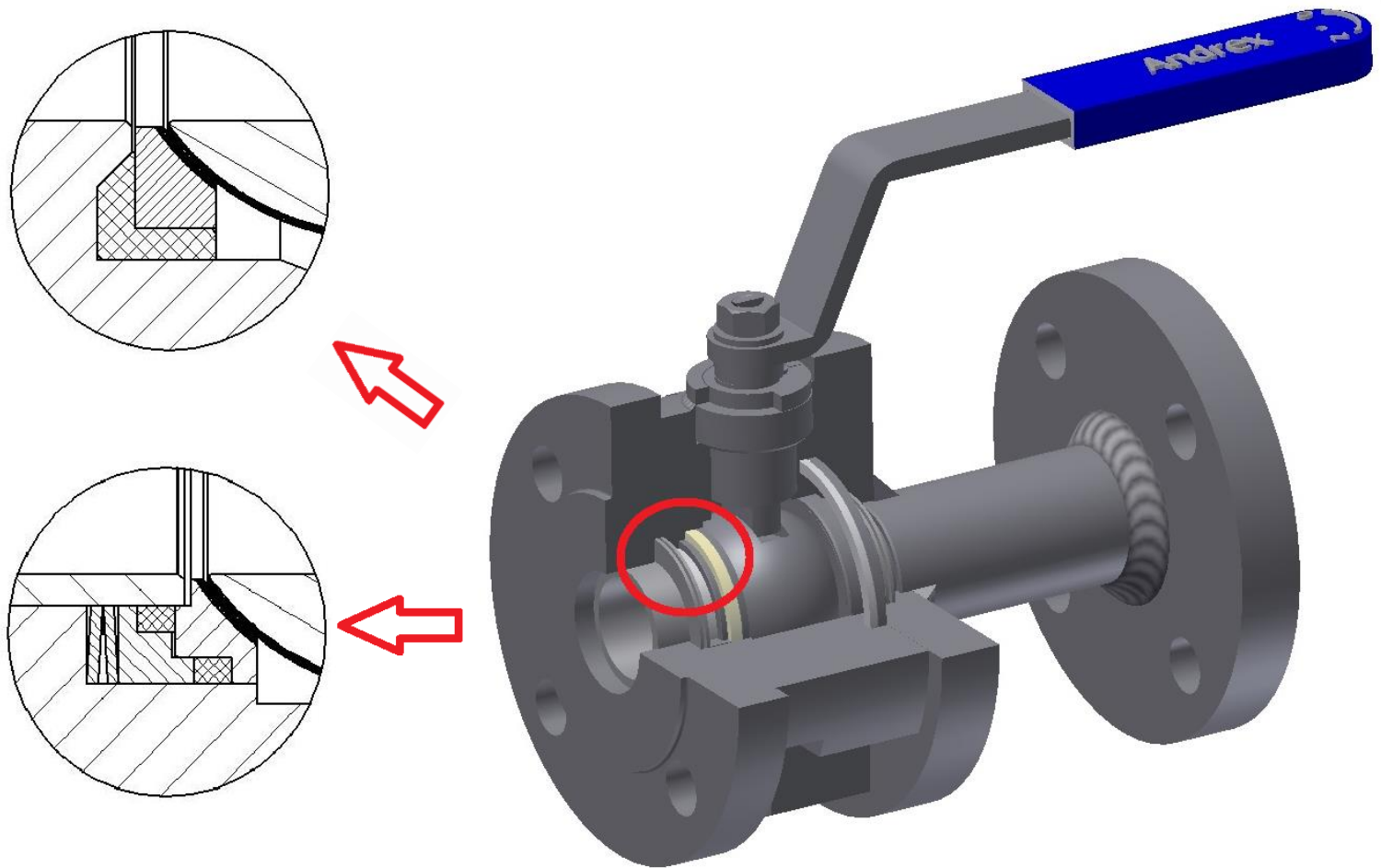
SEALING METAL-METAL

METAL – METAL is right solution for applications which require high resistance for :

- Media with high abrasive properties
- High temperatures
- High pressures
- Frequency of switching
- Intensity of flow



METAL-METAL CONSTRUCTION ANDREX



SEALING TECHNOLOGY METAL-METAL

Layers : flame spraying with thermal thickening
ultrasonic HVOF

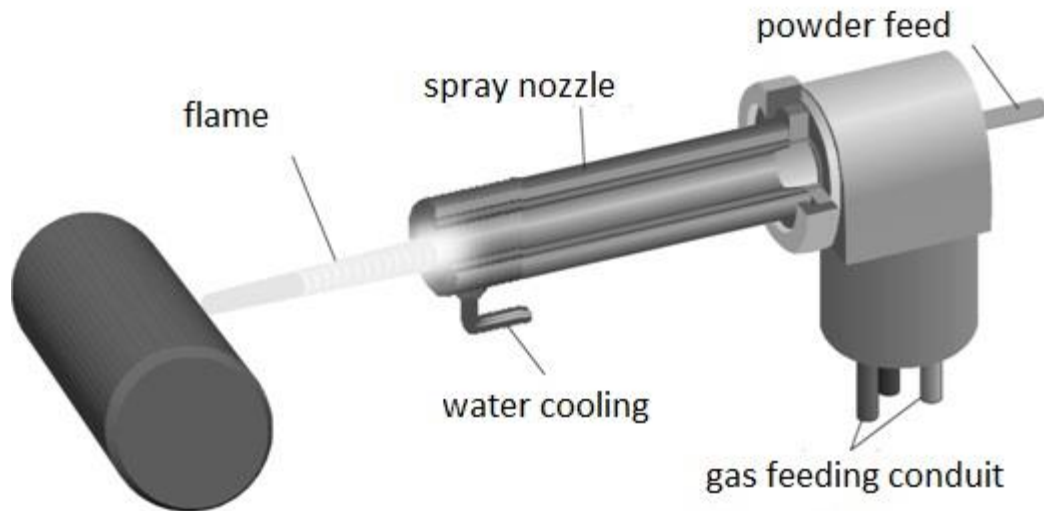
Working pressure up to PN140

Working temperature up to 800°C



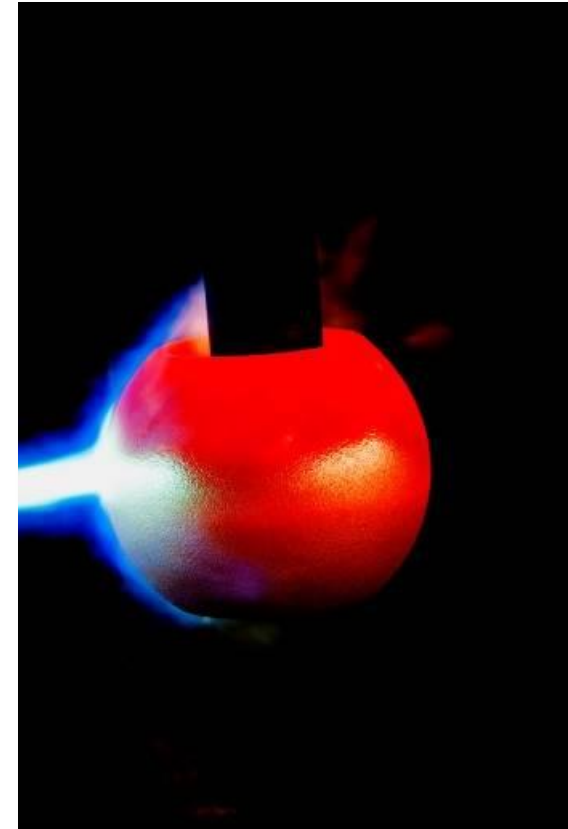
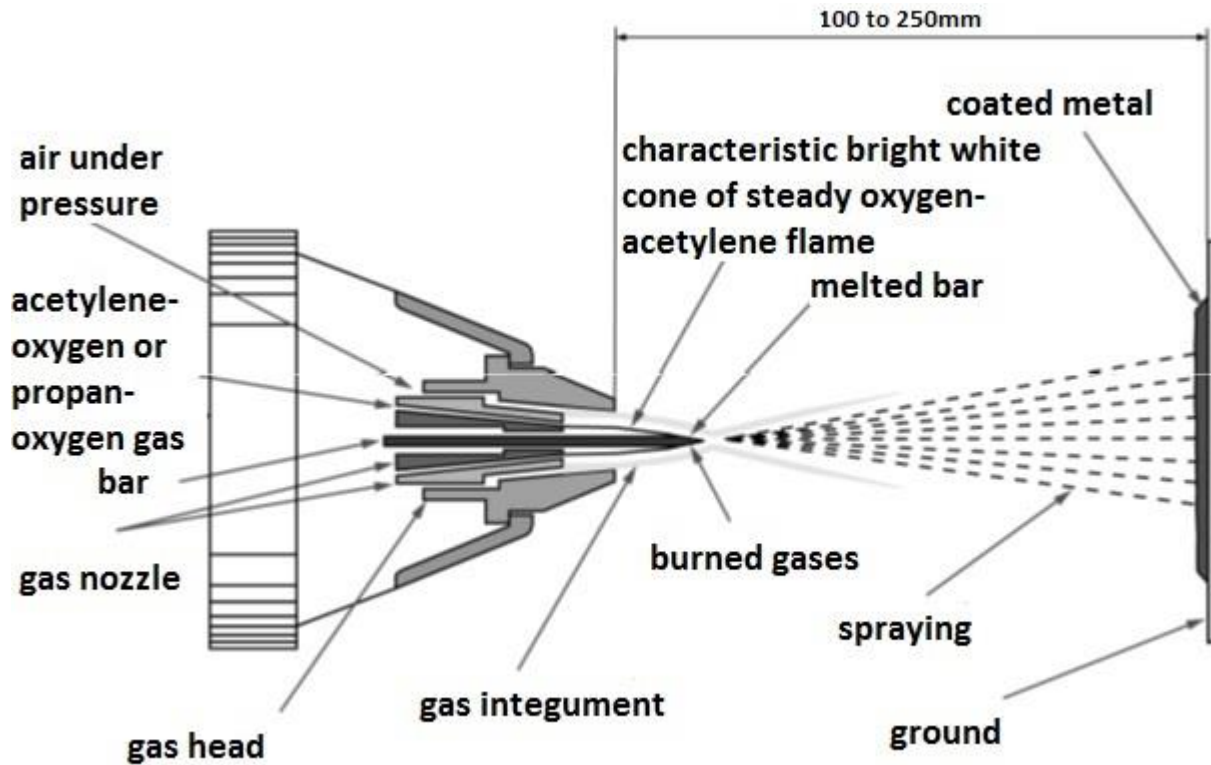
TECHNOLOGY METAL-METAL

Flame spraying with thermal thickening



TECHNOLOGY METAL-METAL

Ultrasonic HVOF



Scheme of oxyacetylene burner for heat spraying (prepared acc to METCO, Inc.)

METAL-METAL LAYERS

Flame spraying / thermally thickened

Group of layers: Nickel hard alloys and Stellite

Number of layers:	7 types
Thickness:	0,5÷0,8 mm
Vickers hardness:	600÷850 HV 0,3
Temperature:	up to 700°C
Coefficient of friction:	0,1÷0,4

- the best tool steels can be hardened maximally 840HV (eg. cutting tools)
- stainless steels can be hardened maximally 600HV
- hard chromium ~1000HV
- above 1000HV hardnesses are reserved for ceramics and diamond.



resistant for abrasion
resistant for alkalis and acids

METAL-METAL LAYERS

HVOF ultrasonic layers

Group of layers: carbides

Number of layers:	4 types
Thickness:	0,2 mm
Vickers hardness:	900÷1200 HV 0,3
Temperature:	up to 800°C
Coefficient of friction:	0,1÷0,4

- the best tool steels can be hardened maximally 840HV (eg. cutting tools)
- stainless steels can be hardened maximally 600HV
- hard chromium ~1000HV
- above 1000HV hardnesses are reserved for ceramics and diamond.



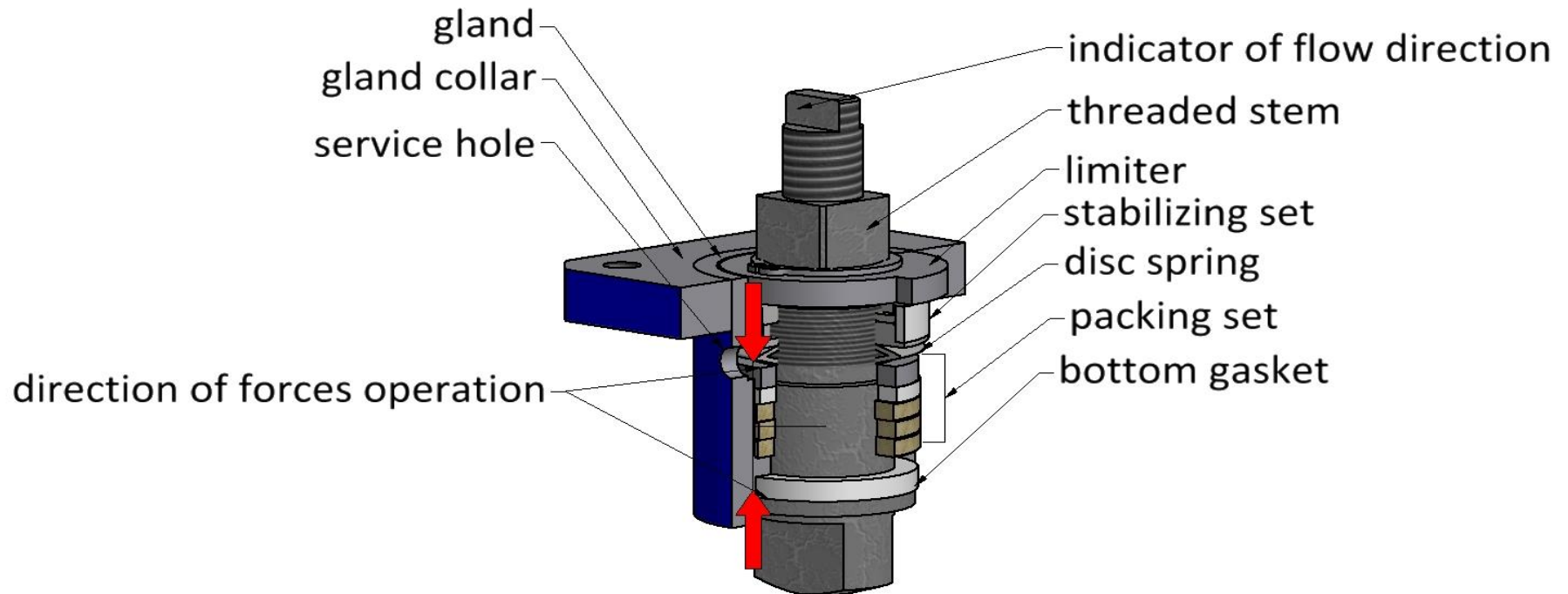
resistant for abrasion
resistant for alkalis and acids

TESTS METAL-METAL

PN100 at 500°C after 6 months of work thightness class 0 (A)

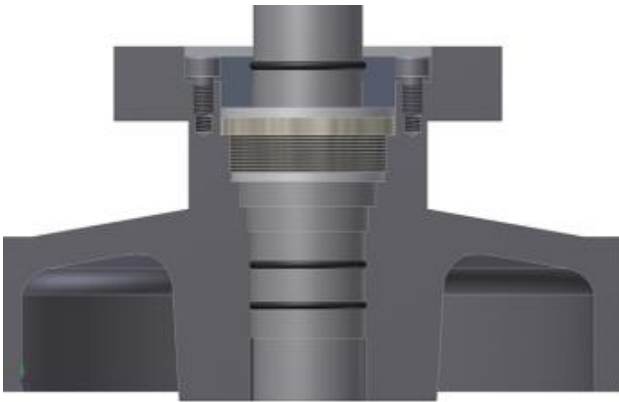


SELF SEALING PACKING BOX

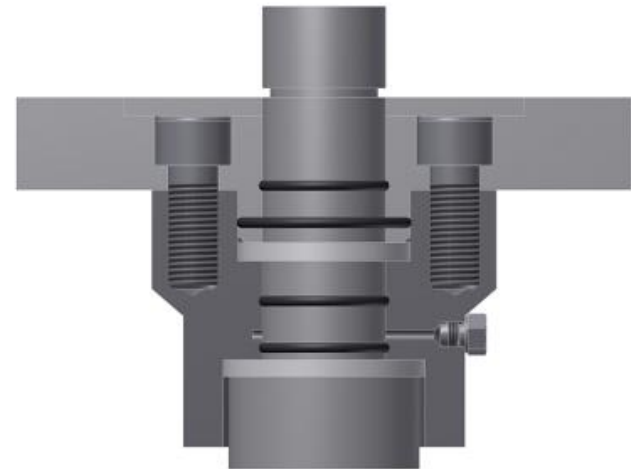


PACKING BOX

Gas



With emergency sealing system



ADVANTAGES of ANDREX products

- wide range of offer: 1-pc, 2-pc, 3-pc, multi-way, heated
- reliability
- made from non-standard kind of steels: hastelloy, uranus, duplex and many others
- durable construction
- fast delivery time 1-4 weeks
- production in express in 48h up to DN250 PN40
- guarantee and after guarantee service : reaction up to 24h
- availability of spare parts
- possibility of regeneration of each type of valve





is part of



Thank you for your attention

www.andrex-vg.com

