



Ball valves in Conventional and Nuclear power plants



Are you looking for...

- Customer-orientated solutions
- Ball valves made in Germany
- Ball valves made of standard and special materials
- Ball valves for temperatures of -196°C to $+800^{\circ}\text{C}$, high pressure to 430 bar
- Various metallic coatings
- Compilation of preliminary test documents
- KTA-approved supplier



The company

Founded in 1900, internationally active and now, with more than 130 employees, represented around the world.

Constantly expanding product portfolio, sound economic basis, tradition combined with innovation, customer-oriented specialized solutions, expertise.

That is what the name PERRIN stands for



Nidderau site



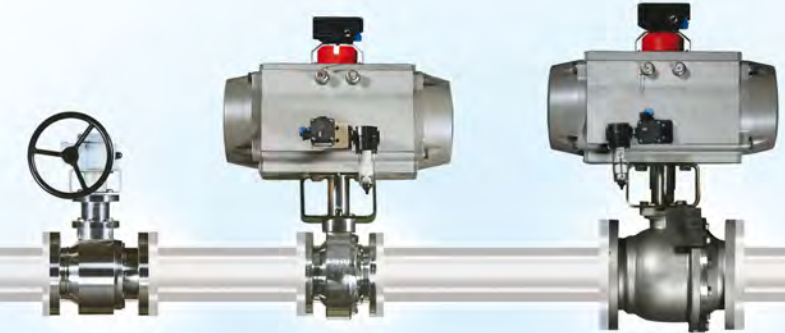
Prenzlau site

Production facilities at Nidderau (near Frankfurt am Main) and Prenzlau (approx. 150 km north east of Berlin). Guaranteeing quality, efficiency, reliability and flexibility.

Over one hundred years of experience in mechanical engineering and valve construction. Wide-ranging industrial applications around the world for Shut-off and Control valves inclusive of conventional and nuclear **power technology**.

The products

- Two-way and Multi-way ball valves
- Switching units for safety valves
- Diverter valves
- Flange, weld-on and threaded connections



Temperature range -196° C to +800° C
Standard nominal diameter range DN 15 to DN 600 DN ½" to DN 24"
 also suitable for increased switching frequency

Pressure range PN 10 to PN 420
 ANSI Class 150 to Class 2500

Materials Carbon steel - all grades
 Stainless steel - all grades
 Titanium
 Hastelloy
 Special materials



Overall lengths DIN, ANSI, other standards
 special lengths

Accessories Actuators (pneumatic, electric, hydraulic), together with accessories e.g. limit switches, solenoids etc.

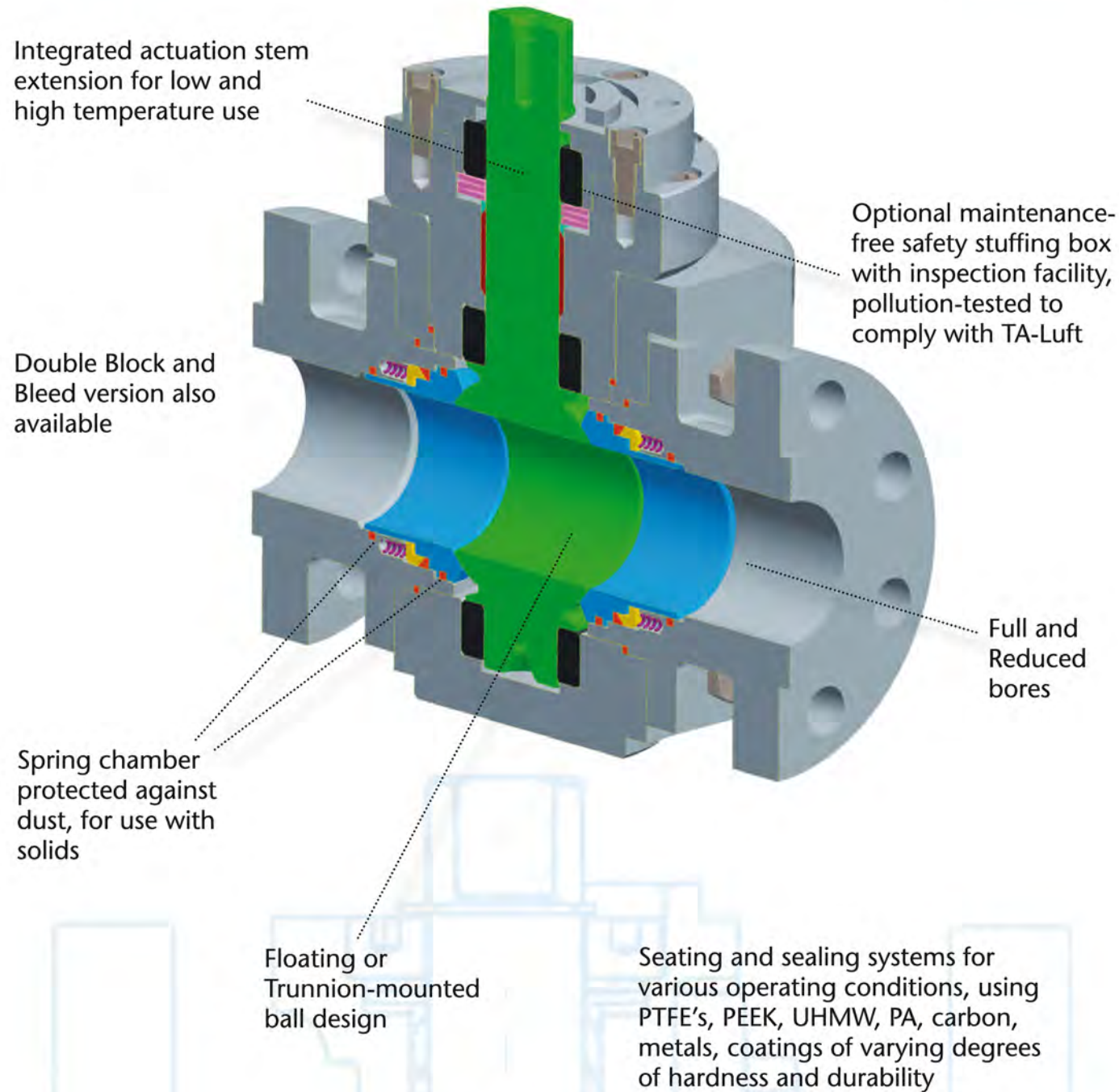
Heating and refrigeration jackets

Stem extensions

Ratchet and locking units



PERRIN Ball valves – design variations



PERRIN – what makes the difference?

Latest technology

- PERRIN employs the latest coating technologies in its products. Thermal coating, e.g. using nickel or cobalt as the basis. High speed flame spraying, e.g. using wolfram carbide as basis, produced in the facility of Nidderau.
- In the various machining phases PERRIN always applies the latest production methods.
- 3D plane tables and inspection machines
- Testing, e.g. cryogenic, firesafe and helium leakage tests



Additional services

- Compilation of preliminary test documents based on PERRIN KTA approval
- Customized manufacture of special items



DIN EN ISO 9001
DGRL 97/23/EG, Module H & H1
API 6D
AD regulations
KTA approval
Vattenfall approval
GOST
TA Luft
DVGW



Manufacture and acceptance of the valves in accordance with DGRL 97/23/EC, AD 2000 HPO and relevant standards as DIN EN/ANSI/ISO/API/ etc.

PERRIN – The valve specialist for power plants engineering



Ball valves for DeNOx installations



Ball valves in conventional or fluidized firing

Ball valves for use in nuclear technology

- in primary and secondary circuits
- compilation of documentation, including all preliminary test documents and calculations based on PERRIN KTA approval

- in the gas sector
- in the transportation of coal/fuel
- in the input of mineral additives e.g. via branch pipes
- In cold and hot (up to +800°C) slag and ash removal systems



Ball valves for flue gas desulphurization

- for liquid/suspensions/solids
- in gas washing
- in special materials, e.g. 1.4439, 1.4539, Hastelloy



Ball valves in tank farms

- for oil and gas and other media
- shut-off downstream and upstream of pumps
- for low temperature use down to -196°C in LNG and natural gas installations



Ball valves in steam and water circuits

- high pressure (up to 420 bar) – and high temperature use (up to 600°C)
- cleaning systems for boiler tubes
- in seawater-resistant special materials (e.g. Duplex 1.4439, 1.4539, Hastelloy...)



PERRIN – references (excerpt)



Conventional power stations

Power stations operated by the following

- EnBW
- EON (VKR)
- Evonik (STEAG)
- RWE (VEW)
- Trianel
- Vattenfall (HGW)
- Various municipal and commercial power stations, CHP and waste incineration plants

Nuclear power stations

- Atucha NPS, Argentina
- Biblis NPS
- Brunsbüttel NPS
- Emsland NPS
- Forsmark NPS, Sweden
- Gösgen NPS, Switzerland
- Grundremmingen NPS
- Leibstadt NPS, Switzerland
- Neckar-Westheim NPS
- Olkiluoto NPS, Finland
- Oskarhamn NPS, Sweden
- Ringhals NPS, Sweden
- Jülich Nuclear Research Station
- Karlsruhe Nuclear Research Centre



PERRIN links Nidderau with the world



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