



Application

The gate valve is designed to open or close the service fluid flow fully. The gate valve is not used for flow-control or throttling purposes. It is used in primary, secondary and auxiliary circuits of the nuclear power plants outside hermetically sealed zones.

Working medium

- water
- steam
- air
- gas
- other fluids

Maximum working temperature

- Tmax 250 °C

Technical description

The gate valves designed in cast version are with rising stem and flexible wedge. The gate valve is made of cast semi-finished products. The body and the bonnet are connected mutually by flanged joint-bolted design. The seat rings are welded into the body. The sealing surfaces of the seats and of the wedge are overlay by hard faced but without cobalt overlay alloy. The packing is made of graphite rings. The gate valves designed in fully welded version are flat with rising stem and solid wedge. The body and the bonnet are fabricated and connected together by flanged joint.

Production range

cast version - DN 50-800

- MAWP up to 4,0 Mpa
- fully welded version - DN 400-1200
- MAWP up to 1,0 Mpa

Body material

cast version:

- stainless steel 08X18H10T
- carbon steel GS-C25N

fully welded version:

- forged carbon steel 11 416.1, 1.0425
- stainless forged steel 08X18H10T (1.4541)

Operation

- manual (hand wheel)
- actuator located out of the valve
- electric actuator (gearbox)

Testing

Each valve is tested according to NP 068-05 let us say VTP-87. Allowable leakage is according to GOST R 54808-2011 or EN 12266-1 class B for cast version, class D for fully welded version, (GOST 9544-2005). The calculation proposal, control calculation and calculation for seismic endurance are provided per each valve. The results of seismic endurance are experimentally verified on particular sizes.

Connection to the piping

- flanged ends
- flanged ends with counter flanges
- welded ends

