

ATV

**ADVANCED
TECHNOLOGY
VALVE**



RISING STEM BALL VALVES

1. MODELS

ATV Spa manufactures a full range of rising stem ball valves for production and processing applications.

Rising stem ball are used in severe service applications requiring the highest reliability and offers the advantage that the sealing surfaces do not contact during stroking of the valve, with the benefit of long life without maintenance.

Rising stem ball valves are particularly suitable for high temperature and cycling service on molecular sieves and dehydrating units in gas treatment plants, isomerization units and other processing plants.

Rising stem ball valves can be supplied in metal to metal or soft seated configuration.

Rising stem valves can be operated with manual gear or with electric, pneumatic or hydraulic actuators.



Rising stem ball valve 12" 1500

ATV Spa Rising Stem Ball Valves comply with following industry standards:

- API 6D ISO 14316
- ANSI B16.34
- API 6FA
- API 598
- PED
- Norsok

MODEL	STANDARD	VALVE TYPE	VALVE CONSTRUCTION	SIZE
ATV-RSBV	API 6D	Rising stem ball valve	Bolted bonnet	2" and larger

2. DESIGN AND QUALIFICATIONS

ATV Spa has implemented state of the art design and qualification processes

Design is carried out using advanced parametric design tools and solid modelling programs.

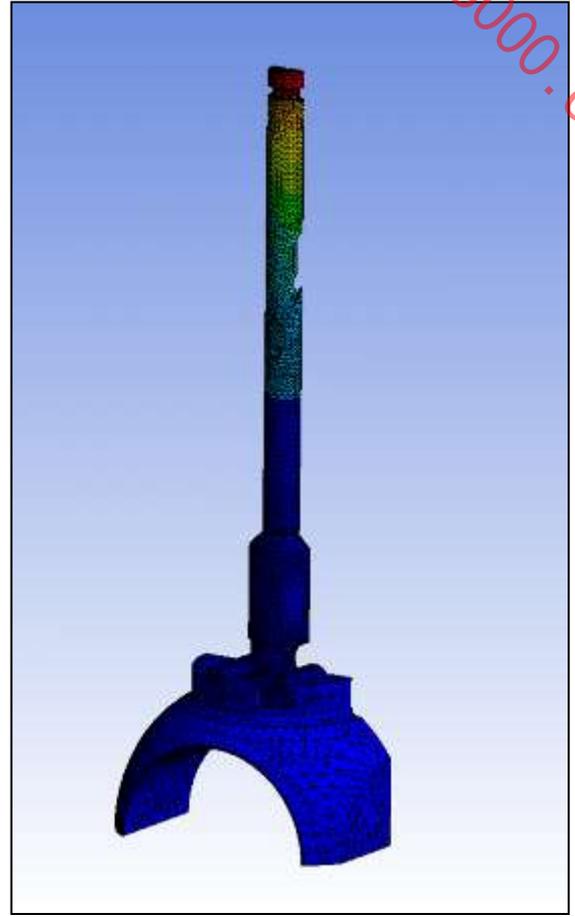
Structural design is optimized and verified with FEA analysis and in compliance with recognized design standards, including ASME Sect. VIII Div. 1 and 2 and PD5500. .

ATV Spa performs also CFD analysis to predict the pressure drop, the position of the clapper disk thru the full range of flow rates and the dynamic response of the clapper in case of slam shut events. Such analysis are required to verify that the valve will perform adequately in service.

Extensive qualification programs include the following tests:

- Bending test
- Fire testing to API 6FA / API 607 / BS
- High temperature test
- Low temperature and cryogenic test
- Fugitive emission testing according to ISO 15848-1
- Complete qualification according to API 6A PR2 Appendix F
- Complete qualification according to ABNT 15827

Tests are carried out in a state of the art test facility equipped with data acquisition system and all relevant instruments



3. RISING STEM BALL VALVES API 6D

Features

- Full bore or reduced bore
- Cast body construction
- Top entry with bolted bonnet
- Soft seated and metal to metal seated
- Wear resistant hard facing on sealing surfaces
- Bubble tight
- Soft or metal seated
- Fire-safe
- Fugitive emission

Applicable standards

- API 6D ISO 14316
- ANSI B16.34
- ANSI B16.10
- API 6FA
- NACE MR0175 / ISO 150156

Range

- 2" to 24" Class 150
- 2" to 24" Class 300
- 2" to 24" Class 600
- 2" to 20" Class 900
- 2" to 12" Class 1500
- 2" to 12" Class 2500

Ends

- Flanged to ANSI B16.5 - B16.47 - MSS SP-44
- Compact flange NORSOK L005
- Hub connectors
- Butt weld ends to ANSI B16.25

Materials

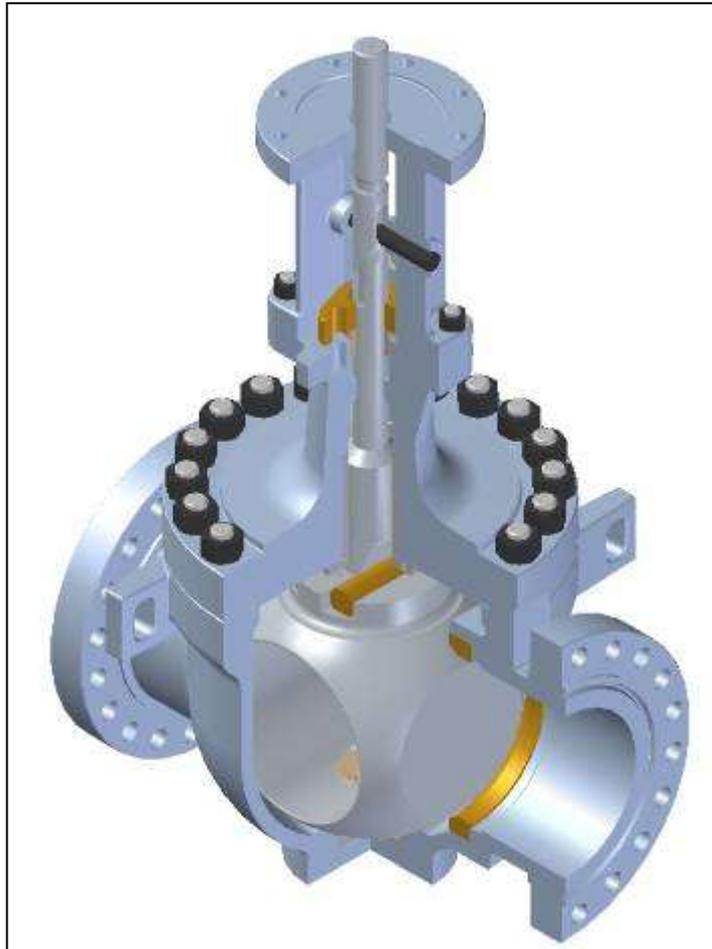
- Carbon steel
- Low temperature carbon steel
- Stainless austenitic and superaustenitic
- Stainless duplex and SuperDuplex (NORSOK)
- Nickel superalloys (Monel, Inconel 625, Hastelloy)

Operators

- Handwheel or manual gear
- Electric multiturn
- Hydraulic double acting and fail close
- Pneumatic double acting and fail close

Options

- High temperature service
- Hydraulic snubber for pneumatic actuator
- Injectable packing for pipeline service
- Stem back-seating



Rising stem ball valve 6"1500

4. CERTIFICATIONS

ATV Spa holds the following accreditations:

- ISO 9001:2008 cert. n° 197407
- ISO 3834-2:2006 cert. n° IT251504
- OHSAS 18001:2007 cert. n° IT257279/UK
- PED cert. n° CE-PED-H-ATV001-06-BVI
- API 6A cert. n° 6A-0880
- API 6D cert. n° 6D-0778

