

## API 20000

**PETROLVALVES** has been developing valve solutions for critical applications for the oil and gas industry for **more than 50 years**.

With onshore and offshore development moving into deeper and increasingly challenging fields, new advanced technologies are needed **to increase reliability, flexibility, speed and performance**.

Recently, working in partnership with one of our customers for a high pressure project application, **PETROLVALVES has been awarded with the design appraisals of ball and axial check valves suitable for 20K psi working pressure**: the ball valve is a 5-1/8" full-bore trunnion mounted, top-entry construction type, in accordance with API 6A design requirements.

The axial check valve is a solid disc, non-slam type, in accordance with API 6A design requirements.

The client requires **30 years** of service life, **7,000 pressurizing cycles** and **1,500 operating cycles** and vertical flow down installation.

Utilizing advanced computational analysis and calculations in accordance with international standards, **PETROLVALVES** is able to design these valves for the critical conditions in which they will operate.

The efforts are comprised of validating through **Finite Element Analysis and API 6A acceptance criteria**, the sealing capability and the strength of the valve itself, body to bonnet and bolting verification, and internal components interface, such as seat to ball, to verify the design.

The validation of the designs shall be proven through the production of the **prototypes**, with qualification testing meeting client and industry performance requirement levels, including PR2 in accordance with API 6A Annex F.