



Main Steam Isolation Valve for new reactors of VVER type - gate valve type ELDIDOR  
Быстродействующий запорный отсечной клапан острого пара для новых реакторов ВВЭР - задвижка ELDIDOR

Sempell profits from 135 years of experience and delivers control, safety relief and isolation valves for conventional and nuclear power plants as well as the chemical industry.

At Sempell, we know what it takes to design and manufacture industry-leading valves that stand the test of time. After all, we have been doing just that for more than a century.

Sempell sees itself not only as a manufacturer of valves, but also as a provider of complete solutions from valve research, development and industrial engineering to complete delivery of highly engineered valves to the customer as well as assuring servicing of delivered systems throughout their entire service life. The result is a custom-designed product.

Consider the nuclear power generation for example. Active valves must perform under such extreme conditions as loss of coolant accidents or seismic events. Based on our 50-plus years of design and operating experience for nuclear applications, our valves are proven to meet these challenges head on.

In the world where performance standards absolutely cannot be compromised, Sempell is the name to trust.

The following sample projects are indicative for Sempell's vast capabilities:

- Delivery of high pressure and temperature gate and stop valves for the Beloyarsk NPP BN600 and BN800. The purpose of the BN600 project, financed by the European Commission, is the replacement of 231 valves which are safety related system components in the water-steam circuit of the Fast Breeder Reactor BN600 with Sempell Gate Valves which are compliant with safety codes and standards.
- Development of a Main Steam Valve Unit based on the proven globe valve design of angle type delivered to German Siemens-KWU and Spain NPP's now for the new reactors of VVER-type. These units consist of the Main Steam Isolation Valve (MSIV), 2 Main Steam Safety Valves (MSIV), a Pilot-operated Isolation Valve upstream from the Control Valve releasing to atmosphere and the Control valve.
- Sempell AG has once again been awarded a contract with RWE. The project involves the new coal power plants at Westfalen in Germany and Eemshaven in the Netherlands. Westfalen and Eemshaven will be identical 1600 megawatts plants from the latest generation of conventional power stations. This performance is made possible by extremely high operating temperatures and pressures requiring customized and optimized component technology and know-how from SEMPELL. The valve package is designed for the steam and water system covering the HP feedwater delivery, HP and IP spraywater, live steam and cold and hot reheat systems.

#### History - Tradition & Innovation

- 1874 SEMPELL is founded as the Rheinische Armaturen- und Maschinenfabrik Albert SEMPELL for the developing industries of that time.
- 60s SEMPELL develops valves for the nuclear power industry according to the highest technical standards, and supplies practically all nuclear power plants in Germany and Scandinavia as well as other power plants in Europe, the former East Block and South America.
- 1970 First delivery of Pilot Operated Safety Valves to NPP Stade / Germany
- 1980 Qualification of the Main and Pilot Valve with hot water and 1985 ATWS Qualification of both valves under full flow
- 1989 SEMPELL AG is the first manufacturer of safety valves in Germany to receive the UV stamp (certification according to ASME).
- 1990 SEMPELL is one of the first valve manufacturers in Germany to have its quality management system certified in accordance with ISO 9001.
- 1991 The plant constructor Deutsche Babcock AG in Oberhausen decides to acquire SEMPELL to supplement its range of products. Babcock's own department for valves is integrated into SEMPELL AG.
- 1997 In the course of the restructuring of the Babcock concern, the SEMPELL group is sold to TYCO International Ltd. and integrated into the Flow Control division (valves, pipes, fittings...).
- 2003 SEMPELL receives the "N stamp" (nuclear certification according to ASME) - with its name, its size and its product range, SEMPELL AG is a pillar in the worldwide association of valves manufacturers.
- 2009 Capacity expansion in the framework of a 12Mio \$ investment program.

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