

## Our Philosophy: Perfection in the smallest detail

Every customer's request will be considered. With a **high degree of flexibility**, each customer's request, however minor it may be, is implemented into the design immediately. We won't give 'no' for an answer! Only those who try the impossible will achieve the possible. With that in mind we can create something that hasn't been created before and the result is **incomparable** with any other design. Upon a customer's request, we designed a valve that lost all visual similarities to our standard valve.

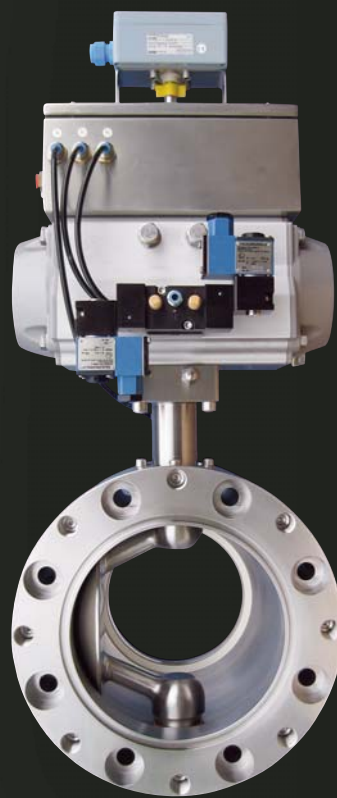
This special design solved the customer's problems and saved him a large investment.



Examples of the advantages that distinguish these valves from others, to give our customers something they can refer to, are: Coatings and special material grades, such as HC 22, Alloy 59 or Titan; Nitrogen purge flanges used for faster drying processes, or used to drain liquids; cooled or heated segments or valve housings; insulated valves; integrated sight glasses for inspection purposes; special actuators; controls with integrated fail-safe technology; actuator assemblies at different levels.



The existing, we will improve. What doesn't exist, we will design from scratch.



## VALVES FOR HIGHEST REQUIREMENTS



### Expertise and high competence

Each enquiry is a **challenge**. When things are seen as a challenge, then **full attention** will be devoted to it. Processing is a difficult area. However, for a Segment Ball Valve, it is a solved case.

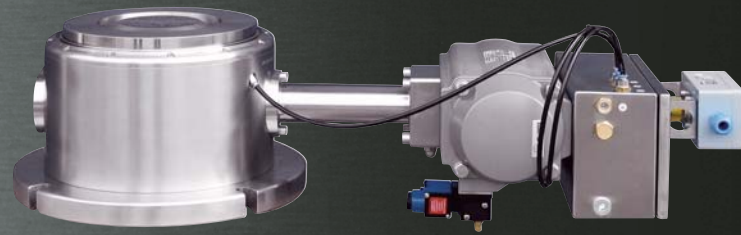
Expertise and a **high level of professional competence**, individual advice and good engineering, customer's orientation and last but not least, perfect performance, are the basic fundamentals of these valves for the highest requirements.

A Segment Ball Valve consists of a housing and a segment of a ball that is supported on two sides by maintenance-free bearings and sealed with an inflatable seal.

A 90° rotation of the segment allows even difficult flowing products to pass the valve's full bore in a short amount of time. During the rotation, the segment moves freely past the spherically shaped housing. A Segment Ball Valve can be used both as an inlet and an outlet valve and can be used to shut off a stream of flowing product.



The most commonly used applications in which the Segment Ball Valves are applied are: conical blenders, mixers and dryers, reactors, double conical dryers, horizontal blenders and dryers, agitator vessels, sluices and in piping.



All Segment Ball Valves are manufactured individually. Each customer can upgrade a valve with a diversity of options. The application of a Segment Ball Valve in dryers and blenders can also result in a system with a minimum of dead space. This will not only increase the product quality but also guarantee a continuous high-grade process. All valves are certified according to Air Quality Control TA-Luft VDI 2440.



### Added convenience - CIP technology

It doesn't get any simpler than this. A Segment Ball Valve can be supplied with a number of CIP nozzles or retractable CIP lances, so that the valve doesn't have to be disassembled for cleaning. The GMP design guarantees a reliable cleaning process.



### High-level equipment with high-tech components

A few characteristics that the Segment Ball Valve distinguishes itself from other valves are: high-grade seals; vacuum and pressure tight; full bore without any restrictions; a long service life, even at high and low temperatures; CIP; no dead space in product contacted areas and a high demand of quality for product contacted surfaces.



The valves can be applied from liquids, pastes to solid products and are vacuum and pressure tight in both directions. Compared to others, the Segment Ball Valve stands out because of the high quality and the perfect sealing system, that allows the valve to function up to a pressure of 10 bar. This is made possible because of the inflatable EPDM, FKM (VITON) and FFKM Perfluoroelastomer-Seals, which are compliant to the FDA regulations. The Segment Ball Valve is operated by a pneumatic actuator, which is controlled by an integrated control unit. This control unit regulates the inflation sequences of the seal. An optional positioner can also be utilized to allow the Segment Ball Valve to operate as a dosing valve.



### Vertical dryer equipped with a Segment Ball Valve as an outlet valve

In areas where high requirements are demanded in a production process, Segment Ball Valves are being used to enhance and shorten production processes. The valve's main qualities are especially apparent when a high quality Segment Ball Valve is in combination with a vacuum dryer. This combination will give an outstanding drying result that is realized due to the valve's excellent vacuum tightness.

During discharge, opening and closing of the valve, the inflatable seal is completely protected from the product flow and moving segment, therefore minimizing seal abrasion. Whether for the pharmaceutical, chemical or food industry, the Segment Ball Valve is commonly utilized in these fields because of its durability and long service life.

The Segment Ball Valve is also attractive for the "revamp / overhaul market" because each valve is customized to meet individual specifications.

