ADVANCED SOLUTIONS

Advanced Solutions are products that provide the greatest benefit for reliable safety and efficiency in critical applications.

In developing these solutions, we take an approach that integrates customer requirements, exceptional quality, and application-driven innovation.

idt-dichtungen.de

OEM

Rapid technological progress and ever shorter innovation cycles are real challenges for OEM system and component manufacturers. Product quality, traceability and safety are essential as well as supplier reliability. For industrial valve makers, we have developed Advanced Solutions that meet these high standards.

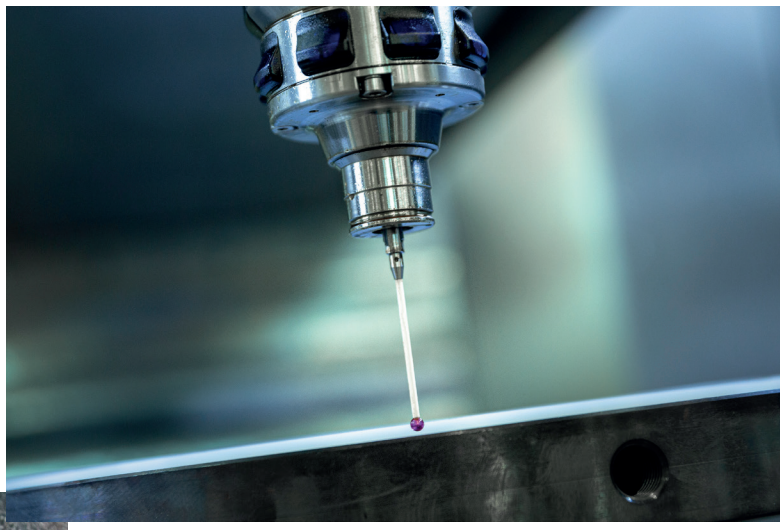
PLASTICS TECHNOLOGY

PTFE high-performance plastics are our strength. They are used in critical applications – where reliability and safety take priority, and outstanding material properties are without alternative. We produce PTFE semi-finished products [press-sintered parts or extrudates] and PTFE molded parts as well as composite parts made of PFA and metal with precision and technical know-how. We are also experienced in processing other fluorinated polymers such as PVDF and PCTFE and engineering plastics such as PE-UHMW, PEEK and POM.

To serve customer needs fast and flexibly, we stock nearly 20 custom compounds in addition to the pure, virgin PTFE and the more diffusion-resistant Dyneon TFM®. Compounding allows us to meet individual requirements, adapt and improve upon the already very advantageous properties of PTFE. For this purpose, organic or inorganic substances such as graphite, glass fiber or quartz are added to the material.

The material properties of PTFE include:

- Heat resistance from -268 to +260°C
- Almost universal chemical resistance, even to aggressive media
- Low coefficient of friction, high elongation at break and reverse bending capacity
- No material adhesion due to low surface tension
- Physiologically harmless even in continuous operation up to 260°C
- Insensitivity to weathering, and high UV stability

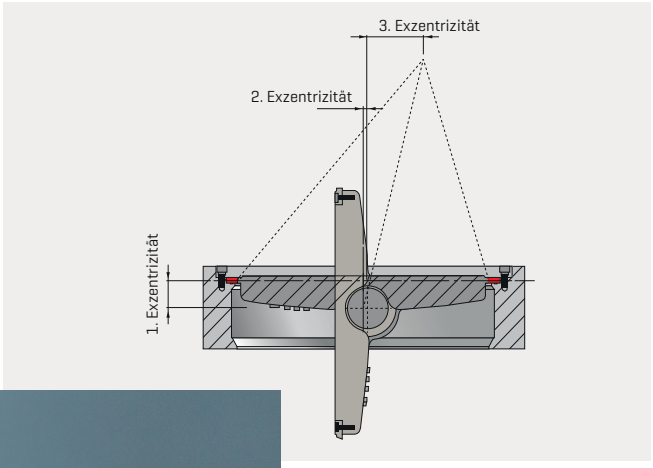


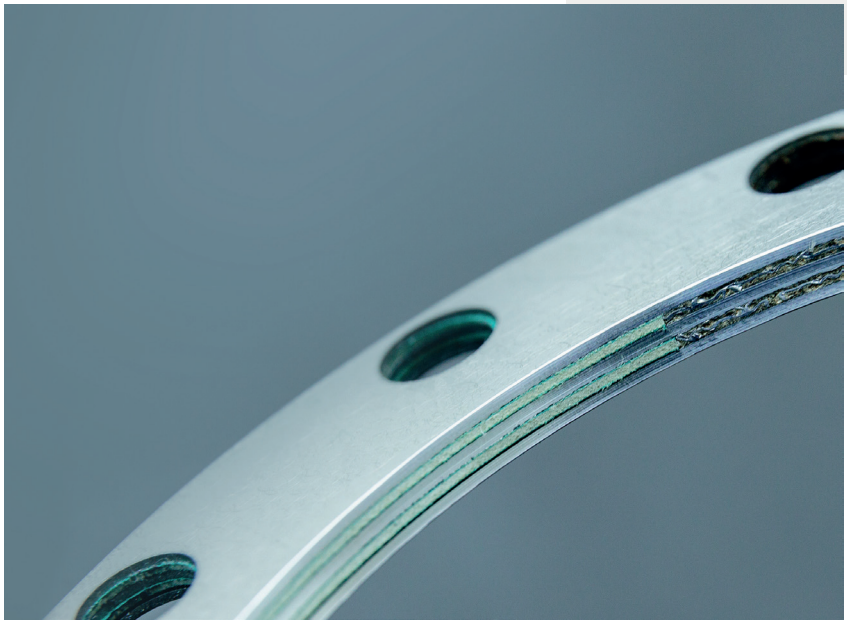
BUTTERFLY VALVE SEAL [LE-SAFE]

The LE-SAFE butterfly valve seals for triple eccentric shut-off valves offer optimum functionality and leak-tightness. In these technically high-performing seals, the metallic carriers are bonded to the pure graphite components without the use of adhesives. In critical applications, adhesive can have a negative impact on the performance of shut-off valves. In oxygen-carrying equipment and components, it carries the risk of unexpected fires. As the adhesive is superfluous once the seal is fixed in place, the LE-SAFE butterfly valve seal offers improved product characteristics with clear advantages: reliable mechanical properties [strength] and leak-tightness [leak class], sealing characteristics that match those of traditional seals with adhesive. As a result, risks are minimized, leakage paths eliminated, erosion and working temperature resistance optimized and a long service life of the entire system ensured.

Geometries & features

All dimensions up to outer diameter ≤650 mm possible, as well as parts tailored to customer requirements. Low leakage rate, easy to adapt to different valves and housings, suitable for extreme operating conditions.





LOW EMISSION PACKING SETS

Industrial valves are one of the most common components in plant engineering for process technology in the chemical industry, where safety for people and environment is the highest priority. Stuffing box packings provide sealing of the stem extension through the valve housing. To ensure a high level of operational safety, special requirements must be met when selecting and designing the packing for the stuffing box. Low emission packing sets are particularly suitable for this purpose. They achieve the leakage rates required by TA Luft 2002 [VDI 2440/2220]; corresponding installation and commissioning instructions must be observed.

LE-1376 UNIGRAF®

Valve packing made of braided, permanently elastic, expanded graphite fibers [C-content >98%]; inconel-reinforced, high-temperature waterproofing, corrosion inhibitor. Excellent cross-sectional density and a special surface texture, very low leakage rates and low friction under extreme conditions. The leakage rates required by TA Luft 2002 are ensured if appropriate installation and commissioning instructions are taken into account. Ready-to-assemble, compression-molded packing rings produced in line with specified dimensions, supplied as a complete set as well as by the meter, in boxes.

LE-1339 UNIGRAF®

Universal graphite packing set. Due to the special combination of graphite foil ring and diffusion ring made of SIGRAFLEX® Hochdruck Pro [WS 3888], the VDI guidelines 2440/2200 are met even without disc springs. The leakage rates required by TA Luft 2002 [VDI 2440/2220] are met, even without the use of disc springs. The corresponding installation and commissioning instructions must be observed. We recommend ready-to-assemble, compression-molded packing rings produced in line with specified dimensions, supplied as a complete set.

LE-2724FS UNIFLUOR®

Universal PTFE packing set. Due to the special combination of braided PTFE packing, diffusion rings and an additional solid ring made of PTFE [WS 7010], the requirements of TA Luft 2002 [VDI 2440/2220] are met even without disc springs. The required leakage rates are therefore guaranteed, taking into account the corresponding installation and commissioning instructions. We recommend ready-to-assemble, compression-molded packing rings produced in line with specified dimensions, supplied as a complete set.