AK® PRODUCTS

High-Performance Sealing Solutions for Demanding Industrial Applications

With decades of experience and a deep understanding of our customers' needs, we offer a wide range of products specifically designed for closures, lids, oven doors, and lever flaps.

Our products are distinguished by their durability, flexibility, and adaptability to various requirements, making them a preferred choice in numerous industries.

Our AK® products, made from rubber-coated fabrics, are the result of meticulous craftsmanship and technical precision. We use high-quality materials such as glass, aramid, and cotton, which can be supplemented with special reinforcements depending on the level of stress. Our products offer an optimal combination of strength and elasticity to meet the specific requirements of each sealing point.

AK® seals are widely used as closure seals on handhole and manhole closures, as lid seals on dome and container lids, as door seals on boiler doors, and as flap seals on blast furnace gas flaps or furnace flaps. Available in various profiles, from strip material to rings and specifically adapted shapes, our seals meet the highest quality standards and contribute to efficient and safe operation.

To maximize the longevity and functionality of our seals, they are usually coated with a non-stick coating. This not only ensures smooth operation but also facilitates installation, even in tight spaces.
Discover our extensive product range and learn how AK® sealing solutions can improve the efficiency and safety of your facilities.

Material and Construction

AK® seals are made from rubber-coated fabrics, using materials such as glass, aramid, and cotton. For higher stress levels, films made of FA material are used for reinforcements.

Wire-reinforced fabrics can also be processed. Core options: For increased elasticity, the seals can be equipped with a soft core made of materials such as elastomer, braided packing, or twisted fiber cord. This allows for individual adjustment of strength and elasticity to the requirements of the specific sealing point.

Application areas

They are used as sealing gaskets (for handhole and manhole closures), lid gaskets (on dome and container lids), door gaskets (on boiler doors), and flap gaskets (for blast furnace gas flaps or furnace flaps).

Profiles and shapes: The gaskets are available in various profiles and shapes, including rectangular and round strip material, rings, oval gaskets, and frames.

For special applications, custom shapes can be supplied, such as flag tape for furnace door sealing or wedge-shaped preload rings.

Special features

Surface coating: The surface of the gaskets is usually coated with a non-stick coating (graphite or PTFE dispersion) to improve performance and longevity.

Installation: When installing in tight spaces, it should be noted that the gaskets are equipped with a 45° bevel cut and a slight excess length.

This allows for effective compression throughout the installation space and prevents leaks.

AK® 2602

Glass Fiber Seal

The AK® 2602 gasket represents the highest quality and performance in demanding industrial applications. Developed as an asbestos-free alternative, it combines innovative materials and manufacturing techniques to provide a reliable sealing solution.

Material composition

The core of the seal is made of glass fabric, which is coated on both sides with an elastomer. An additional special feature is the one-sided rubber-coated overlay of glass fabric, which is soaked on the outside with a PTFE dispersion. This construction offers exceptional sealing performance and durability.

Application range

The seal shows outstanding resistance to water, steam, aqueous solutions, weak acids and alkalis, as well as non-aggressive vapors and gases. This versatility makes it the ideal choice for a wide range of applications. The AK® 2602 is primarily used as a static seal, for example, for hand and manholes, covers, or blast furnace gas flaps. Its PTFE coating increases chemical resistance and minimizes the risk of the seal sticking or burning on. It is supplied in various shapes, including strips from 8 mm square, rings from 60 x 80 mm diameter, and frames from 10 mm square, allowing for customized adaptation to specific requirements.

Technical details

» Temperature resistance: -50°C to 280°C

» Pressure resistance: Up to 20 bar

» Media resistance: Water, steam, weak acids and alkalis, as well as a variety of chemicals

» pH range: 1-12

» Easy installation and maintenance

Conclusion

The AK 2602 impresses with its extraordinary adaptability and resistance to a wide range of media, making it a versatile solution for numerous sealing problems.

AK® 2635

The solution for extreme demands

The HT fabric seal AK® 2635 is a specially developed high-temperature seal that offers optimal performance in demanding industrial environments. Manufactured from high-quality HT glass fabric reinforced with stainless steel wire and coated on both sides with a special elastomer coating, the AK® 2635 sets new standards in sealing technology.

Material composition

The core consists of HT glass fabric reinforced with stainless steel wire. The dual-sided special elastomer coating enhances sealing and durability, while the graphite coating on all sides largely prevents the seal from sticking to the mating surface. As a result, the seal is particularly soft and elastic, enabling excellent adaptation to the sealing surface.

Application area

The AK® 2635 is resistant to water, steam, aqueous solutions, weak acids and alkalis, as well as non-aggressive vapors and gases. It is designed for sealing handholes and manholes, boiler doors, or covers, making the AK® 2635 suitable for a variety of industrial sectors. Its versatility makes it an ideal choice for power generation facilities, the chemical and petrochemical industry, and other sectors that require reliable sealing at high temperatures.

Technical details

» Pressure range: Up to 20 bar

» Temperature range: From -50°C to +450°C

» pH range: 3 to 12

» Available forms: Supplied as tape from 8 mm width, rings from 60 x 80 mm, and frames from 10 mm width, to meet a wide range of application requirements.

Conclusion

The AK 2635 represents a significant advancement in sealing technology by combining safety, reliability, and environmental awareness in one product. With its outstanding performance and flexibility, it is an excellent choice for companies looking to enhance their operational efficiency while simultaneously minimizing their environmental impact.

AK® 2747 & 2749

High-performance aramid fabric seals

Specially developed to meet the most demanding industrial requirements, these seals offer unmatched performance, durability, and versatility.

Material Composition

The AK® 2747 & 2749 seals are made from high-quality aramid fibers and NBR rubber. This unique combination ensures outstanding chemical resistance to oils, fuels, and water. Moreover, they provide excellent compressibility and recovery, ensuring a lasting seal even under difficult conditions.

Application Areas

With their advanced material composition, the AK® 2747 & 2749 are ideally suited for a wide range of applications, including the oil and gas industry, chemical plants, power plants, and more. Their high pressure and temperature resistance make them the first choice for demanding operational conditions.

Technical details

» Material: Aramid fibers, NBR rubber

» Temperature range: -100°C to +250°C (AK® 2747), -100°C to +350°C (AK® 2749)

» Pressure resistance: Up to 100 bar (AK® 2747), up to 150 bar (AK® 2749)

» Thickness: 0.5mm, 1mm, 1.5mm, 2mm, 3mm

» Size: Standard formats and custom cuts according to customer requirements

Conclusion

The combination of high temperature and pressure resistance, along with exceptional chemical resistance, makes the AK® 2702 & 2757 an ideal choice for extremely demanding sealing requirements.

AK® 2702 & 2757

High-performance aramid fabric seals

The models AK® 2702 and AK® 2757 represent the pinnacle of innovation in material technology and sealing performance. These products combine outstanding mechanical properties with excellent chemical resistance to ensure reliable sealing even under extreme conditions.

Material Composition

The AK® 2702 & 2757 seals are made from a high-quality aramid fabric, coated on both sides with special elastomers. This combination ensures high mechanical strength, excellent chemical resistance, and good temperature tolerance. The aramid fibers offer exceptional durability and resistance to abrasion and erosion, while the elastomer coating provides an effective seal. Additionally, the AK® 2702 is PTFE impregnated, and the AK® 2757 is graphitized. This surface treatment prevents the seal from sticking. The PTFE impregnation is recommended when discoloration of the medium must be avoided.

Application Areas

These seals are designed for use in a variety of industrial applications where high temperatures and aggressive chemicals play a role. These include chemical plants, power plants, refineries, as well as applications in the oil and gas industry. They are particularly suitable for static seals where high reliability and durability are required.

Technical details

» Temperature resistance: -50°C to +250°C (AK 2702), up to +300°C (AK 2757)

» Pressure resistance: Suitable for applications with medium to high pressure

» Chemical resistance: Designed for use with a wide range of media, including oils, gases, water, and a variety of chemicals

Conclusion

Die Kombination aus hoher Temperatur- und Druckbeständigkeit, zusammen mit der außergewöhnlichen chemischen Beständigkeit, macht die AK® 2702 & 2757 zu einer idealen Wahl für extrem anspruchsvolle Dichtungsanforderungen.