**KRAIBURG TPE Delivers Reliable Sealing Solutions for Security Devices with TPE**

Public safety relies on effective screening devices to prevent threats and risks, especially in high-traffic areas like airports, government buildings, and public venues.

Trustworthiness of metal detectors, a must-have in modern security systems, rests on well-secured sealing components made with advanced materials like thermoplastic elastomers (TPEs) to protect internal [electronics](https://www.kraiburg-tpe.com/en/industry) from dust, moisture, and mechanical wear—factors that can compromise accuracy and reliability. TPEs outperform traditional sealing materials like rubber and silicone by offering key benefits that boost efficiency and extend the equipment’s service life.

KRAIBURG TPE, a global manufacturer of TPEs and customized solutions for various industries, offers its THERMOLAST® K series for superior sealing performance, with the added value of better processability, design flexibility, and resistance to harsh environments, making it a smart material choice for modern security technology.

**Excellent Adhesion to PC, ABS, PC/ABS, ASA, and SAN**

[THERMOLAST® K](https://www.kraiburg-tpe.com/ko/thermolast-k) enhances the fit, integrity, and performance of metal detector seals, housings, and covers through excellent adhesion to engineering plastics such as PC, ABS, PC/ABS, ASA, and SAN, further supporting the robust assembly and long-term durability required in security equipment applications.

**Insert Molding Capability**

THERMOLAST® K allows for insert molding, a process in which TPE is molded around pre-inserted components such as metal parts or connectors. This capability streamlines manufacturing, reduces assembly time, and minimizes the risk of misalignment, resulting in more reliable and cost-effective production of metal detectors.

**Controlled Level of Emissions and Odor**

The THERMOLAST® K series can be engineered for [low emissions and minimal odor](https://www.kraiburg-tpe.com/en/thermoplastic-elastomers-vehicle-interiors), making it ideal for use in environments where air quality must be maintained. As a top-tier material solution, it helps control VOC levels and maintain a clean material profile, enabling manufacturers to meet regulations while enhancing user comfort and safety.

**Soft Touch, Non-sticky Surface**

THERMOLAST® K provides a [soft-touch surface](https://www.kraiburg-tpe.com/en/smooth-touch-tpe) that enhances the haptic feel of contact areas such as grips, button covers, edges, and control interfaces, improving comfort and usability in handheld or portable metal detectors, especially during prolonged use. Its non-sticky, non-slip properties prevent dust or debris buildup, delivering a premium, non-tacky finish that stays clean and easy to handle.

**Fully Colorable to Match Design Goals**

THERMOLAST® K can be [custom-colored](https://www.kraiburg-tpe.com/en/coloring) to meet precise design specifications or effectively convey brand identity. KRAIBURG TPE’s in-house coloring service offers manufacturers the flexibility to achieve visually consistent products tailored to their specific design needs.

**Sustainability from the get-go**

At KRAIBURG TPE, [sustainability](https://www.kraiburg-tpe.com/en/sustainability) is at the heart of our innovation. Our portfolio features bio-based TPEs and compounds with post-consumer (PCR) and post-industrial (PIR) recycled content. Selected TPEs carry GRS and ISCC PLUS certifications. We also provide Product Carbon Footprint (PCF) data on request to support sustainability decisions.

We proudly earned the EcoVadis Gold Medal in 2025 and are committed to the Science Based Targets initiative (SBTi), aligning our goals with global climate action.

From reducing emissions to increasing circularity, our sustainable TPEs deliver dependable performance and are available worldwide to help meet your applications while advancing your sustainability goals.

Get in touch today to explore how KRAIBURG TPE is able to support you on your sustainability and product development journey.

*Disclaimer: The applications mentioned are illustrative of material capabilities only. Final product suitability and regulatory compliance must be assessed and validated by the customer.*

Metal detector in a airport

AI-generated content may be incorrect.

**(Photo: © 2025 KRAIBURG TPE)**

For high-resolution photography, please contact Bridget Ngang ([bridget.ngang@kraiburg-tpe.com](mailto:bridget.ngang@kraiburg-tpe.com) , +6 03 9545 6301).

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KRAIBURG TPE (www.kraiburg-tpe.com) is a global manufacturer of custom thermoplastic elastomers. KRAIBURG TPE was founded in 2001 as an independent business unit of the KRAIBURG Group and is now the industry's competence leader in the field of TPE compounds. The company's goal is to provide safe, reliable and sustainable products for customer applications. With more than 700 employees worldwide and production sites in Germany, the USA and Malaysia, the company offers a large product portfolio for applications in the automotive, industrial and consumer goods industries, as well as for the strictly regulated medical sector. The established THERMOLAST®, COPEC®, HIPEX® and For Tec E® product lines are processed by injection molding or extrusion and offer manufacturers numerous advantages not only in processing but also in product design. KRAIBURG TPE is characterized by its innovative strength, global customer orientation, customized product solutions and reliable service. The company is ISO 50001 certified at its headquarters in Germany and holds ISO 9001 and ISO 14001 certifications at all its sites worldwide.