



Plastics Engineering 塑料工程 | **BEKAPLAST™** 系
统

锚固热塑性塑料衬里
适用于极端介质条件
Mechanically anchored thermoplastic lining
for extreme conditions



System BEKAPLAST™ – Mechanically anchored lining systems to meet the highest requirements 满足最苛刻要求的机械锚固衬里 系统

BEKAPLAST™ system BEKAPLAST™系统

The ideal combination of stability, safety and resistance 稳定性、安全性和耐蚀性的完美结合

The exceptional feature of the BEKAPLAST™ System is the anchor technique at the back of the sheet, with special studs increasing in size in a conical shape. They create an inseparable mechanical bond between the plastic lining and the concrete, and additionally prevent differential expansion. BEKAPLAST™系统与众不同之处在于盖板的反面采用了专用锚固技术，螺柱尺寸逐渐递增，布局呈锥形分布。这些螺柱使塑料衬里与混凝土实现牢固的机械接合，同时还可防止膨胀系数不同造成的局部破坏。

BEKAPLAST™ can be repaired repeatedly, ensures high impact durability, and is resistant even to biogenic corrosion, high and low temperatures and thermal shock. BEKAPLAST™很容易维修，确保长时间的耐冲击性，还具备耐生物腐蚀、耐高低温和抗热冲击的特性。

BEKAPLAST™ has been successful on the market for over 30 years. From problem solutions in the chemical industry and municipal sewage systems, to installation and repair of tank and shaft linings, through to tank construction – potential BEKAPLAST™ applications are as diverse as today's demands on modern, future-oriented lining technology. BEKAPLAST™在防腐领域已经成功使用了 30 余载。从化工行业和污水处理系统问题的解决方案，到储罐与井壁的安装与维修，再到储罐施工，BEKAPLAST™都存在着潜在的应用，能够满足市场对现在及未来的衬里技术发展的需求。



BEKAPLAST™ S

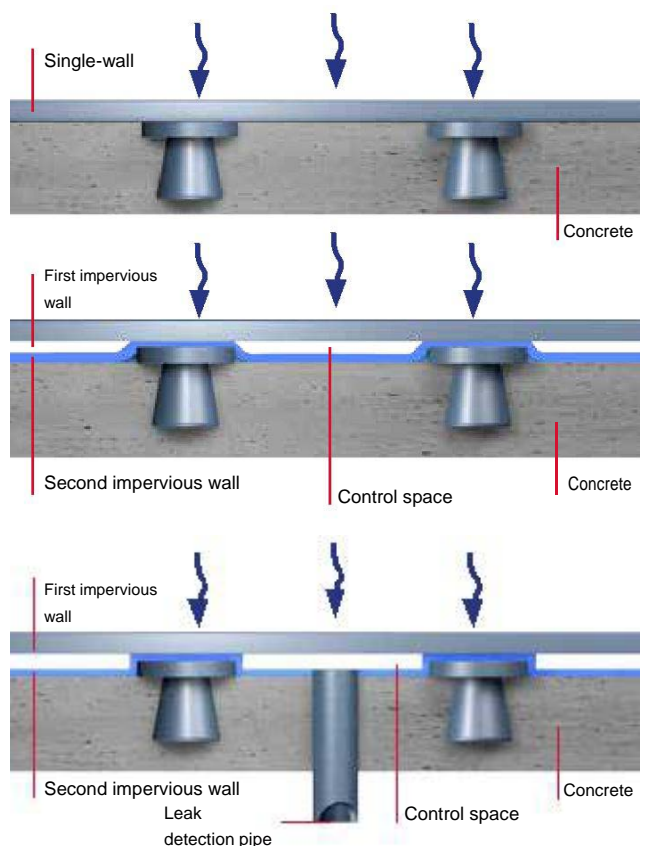
The BEKAPLAST™ standard system is a mechanically anchored single-wall thermoplastic lining. BEKAPLAST™ S 系统标准产品是一种机械锚固单层热塑性塑料衬里。

BEKAPLAST™ DWS

More stringent environmental laws have required the lining of reinforced concrete structures for the storage of water-polluting liquids to be permanently controllable for leakage. The construction of the BEKAPLAST™ DWS System, a thicker primary thermoplastic sheet with a secondary thermoplastic sheet welded behind to form a double sheet, safely complies with legislative requirements. 较为严格的环境法已明确要求储存水污染液时钢筋混凝土结构需安装衬里，用于长期控制水污染液以防泄露。BEKAPLAST™ DWS 系统采用一块较厚的主层热塑料板加一块次层热塑料板，形成双层塑料板，这一结构安全可靠，符合法规要求。

BEKAPLAST™ LS with Leak Detection 带泄露检测的 BEKAPLAST™ LS

In many applications control and repair of underground concrete structures is a requirement, and is addressed by the BEKAPLAST™ LS System. It essentially corresponds to the BEKAPLAST™ DWS double-wall system, but the concrete-facing second wall is not welded. The gap between the BEKAPLAST™ walls serves as a control space. 众多应用对地下混凝土结构进行控制和维修均有要求，并使用 BEKAPLAST™ LS 系统进行处理。BEKAPLAST™ LS 系统与 BEKAPLAST™ DWS 双层系统大体相似，不同之处在于和混凝土连接面的第二层无需焊接。BEKAPLAST™ 双层之间的间隙可用作控制区。





Innovative yet still technically perfected for new construction or renovation 适用于新建 或改造项目技术完美的创新产品

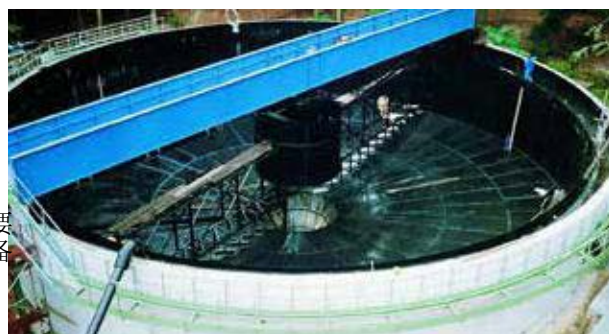
System orientation combined with utmost versatility – the basis for BEKAPLAST™ success. Our references demonstrate the diversity of applications – every project implemented is further proof of the quality of this innovative system solution.

系统设计和多功能性最大化结合—BEKAPLAST™ 成功的基础。我们的业绩说明介绍了多种不同的应用-每个完成的项目都进一步证明了该创新系统的品质。

BEKAPLAST™ for storage tanks 适用于储罐的 BEKAPLAST™

Tanks in the chemical industry and municipal sewage installations must meet various requirements, not always precisely defined in advance. Outdoor plants are also subject to weather conditions, such as sun and frost.

应用于化工行业与污水处理装置中的储罐必须满足各种要求，而这些要求并不总能事先预料得到，此外，室外设备也会受到光照和霜冻等天气条件的影响。



BEKAPLAST™ for Basins and Collection Tanks approved by the German Institute for Building Technology

The BEKAPLAST™ HDPE System has been certified for sealing collection tanks and/or basins for the storage of water-polluting liquids in accordance with § 19 h of the Water Resources Law. This system also offers tailor-made solutions for pump sumps, pipe joints, channel constructions etc.

BEKAPLAST™系统被德国建筑技术研究所（German Institute for Building Technology）认可，用于集污池与集污箱按照德国水资源法的第 19h 条款规定，BEKAPLAST™高密度聚乙烯（HDPE）系统已在水污染液储存用的密封集污箱或集污池方面获得认证。该系统还为泵循环水池、管道接缝、渠道施工等提供量身定制的解决方案。





Bekaplast™ lining in flue gas scrubbers

The particularly high degree of resistance to abrasion offered by thermoplastic polypropylene means that this high-impact material from STEULER-KCH can also be used as mechanically anchored corrosion protection in concrete scrubber structures.

This creates a homogeneous and testable lining around the entire space. The concrete structure and the lining are manufactured in one work step, resulting in considerable time advantages. The entire structure can be exposed to load and then commissioned for operation as soon as the welded seams are finished.

烟气吸收塔内使用的 **Bekaplast™** 衬里

热塑性聚丙烯具有极高的耐磨性，这意味着此类 **STEULER-KCH** 高抗击冲材料也可作为机械锚固层，用于混凝土吸收塔结构中的防腐。

这使得均匀、可检测的衬里能够保护整个表面。混凝土结构与衬里的安装同步进行，从而大幅节省时间。整个结构在安装完成后即可承受机械及化学载荷，接缝焊接完成后即可投入试运行。

Bekaplast™ DWS for water tanks 适用水槽的 Bekaplast™ DWS

In general, leachate water is classified as a water-polluting liquid. In accordance with the Water Resources Law, appropriate sealing systems must be used in the construction of underground concrete tanks. 一般来说，渗滤液属于一种水污染液。根据水资源法规，地下混凝土水槽结构中必须使用适当的防水系统。

BEKAPLAST™ for shaft construction 适用于立井结构的 Bekaplast™

Shaft constructions, e.g. inspection chambers at disposal sites or in mixed water collecting sections, are often subject to conditions that cannot be defined precisely in advance, such as biogenic corrosion and aggressive fumes. System-specific steps in compliance with DIN requirements complement the lining technology. 立井结构，如在废水处置现场或混合集水区的检查人孔，通常会受到诸如生物腐蚀与腐蚀性烟气等无法预先精确定义的条件的影响。符合 DIN 要求的系统特点步骤与衬里技术互为补充使用。

BEKAPLAST™ for electrolysis cells 适用于电解槽的 Bekaplast™

Electrolytic cells for the recovery of zinc, copper or cobalt are exposed to specific chemical, thermal and electrical conditions. In the case of normal sheeting, high temperatures and damage caused by anodes and cathodes striking and falling often cause plant repair and downtime. The mechanically highly durable BEKAPLAST™ thermoplastic lining guarantees a high level of plant operability. 用于还原锌、铜或钴的电解槽容易暴露于特定的化学、热、电流条件下。在使用标准版的情况下，高温与阴阳极电位差波动造成的损害通常会导致设备维修或停机。具有高度机械耐久性的 **Bekaplast™** 双层热塑性塑料衬里，可保证设备连续的运行。

