

Consistently Implemented Plastics Expertise:
Formed In Place Foam Gaskets. Progress for
Your Success – Pöppelmann K-TECH®.



Jointless. Exact Fit. Long Life: **Formed in Place Foam Gaskets (FIPFG)** – for Absolute Precision in the Smallest Detail.

Pöppelmann's K-TECH® Division develops and produces high-quality injection moulded engineering parts for the automotive, electrical and mechanical engineering industries. Apart from its injection moulding facility, Pöppelmann K-TECH® is also equipped for the in-situ production of PUR foam gaskets.

With the FIPFG process, the gasket is produced directly on the sealing face of the moulded part. This is done by means of a CNC robot-guided mixing head, which places a strand of polyurethane into the sealing groove of the part. This strand foams to produce the finished, undetachable, perfectly fitting gasket within a reaction time of only a few minutes – even

in cases of complex part geometry. This process eliminates the need for prefabricated gaskets. The PUR-sealing foam consists of a two part mixture. By choosing specific starting materials and processing parameters it is possible to adapt the elastic properties, thermal stability and chemical resistance of the gasket to actual customer requirements.



Fully automatic line for the production of in-situ foamed gaskets: a conveyor system ensures that the gasket foam has sufficient time to completely react and its geometry cannot then be adversely affected by any unforeseen stresses or loads during subsequent packaging and transport.

Gaskets Produced by the FIPFG Process Feature Many Advantages:

- Reliable, longlife seal.
- Extremely accurate fit in the moulded part.
- The finished gasket is jointless where the ends of the strand meet.
- No need for separate gasket production.
- No need for the warehousing of differently sized and shaped gaskets.
- No risk of confusing gaskets featuring similar geometries.



The CNC-controlled mixing head places the PUR gasket foam straight into the sealing groove of the moulded part.

Examples of High-Precision Injection Moulded Engineering Parts Featuring In-Situ Foamed PUR Gaskets.



ECU for Mercedes-Benz E Class.

As the interface between the vehicle and the electronic control unit, the ECU box must protect the central electrical system reliably and permanently against external influences such as water and dirt as well as ingress of fuel, oil and other media. Pöppelmann seals the mating surfaces of the box and the cover as well as the connecting flange between the engine and passenger compartments with in-situ foamed PUR gaskets.



Cover for photovoltaic converter.

This housing cover is injection moulded in a flameproof polyamide (UL 94 Class V-0) reinforced with 25 % w/w glass fibres. The material also features high strength and rigidity as well as a good surface quality and texture. A gasket in the sealing groove of the cover protects the electronic circuitry against ingress of moisture.

A Successful Family-owned Company: Focusing on People.

Pöppelmann – a strong and reliable partner. Since 1949 the family-owned company Pöppelmann with 5 production sites and 450 injection moulding, thermoforming machines and extruders has proved itself to be a leading manufacturer in the plastic processing industry. In more than 70 countries the quality “made by Pöppelmann” is appreciated. More than 1,600 highly qualified employees stand for our success.

Our Pöppelmann K-TECH® business division develops and manufactures technical injection mouldings to the highest quality standards for the automotive and electrical appliances industry, mechanical engineering, and equipment manufacturers.

Our manufacturing operations are ISO/TS 16949:2009 and DIN EN ISO 9001:2008 certified.



More than 1,600 Pöppelmann employees stand for productivity, quality and service



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