Your industry partner from design to production

Polymer solutions
with moulded elastomers
An expert in elastomers, Teknikum is an integral part of the customer’s product development process. Solid knowledge and experience in various fields help us to find the best solution for your problems.

Our solutions
Cost-effective solutions

Polyurethane elastomers are needed for applications requiring excellent mechanical properties, and wear and tear resistance. The products can be made of elastomer alone or with steel structures. Elastomer coating can be selected according to the operating conditions, and metal structures are used to handle the structural rigidity, pressure-proofing or mounting. There are also special ceramic-polyurethane combinations, like the Cerpu-wear plate.

Operating as an integral part of the customer’s product development, Teknikum provides cost-effective solutions for the entire delivery process. We can rely on our competent sourcing and wide international network of audited partners. Our logistical solutions take everything into account, from country-specific export packaging requirements to product storage and export documentation management. 3D modelling enables us to simulate different material alternatives by using the FEM method. As a result, we can optimise the solution offered to the customer.

The technique applied in Pucast® polyurethane and Nyrim product manufacturing facilitates both small- and large-scale production runs. As special strengths, Teknikum can offer the specific elastomer precision casting technique, manufacturing parameter control and a versatile selection of moulds.

Properties of the polyurethane elastomers

- Excellent wear resistance
- High impact strength
- Wide hardness range
- Good weather resistance
- Extremely elastic and resilient
- High tear resistance
- Wide chemical resistance
- Affordable tools
- Non-staining in all colours
- Wide colour range, customer-specific colours
- Manufacture of large volume pieces also possible

Fulfilment of the customer’s requirements can be assured using modern methods.
Cast plastic materials complement the application range of the traditional rubbers and plastics.
Mining industry
Demanding machine components

In mining operations, polyurethane increases the service life of the equipment components exposed to wear, impacts and abrasion. In addition, it protects against corrosion, vibrations and noise. Polyurethane has many superior properties that, combined with competent design, offer the optimal solution for various mineral processing steps.
Machine and equipment industries
Precise processing and systematic quality assurance guarantee high-class products

Durable quality

Quality assurance throughout the delivery chain:
• risk analyses already at the product development stage
• modern manufacturing technology and skilled personnel
• quality assurance and statistical methods.

Quality assurance programmes cover the entire production chain, starting from the suppliers and subcontractors. The operations are based on certified environmental and quality management systems.
Fulfilling the customer’s requirements

A bespoke and well-informed choice of material is based on understanding the customer’s processes and thorough preliminary work. Reliable deliveries and flexible service ensure customer satisfaction.

Teknikum provides rubber and polyurethane coatings for rollers. With decades of experience of various applications and coating manufacture, we offer a wide range of materials with special properties, including antistatic elastomer solutions for demanding applications.
Paper processing

High quality components for chemically demanding environments and high temperatures ensure an efficient process utilisation rate. Polyurethane guarantees excellent mechanical properties, wear and tear resistance, low friction as well as good damping properties.

To ensure high end product quality, we monitor all process stages and keep a systematic record of our performance. By developing the professional skills of our personnel, we increase our capacity for change and reform as well as innovation – prerequisites for success in the global market.
Environmental technology
Teknikum Polymer solutions

Wide range of materials and decades of experience

Nyrim is a polyamide-based material often used to replace metal structures. It combines the strength, stiffness and heat and chemical resistance of polyamide with the flexibility and toughness of rubber. Nyrim’s recyclability can be utilised in product life cycles.

Nyrim products are durable and light, and fillers can be used to modify the properties. Reaction Injection Moulding (RIM) enables large product volumes and low mould costs.

Teknikum manufactures roller coatings for various industry sectors. In addition to the wide polyurethane range, we manufacture rubber raw materials in our own plant, enabling us to develop bespoke rubber mixtures that meet our customers’ demands.

Product design and tool manufacture are usually based on 3D models. FEM analysis allows us to compare optional materials and offer our customers the best possible solution. In-house tool manufacturing enables short turnover time from design to product.
Machines and rolling stock

Solutions for extreme conditions

Teknikum knows how elastomers work under extreme conditions. Through our expertise, we can offer quality solutions for varying operating environments, from Arctic to tropical.

The products can be made of polyurethane alone or with metal structures. The coating is optimised according to the operating environment, and the metal structure is used to meet the structural demands.
Expert in using elastomers in extreme conditions

From design to end product

Product development partnership with the customer means long-term co-operation. Teknikum’s expertise covers planning premises and processing technology for various elastomer materials. Our strength lies in determining the customer’s needs thoroughly before choosing the correct material, design and manufacturing method.

Safety and environmental considerations throughout the product’s life cycle are taken into account.
Offshore industry

Understanding the requirements of a wide customer base
Product design is regulated by international laws and regulations. Teknikum’s actions are based on purchase and safety policies, ensuring responsible operations and continuing development.

Holistic model of operation
Teknikum’s vision is to be the technology and material leader in selected product and market areas, with the best delivery record on the markets. Our operation model is based on offering our customers practical product and service packages.
Maritime industry

Product development and research
Teknikum’s in-house product development resources ensure that our mould design, compound development and product and method planning solutions meet customer requirements. Long-term co-operation with domestic and foreign companies and institutes enables the use of the latest research information.
Energy industry

Products for electrical and electronic applications

The insulating components meet the requirements for high electrical strength, insulation and tracking resistance, as well as mechanical characteristics across a wide temperature range.

The electrostatic discharge properties of ESD materials developed by Teknikum are well-suited for the EPA region.
Customer-oriented service supporting the customer’s business activities

We keep our promises — whether they concern product features and quality, delivery time or other matters we have agreed upon together. We also act in such a way as to fulfill all the required regulations issued by the public authorities.

We monitor our success on a regular basis. We operate in accordance with a documented and certified operating system.

Our competent and flexible employees are committed to constant development and improvement, and our objective is to increase the efficiency and competitiveness of our company, improve the working environment and ensure profitability and thereby the continuity of our operation.

We aim to minimise errors through proactive and preventive action.

We use continuous and open distribution of information and training to ensure that people understand our quality policy and that it is implemented correctly.
Teknikum Group is one of the most significant European experts in polymer technology

The history of Teknikum goes back to year 1896 when Teknikum was part of Gummifabrik rubber factory and later merged with Nokia Group. Teknikum has operated with its present name since 1989 when major part of rubber business line of Nokia Group was transferred to Teknikum Group.

Teknikum Group includes the Finnish units of Teknikum Oy Vammala, Teknikum Oy Kikki and Teknikum Sekoitukset Oy in Kerava. Teknikum also has sales companies in Germany and Russia, a production company in China and a Joint Venture company called T-Plasztik in Hungary.

Teknikum provides product and service solutions related to protection from wear and corrosion, industrial hoses and hose assemblies designed for transfer of liquids and other materials, and polymer products that are designed and customer-specifically manufactured. Teknikum’s success is rooted in excellent products, efficient production, and high-quality customer service.

With each customer project, our objective is to find a cost-efficient, sustainable, and well-designed solution, whether it is a tailored or standard product.

We reach our goals through motivated and competent employees, innovative material solutions, and dealing with challenges that different industry segments have.

Teknikum’s business culture is not merely result-oriented: responsibility in our operations is very important to us. We have defined principles of good corporate governance, a purchasing and safety policy, and an updated, uniform equality plan for the entire Group. We have strict principles for occupational safety and job satisfaction, environmental issues, and financial responsibility. These principles guarantee that the employees are satisfied and the company is successful.