

Hydrogen

Renewable

Eco

H₂

Shaping the future
with hydrogen.

Innovations in
high-performance plastics

elringklinger
Engineered Plastics

»

From the idea to the design,
prototype to final product
we develop and produce individual,
market-driven and innovative
engineering solutions made from
high-performance plastics.

Pioneering: our engineering solutions made from high-performance plastics.

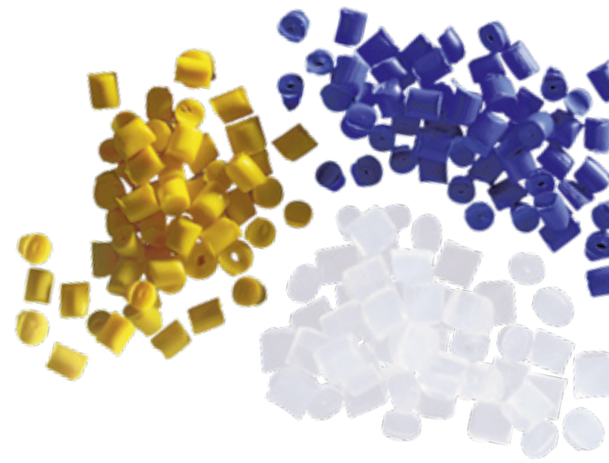
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Comprehensive: our product range along the H₂ value chain.

For our customers worldwide we develop and produce individual, market-driven and innovative engineering solutions made from high-performance plastics such as **Polytetraflon™ PTFE, modified PTFE, PTFE composites, Moldflon™ PTFE, PFA, FEP, ETFE, PVDF, PEEK, PPS, PEI and PE-UHMW**. Our materials and products meet the toughest demands required in the field – economical, sustainable and safe.

Our process know-how is focused on providing small quantities or prototypes as well as series production. By providing manufacturing processes with high quality standards and environmental awareness we offer the best conditions to meet challenging solutions. This is the central component of our corporate policy and is reflected in all relevant certifications according to IATF 16949:2016, GMP, ISO 14001 and ISO 50001.

The product portfolio comprises a wide range of materials and components for **Power to X applications** – from electrolysis to mobile use. Sustainability and CO₂ reduction are the core of our tailor-made solutions.



High-performance plastics – your benefits

- » Customized properties
- » Performance with the toughest requirements
- » For a longer service life in critical applications
- » More safety
- » Extreme durability
- » Highly compression-proof
- » Broad thermal application range
- » Highly wear-proof
- » Outstanding sliding characteristics
- » Low friction coefficient
- » Almost universal chemical resistance

Based on our inhouse material development and compounding we can tailor materials according to customer specifications. Our team of application and material specialists offers the best in product design know-how combined with in-house practical testing.

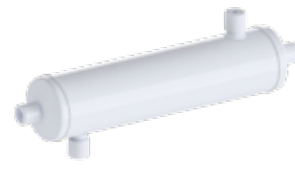
H₂ Electrolysis – Our solutions for more efficiency



Large-scale gaskets
In dimensions up to 3,000 mm
diameter. Frame gasket.



Pipes and tubes
for alkaline electrolysis



**Corrosion resistant Thermo-X™
heat exchangers**
for tempering of e.g. liquid
electrolyte or gas cooling

H₂ storage and transportation – Our solutions for more safety



Heat shrink tubings
as protective coating



Diaphragm
for actuators and pumps



Spring energized seal
for high pressure sealing



Laminated piston
for dry-running compressors



V-packing
for high pressure valves

Mobility

H₂ mobility –
Our solutions for
drives of tomorrow



Seals
for valves



ElroSeal™ SP rotary shaft seal
for fast rotating shafts



Spring energized seal
for regulation and tank valves



Memory packing
for e-compressors



Overmolded porous diaphragm
for aggregate venting

→ **Further application examples:**

- » Electrolyzers
- » Cryogenics
- » Pumps for chemical aggressive media
- » Circulating pumps
- » Gas rotary pumps
- » Pumps for liquid gas and vacuum
- » Dry-running compressors
- » Rotary compressors for loading and unloading tanks
- » Turbochargers
- » Electric drive and charge systems
- » Expansion machines
- » Throttle valves for fuel cell control
- » Control valves
- » Pressure control valves
- » Liquid gas valves
- » Electric engines
- » Venting and pressure regulating systems

Take our plastics know-how to the test.

Headquarter and other plants of ElringKlinger Kunststofftechnik GmbH

ElringKlinger Kunststofftechnik GmbH

Etzelstraße 10 | D-74321 Bietigheim-Bissingen
Phone +49 7142 583-0 | Fax +49 7142 583-200

Heidenheim Plant

Badenbergstraße 15 | D-89520 Heidenheim
Phone +49 7321 9641-0 | Fax +49 7321 9641-24

Mönchengladbach Plant

Hocksteiner Weg 40 | D-41189 Mönchengladbach
Phone +49 2166 9590-0 | Fax +49 2166 9590-55

sales.ekt@elringklinger.com
www.elringklinger-engineered-plastics.com



www.ek-kt.de/shop

ElringKlinger Engineered Plastics (Qingdao) Co., Ltd.

No. 101&201 Room, A2 Building 1000 Yuntai Shan Road
International Innovation Park
Sino German Ecopark Huangdao District | 266500 Qingdao PR China
Phone +86 532 5558 2832

info.ektc@elringklinger.com
www.elringklinger-ep.cn

ElringKlinger Engineered Plastics North America, Inc.

4971 Golden Parkway | Buford, GA 30518 USA
Phone +1 678 730 8190 | Fax +1 770 932 2385

info.ektu@elringklinger.com
www.elringklinger-ep.com



IATF 16949:2016 | DIN EN ISO 14001 | ISO 50001



GMP



EN ISO 13485