



PROFESSIONAL RENOVATION
AND CONSTRUCTION WITH OUR
DURA RANGE

THE ALL-ROUND SOLUTION FOR
ACCESSIBLE SEWER SYSTEMS

STEINZEUG
KERAMO 

COMPLETE AND PARTIAL RENOVATION FOR SEWERS AND MANHOLES

Especially with old, brick-lined sewers, the section of pipes to be renovated can include cross-sectional changes, curves and bends with different radiuses. This is where the superior flexibility of the DURA system proves its worth, with its individual capabilities for perfectly adapting all forms to varying cross-sectional geometries. What's more, the optimal bend flexibility of the elements can be produced using an angle without great effort.

SEWER RENOVATION. PARTIAL OR COMPLETE.

Here, for example, the invert of the drain to be renovated is lined with thin-walled, corrosion-proof shells. This kind of renovation is particularly suitable for drains with right-angled or even acute-angled cross-sections. The renovation sections are first put together inside the drain and are bonded together on site. In this way, the elements can be taken into the sewer even through tight manholes.

Bonding polyceramics is straightforward and presents a secure solution for connecting the various components. If necessary, the entire arch of the drain can also be lined with a shell composed of individual elements. In addition to this solution, many other components are available to meet your individual needs.

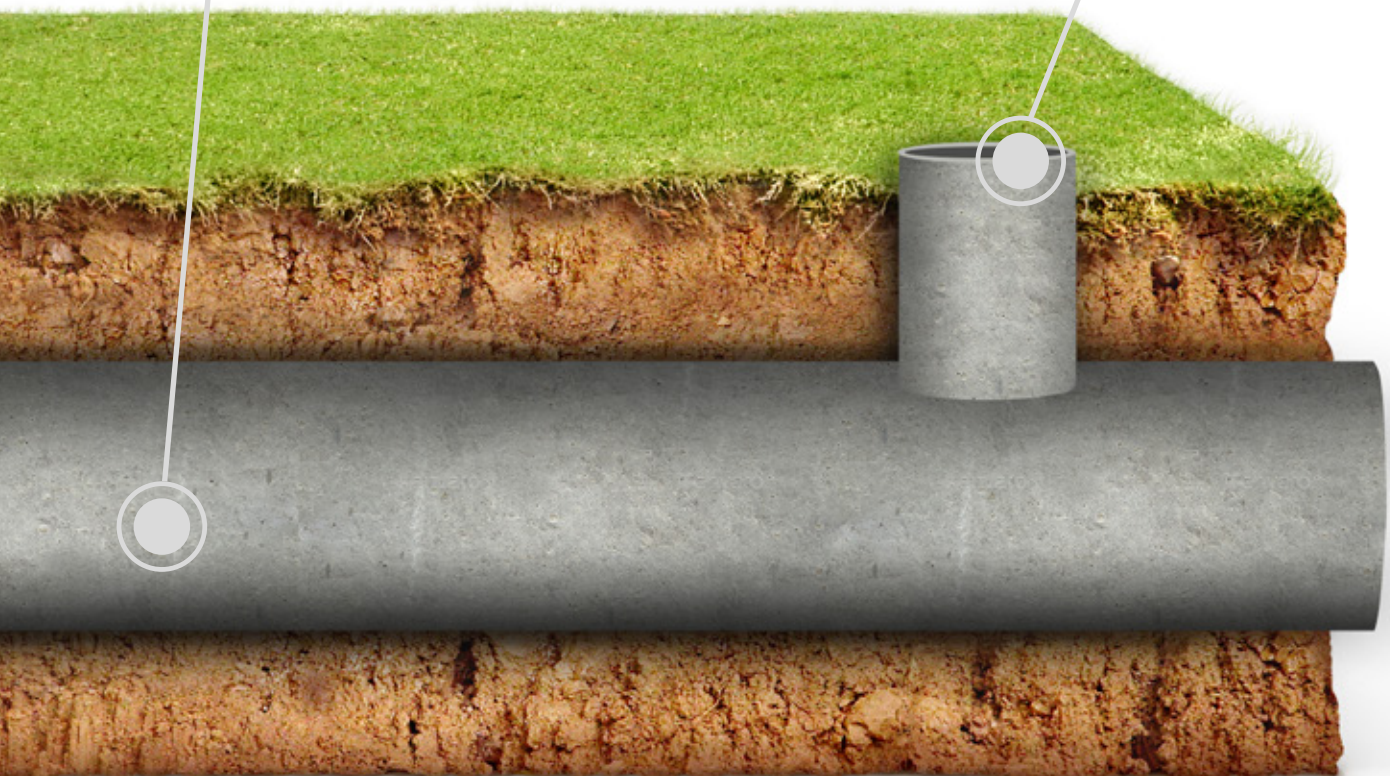


NEW SEWER CONSTRUCTION. OPTIMIZED RETROACTIVELY.

With newly constructed drains made with round pipes, a long-lasting, corrosion-resistant dry-weather channel can be created with the retroactive fitting of a polymerceramic invert shell. For the corrosion-proof lining of the channel in egg-shaped sewers and an in-situ concrete construction process, invert shells up to two meters long are available. The resulting low number of joints means especially cost-effective production. Special components with terminations and bend elements complete the system.

MANHOLE RENOVATION. SYSTEMATICALLY REFURBISHED.

As a rule, manhole renovation takes place in two steps. First, the base of the manhole is restored with specially cut-to-fit half shells and prefabricated polymerceramic berm plates. The rising manhole section is lined with corrosion-proof elements of the same material, bonded into rings inside the shaft. The thin walls allowed by the material are particularly beneficial, allowing a maximum of free space to be retained. We are happy to advise you when choosing the right elements for your renovation plans.



INDIVIDUAL SOLUTIONS: FROM PRODUCTION TO THE BUILDING SITE



COMPETENT CONSULTING

As a supplier of complete solutions and systems for the water and wastewater industry and active across Europe, Steinzeug-Keramo also specializes in the customized partial or complete renovation of accessible sewers and manholes. Our practice-oriented experts put their experience at your disposal, supporting you with the first-class planning and execution of your projects.

CUSTOMIZED PRODUCTION IN OUR FACTORY

With our sector-specific expertise, we are able to offer our customers a consistently proven, modular system of high-quality components and sophisticated technical solutions for the renovation and retrofitting of accessible sewer systems. At the same time, we don't see ourselves only as a producer of innovative, high-precision components, but most importantly as an expert consultant and flexible problem-solver for all your construction plans.

STRAIGHTFORWARD, SECURE INSTALLATION

Our system of high-precision components has proven itself on numerous construction sites. Everything fits together perfectly, and every process step is accurately documented. All required materials – such as multi-component adhesives and special tools to make the work easier – can be sourced through us. If desired, we also offer customized instructions for complex projects.

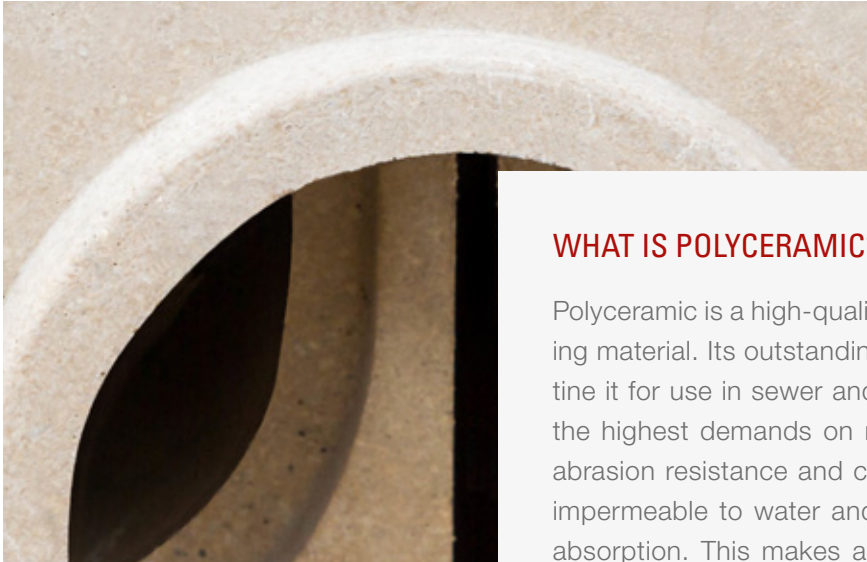


SAFE AND SECURE: 100% LEAKPROOF

DURA pipe walls and fittings are made from impermeable polymerceramic, the ideal material for reliably watertight sewer components. With a service life of up to 100 years, DURA elements deliver long-term, trouble-free and environmentally secure functionality in renovated and retrofitted systems. They are the perfect fit for Steinzeug-Keramo's sustainability-based product philosophy.

DURA.Info





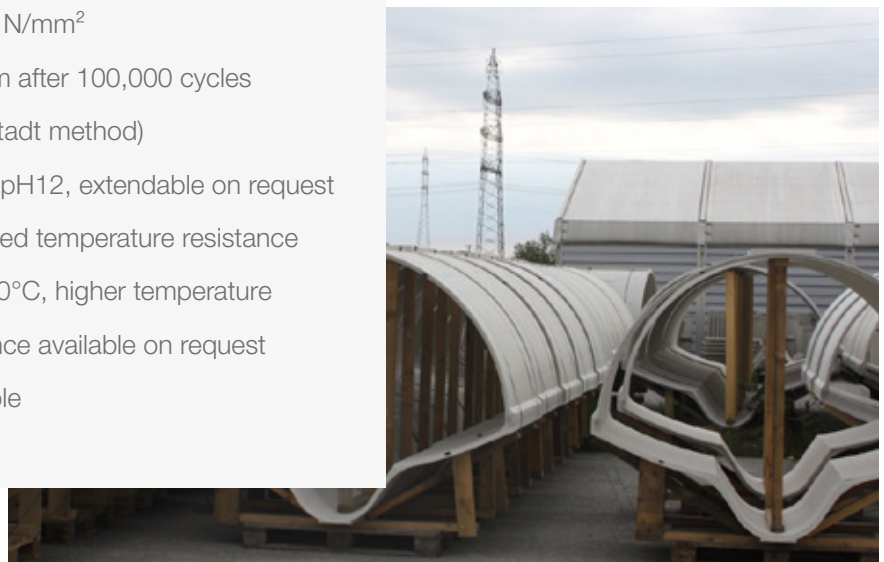
WHAT IS POLYCERAMIC?

Polyceramic is a high-quality, extremely wear-resistant building material. Its outstanding material characteristics predestine it for use in sewer and manhole applications that place the highest demands on mechanical toughness, long-term abrasion resistance and chemical durability. The material is impermeable to water and exhibits extremely low moisture absorption. This makes all DURA components resistant to frost and weathering.



DURA IN NUMBERS

Compressive strength:	> 80 N/mm ²
Flexural strength:	> 20 N/mm ²
Elastic modulus:	20,000 N/mm ²
Abrasion resistance:	0.14mm after 100,000 cycles (Darmstadt method)
Chem. durability:	pH2 to pH12, extendable on request
Temp. resistance:	Sustained temperature resistance up to 80°C, higher temperature resistance available on request
Moisture absorption:	negligible



NEW CONSTRUCTION, COMPLETE AND PARTIAL RENOVATION

10 GOOD REASONS TO CALL

- ✓ When extremely long service life is a mission-critical factor.
- ✓ When your construction demands highly flexible geometry of the individual components.
- ✓ When being reliably watertight is top priority on your projects.
- ✓ When perfect dimensional stability under heavy loads is a must.
- ✓ When access to the sewer is tight.
- ✓ When you need sustained abrasion resistance under constant use.
- ✓ When you have to ensure long-term, high-level chemical durability.
- ✓ When frost and heat resistance are part of your project's specifications.
- ✓ When you expect uniform wall structure and the highest level of precision in your components.
- ✓ Our consultants are happy to inform you about the strengths and opportunities offered by the DURA system.

SEWER/
MANHOLE
RENOVATION

Steinzeug-Keramo GmbH

Alfred-Nobel-Straße 17 | D-50226 Frechen

Telefon +49 2234 507-0
Telefax +49 2234 507-207

E-Mail info@steinzeug-keramo.com
Internet www.steinzeug-keramo.com

Steinzeug-Keramo N.V.

Paalsteenstraat 36 | B-3500 Hasselt

Telefon +32 11 21 02 32
Telefax +32 11 21 09 44

E-Mail info@steinzeug-keramo.com
Internet www.steinzeug-keramo.com