



# The revolution in pipeline construction

FRIACORE  
Connect & Repair



# One solution for all. Old networks and new!

**Above all, the situation on construction sites today is extremely challenging.**

Today's water and gas supply networks have a long history. The first pipes were laid in the middle of the 19<sup>th</sup> century – and are still in operation today.

Modernisation efforts date from the 50s and 60s. The problem is obvious: a patchwork quilt from yesteryear, expanded from generation to generation. With materials that did not deliver what they once promised in terms of quality and longevity.

And today? Local pitting and surface corrosion due to defective coatings and less noble alloys in the pipe material, aggressive soils, leakage currents, etc. are the order of the day.

But that's not all: aside from the heterogeneity of the "pipe landscape", safety requirements, a lack of time and manpower, as well as storage, are making the situation increasingly difficult. Outdated technologies, materials and mechanisms add to the problem.

**FRIATEC: the Infrastructure Brand of Aliaxis – stands for quality, longevity and easy installation.**

## **Aliaxis. We make life flow.**

Aliaxis is behind the FRIATEC repair line FRIACORE. A company that connects people with water and energy, ensuring a better future. As a leading, international provider of advanced plastic pipe systems for civil engineering, industrial and agricultural applications, Aliaxis provides people around the world with sustainable, innovative and highly efficient water and energy solutions. Around 14,000 employees worldwide contribute their technical expertise and market knowledge to targeted solutions that meet the highest demands of our customers around the globe. Aliaxis is present in more than 40 countries through leading local brands, combining local solutions with global innovation and operational excellence in each location.




# The repair portfolio FRIACORE

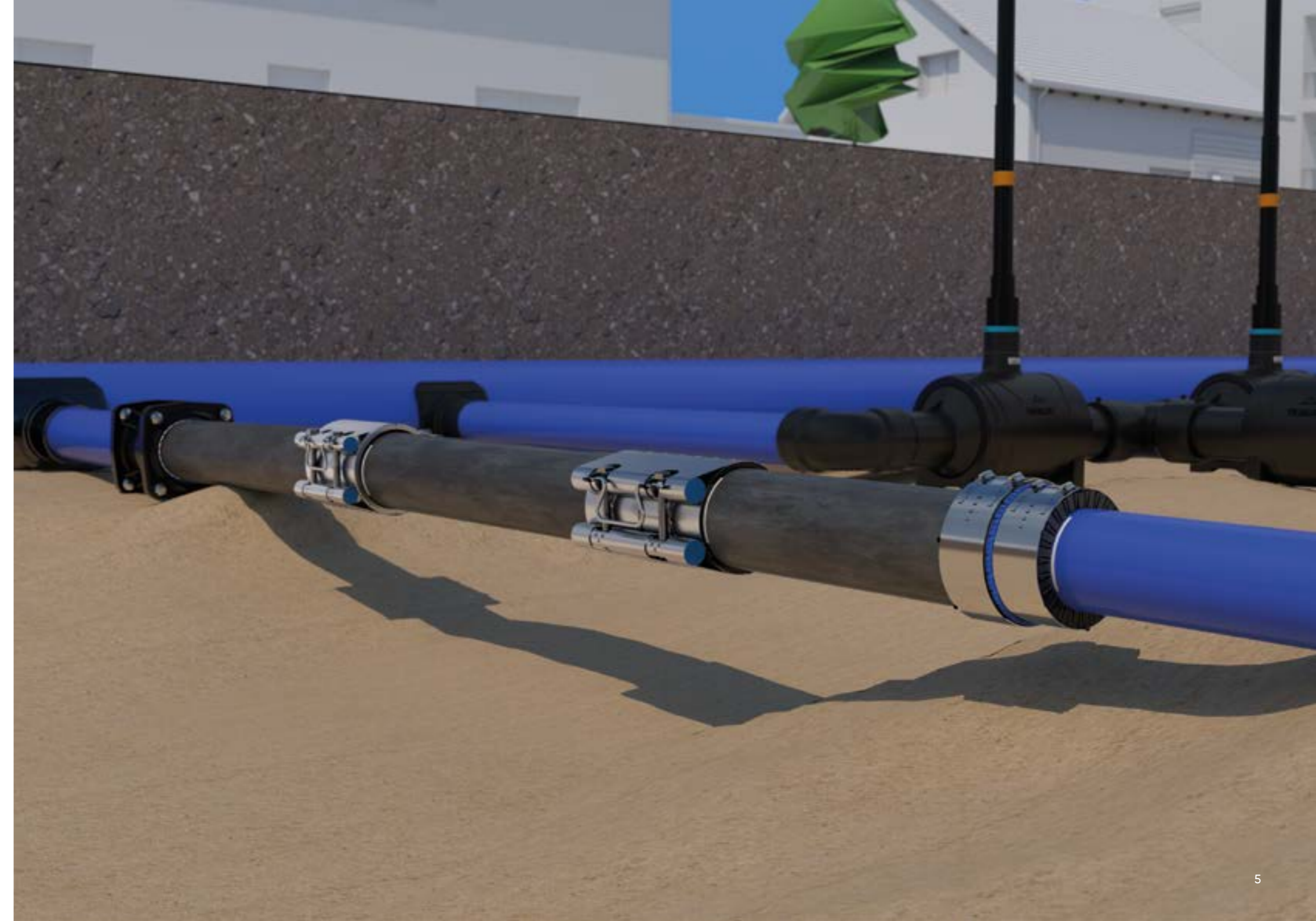
Four products from a single source for almost all types of damage

Historically grown pipe networks for gas and water supply consist of many of different materials with a wide variety of properties and external diameters. A huge challenge in terms of economic efficiency and feasibility.

The FRIACORE repair portfolio covers almost 90 % of all damage in the pipeline network with just four products. Safe, fast and lasting. A comprehensive, high-quality and sustainable range of mechanical connection and repair solutions – developed for the tough day-today of construction sites and conscious calculators.

## Your advantages at a glance:

-  **Maximum availability**
-  **Maximum flexibility**
-  **Reduced costs through time-saving installation**



# FRIASAFE

Innovative technology with persuasive advantages

## A problem solver for everything?

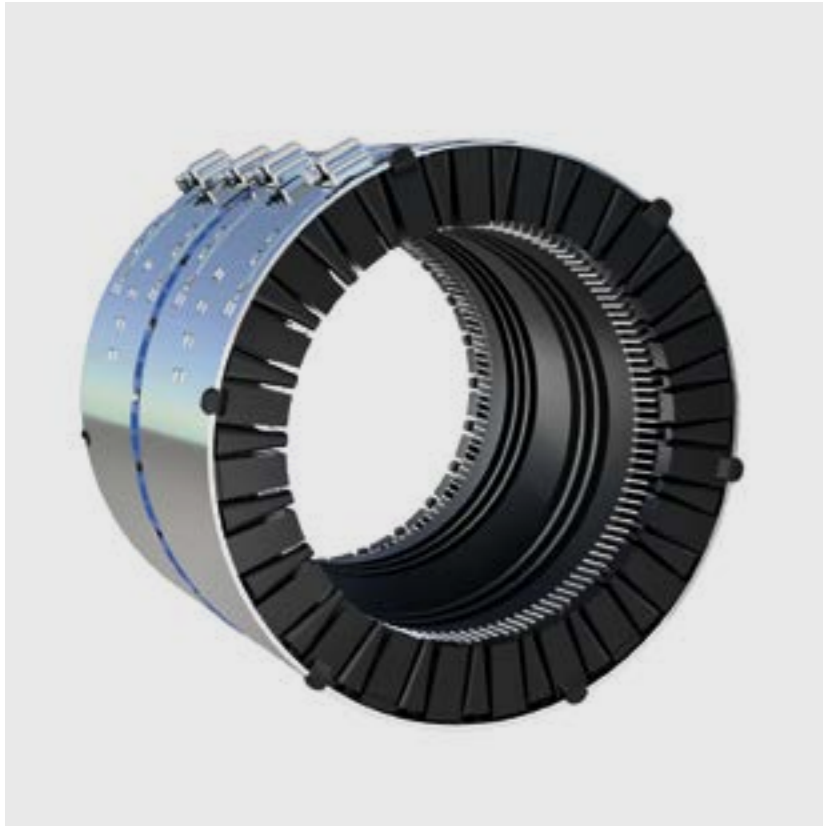
Sounds like the dream of every installer, network owner and utility company. Well, we've made it come true: a powerful solution that combines ground-breaking technology and revolutionary design to effectively and efficiently address the current challenges of water networks. With the easiest handling and minimal assembly time, developed and produced in Europe.

## That makes all the difference:

-  **Uncompromisingly versatile** – Suitable for all common pipe materials
-  **Free of stagnation** – Sets new standards in hygiene and water quality
-  **Ultra-lightweight** – Makes assembly easy, quick, secure and safe
-  **Corrosion resistant** – Made completely of high-performance plastic and stainless steel
-  **Minimum environmental footprint** – Less material, reduced energy consumption during production and transport
-  **Maximum availability** – Fastest possible delivery times for any desired quantity

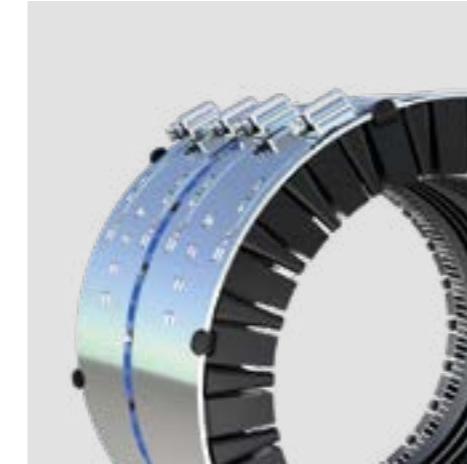


# Innovation for a new era in assembly



## High-end lightweight construction

FRIASAFE consists of a high-strength stainless steel housing and radial stamps made of the high-performance plastic POM. Compared to conventional connectors, this leads to a weight reduction of over 75 %. The stainless steel housing is designed to be self-locking for maximum safety and minimum weight.



## Unique closure technology

Innovative closure technology guarantees even and radial closure of FRIASAFE.

This uniform and simultaneous force from all sides enables the self-centering of the pipe and therefore ensures safe and easy repairs.



## Gripping for ultimate grip

The specially designed, stainless steel gripping band ensures maximum holding power on almost all pipe materials such as PE, PVC, cast iron and ductile iron. The special surface design of the gripping band reduces the notch effect to a minimum.



## Perfect gasket

The EPDM seal is developed for drinking water use and the patented sealing system free of stagnation ensures absolute sealing, even on rough pipe surfaces.



## Maximum hygiene during storage and installation

The encapsulated design and the included hygiene protection caps ensure maximum hygiene. FRIASAFE is protected during both installation and storage.

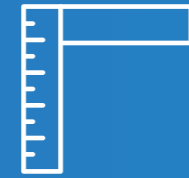
# 5,729

The number of water utility companies providing drinking water in Germany.



# 544,000 km

The total length of the German water supply network.



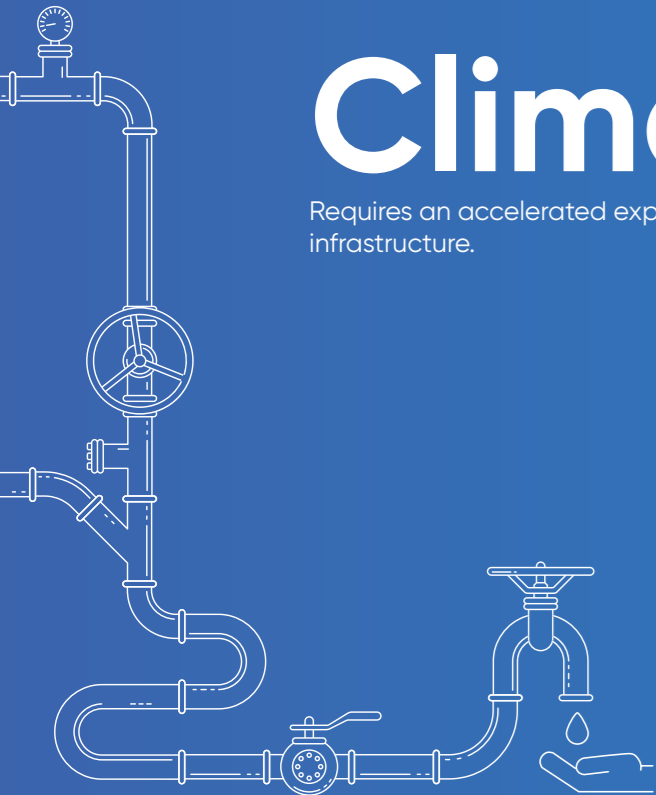
# Climate change

Requires an accelerated expansion and renewal of water infrastructure.



# 3.5 bn euro

The amount that German drinking water suppliers invested in renewing the infrastructure in 2022 - 62 % of it in pipe networks.



# 150<sup>th</sup> anniversary

Many utility companies are celebrating their 150<sup>th</sup> birthday.

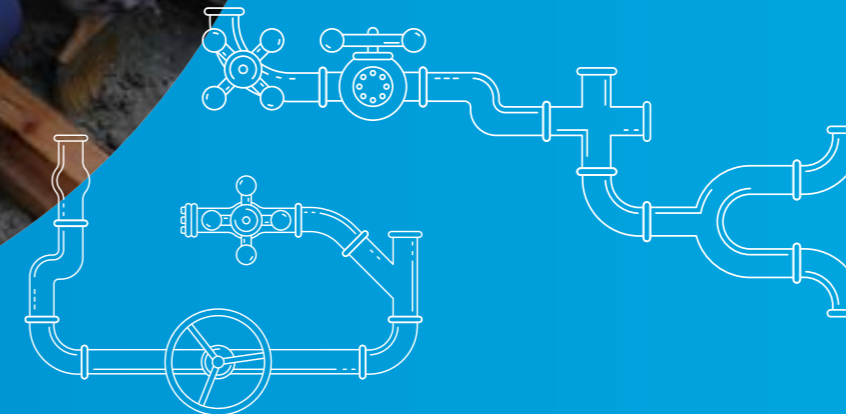


It is recommended to repair damage to pipe materials with two movable connections.

# DVGW W400-3

# 50 years

of lifetime expectancy for FRIACORE solutions to also allow repairs to comply with durability and sustainability standards.



# FRIAGRIP

## The proven solution






Application example

### Restrained pipe connection of various materials

Preventing the pipe system from any tension and ensure permanent repairs – for every type of damage and all piping materials? Yes, that's possible! Restrained, absolutely tight and avoiding contact corrosion. With FRIAGRIP you can repair the damaged area with two moving joints and a piece of new pipe – this is also the recommendation according to DVGW W-400-3. Angularity of up to 8° offers ideal properties for axial and angular misalignment. When it comes to material transitions, you benefit from maximum material flexibility. An impressive feature, especially useful when installing new PE pipes in existing cast iron pipe networks.

#### Your advantages at a glance:

-  **Minimal & easy assembly** – without thrust blocks when changing direction
-  **Environmentally friendly** – thanks to the Rilsan coating made from renewable raw materials
-  **Secure & flexible sealing** – independent sealing and gripping system of seal



# FRIAFLEX

## At last, tension free repairs






Application example

### Repair of transversal fractures with axial offset and axial bending

The innovative FRIAFLEX sets previously unimagined standards in the repair of transversal fractures. This applies both to axial misalignment due to tension in the pipe network and to angles between the pipes. Thanks to the special patented seal design and the radial sealing lips, you can even repair pipes with axial misalignment without any tension. And there's even more: in combination with the progressively increasing sealing behaviour, the FRIAFLEX makes tension-free repairs possible even with an angle of up to 8°.

#### Your advantages at a glance:

-  **Minimal & easy assembly** – due to double joint and quick fastener technology
-  **Universal use** – with adaptable diameter range
-  **Tension-free repair** – with patented seal design for angles and offset






# FRIACLAMP

## All tight, all right

### The stainless steel repair clamp for pitting and cracks

Inadequate coating, less noble alloy elements in the pipe material, blowholes, aggressive soils or stray currents – factors that all have one thing in common: fatal consequences. From localised cracks to pitting and surface corrosion. The special gasket design of the FRIACLAMP repair clamp, made of high-quality stainless steel, ensures a secure seal. Reliable and safe with a wide range of pipe materials such as steel, cast iron, ductile cast iron, asbestos cement or even PVC.

### Your advantages at a glance:

-  **Simple & time-saving repairs** – due to quick fastener technology
-  **Safe sealing** – thanks to large waffle profile and special sealing bars
-  **Versatile applications** – compatible with a wide range of pipe materials



Application example



### Talk to us!

What makes assembly with our FRIACORE products so unique and how do they benefit you in detail?

Apply via the form on the website contact our experts and get personal advice.

[alixis.de/FRIACORE-EN](https://alixis.de/FRIACORE-EN)





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