

CONSTRUCTION ENGINEERING

TRENCHLESS RENOVATION
AND SERVICE OF WATER
AND SEWAGE PIPELINES





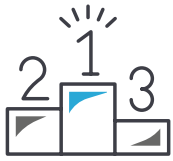
is a company with many years of experience, currently employing over 160 people and having a share in the Polish market of trenchless pipeline renovations of about 35%. We specialize in the modernization and repair of sewage, water, pressure, technological and gas pipelines.

We approach each task individually, providing a tailor-made service. We operate according to the "A to Z" formula. Investors can always count on the service before and after the implementation of the project – not only on the execution of the works.

We offer consultation and advice already at an early stage of project planning, helping to choose the optimal solution in terms of technical, economic, social, environmental and time aspect. We provide service and maintenance.



ABOUT US



POLISH LEADER

2007–2020



8 COUNTRIES

Cyprus – Estonia – Finland – Lithuania
– Latvia – Germany – Poland – Romania



OVER 200 PROJECTS

**15–20 PROJECTS
SIMULTANEOUSLY**



We work with the best- therefore we guarantee quality and the highest standards.

We invite you to take a look at our offer- an offer made by a company, that executes the first trenchless renovation of the sewage system in Cyprus in the history of the country.

The Limassol project is still in progress: the works consist of the trenchless renovation of the sanitary sewage system using the CIPP method. Works are progressing quickly, and residents and tourists do not feel almost any discomfort because of them- even though the renovation takes place in one of the main streets of the city.

**Thank you for trusting us, but...
this is not about us: check out how we can support you.**



Water and sewage networks are the heart of the city- the basis for its proper functioning. That is why taking care of the pipelines, providing the best quality water and limiting its losses, as well as discharging wastewater and preventing it from entering the environment are the primary duties of water and sewage companies. A reliable and smoothly functioning sewage network requires regular servicing, cleaning and inspections. What's important- a proven business partner can be entrusted with all those activities ensuring efficient operation of water and sewage networks.

BLEJKAN offers three options for network maintenance:

MINI

individual service depending on the demand:
e.g. cleaning, CCTV inspection, spot and line repairs - executed either during the chosen period or on an ad hoc basis

MIDI

comprehensive "A to Z" services:
consisting of taking over all or part of the network from its operator for ongoing monitoring, inventory, maintenance and modernization

MAXI

services focused on efficiency:
consisting of maximum reduction of costs related to network management and maintenance, connected with taking over the network into operation

SERVICE AND MAINTENANCE

Available options:

- water and sewage pipes cleaning,
- CCTV inspection of water and sewage pipes,
- inventory and technical assessment of the pipelines,
- spot /part liner/ repairs,
- line repairs,
- trenchless renovation of the water supply system,
- trenchless renovation of the sewage system,
- manhole renovation,
- selection of renovation methods and design works.

MINI? MIDI? Or maybe MAXI?

You get to choose a unique service for yourself, a tailor-made solution.



Advantages, benefits, possibilities

- no costly investments in specialized equipment,
- no need for tenders,
- short- and long-term contracts,
- speed of implementation,
- economically and technologically optimal choice of solutions,
- efficient, state-of-the-art water supply network management,
- implementation in accordance with environmental protection principles.

But there is more – ask us about the full offer

We will present you the solution you're looking for.

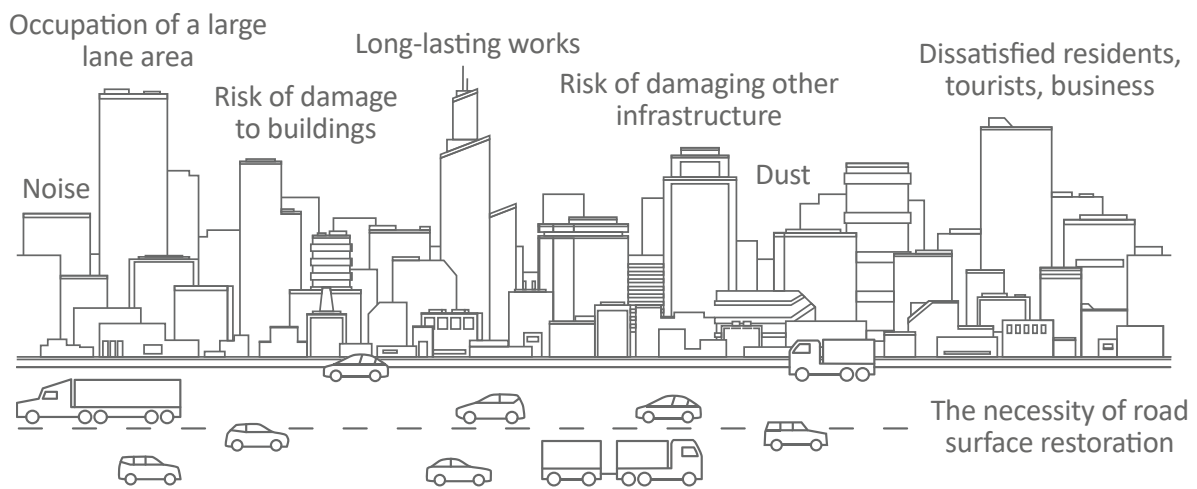
SAY YES TO THE TRENCHLESS

Trenchless technologies have been known and applied for several decades. They are used for construction and renovation of underground pipelines. In the beginning, they were popularized mainly in Western Europe and North America, and now they are widely used on all continents.

Trenchless technologies are particularly important wherever it is impossible or highly difficult to apply traditional solutions- among others when overcoming obstacles in the form of rivers and other watercourses, communication routes or protected areas.

PERFECT SOLUTION FOR CITIES

NOW



...WITH THE USE OF TRENCHLESS TECHNOLOGY



Trenchless technologies are also eco-friendly: they contribute to the reduction of CO₂ and emissions, which also reduces interference with the environment to a minimum.



TECHNOLOGY SELECTION

How to choose the right one?

The project execution requires many difficult decisions: the most important one is the right choice of technology.

Selection of technology may affect the success of the entire project and its costs, but also the subsequent consequences, reaching the disruption of the network operation.

Choosing the renovation method should be preceded by an in-depth analysis. A well-chosen solution will function very well within the existing network in technical terms and allow for maximum reduction of inconvenience for residents. It will not require disproportionate financial outlays or harm the environment. We will provide you with this solution! Let our experts carry out the analyses and necessary calculations- entrust the specialists with the process of technology selection.

You will avoid:

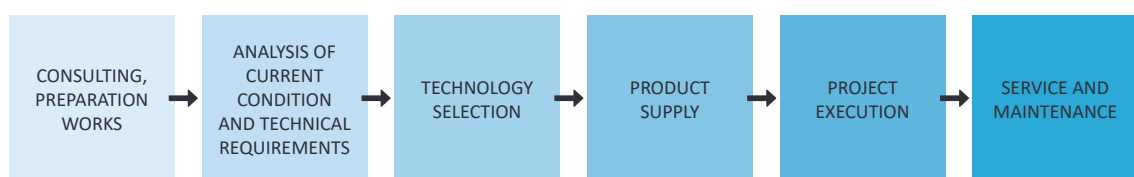
- unnecessary costs,
- risk of making a wrong decision,
- extending the time of the renovation.

What will you gain? Long-term and reliable operation of the network and... peace of mind.

We have already renovated more than 250 km of pipelines with various technologies - at different times and in various places and conditions. We renovate sewage systems as well as water, gas and process pipelines in industrial plants.



COMPREHENSIVE COOPERATION





solves problems by providing comprehensive solutions to the market. We are continuously developing and introducing such modifications to strengthen our competitive advantage and to set market trends.

The complete offer of trenchless pipeline renovation includes the following elements of the construction process:

■ PREPARATION WORKS

Before performing basic installation work, the pipeline, channel or water pipe must be disconnected. Prior to that, water transmission or sewage collection must be ensured by building temporary replacement pipelines, so-called by-passes. Existing pipelines should be cleaned and then CCTV inspection needs to be performed. After that a report including the assessment of the technical condition of the pipes can be prepared, listing all the visible cracks in the pipe, deformations, possible leaks.



WIDEST TECHNOLOGY RANGE



■ ANALYSIS AND SELECTION OF THE RENOVATION TECHNOLOGY

Based on the TV inspection and the report, it is necessary to select the renovation/repair technology, perform the strength calculations and hydraulic flow assessment. One of the criteria for the selection of technology is, of course, the price, but it is not the most significant element. The following parameters are taken into account: the possibility of reducing the diameter required flow rate after renovation, the chance of stopping the temporary flow and other.



Learn more



■ CIPP – Cured in Place Pipe

The technology of renovation with CIPP liners, cured by UV, hot water or steam belongs to the most state-of-the-art and advanced renovation methods. Known for over half a century, it is constantly being refined. It is suitable for renovation of both sewers and waterworks. Its application improves the durability and tightness of the pipeline.

This technology is a perfect fit for the renovation of the networks in urbanized areas, where the short time of the installation process is a crucial factor.



Learn more



■ GRP (*Glass Reinforced Plastic*) RELINING

This method of a trenchless renovation of the sewerage system uses the segmented pipes/panels that are inserted in the renovated pipeline. Depending on the type of network and pipeline undergoing renovation, the panels are installed through existing sewer manholes or assembly excavations.

The panels, made of polyester or vinylester resins reinforced with glass fibre, are an extremely durable material and their assembly is carried out remarkably efficiently.



Learn more



■ SLIPLINING

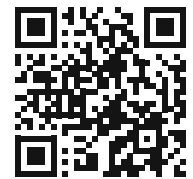
It is used for renovation of sewers and waterworks with the use of standard polyethylene (HDPE) or polypropylene (PP) pipes, and sometimes also short pipe modules.

Pipes are installed in an existing pipeline. As in the case of other methods, the installation of a pipe - even though it reduces the diameter of the pipeline- has a positive effect on increasing the flow velocity of e.g. sewage, and above all ensures the tightness and durability of the pipeline.

WIDEST TECHNOLOGY RANGE

■ CRACKING /BURSTLINING/

It is used for trenchless replacement of waterworks and sewage systems while maintaining the diameter of the existing pipe. It also allows for increasing the diameter of a new pipe. The exchange by means of the demolition method- burstlining (so-called cracking)- consists of crushing the old pipeline with a larger or smaller extension of space by means of a special head connected with a winch. The new pipeline is pulled in simultaneously.



Learn more

■ RENOVATION OF MANHOLES AND INSPECTION CHAMBERS

A quick method of protecting manholes and inspection chambers against corrosion and groundwater inflow with the use of manually applied chemically resistant coatings that also improve the strength and durability of the structure. The most commonly used materials are construction chemical products, GRP elements, spray-on chemical-resistant coatings. They ensure the tightness of the whole sewage system.



Learn more

■ PIPE PULLING

Trenchless method of replacing domestic water and gas house connections. It has been successfully applied globally and is present on the global market for several years now: in the UK, Germany, the Netherlands and the USA. During one installation the old pipe is pulled out- and a new PE pipe is being installed in its place simultaneously.



Learn more

WHY YOU SHOULD CHOOSE BLEJKAN S.A.?

■ ...because we have **KNOWLEDGE**

We focus on cooperation with the best and we care about development. We train our employees, invest in technologies and constantly seek new solutions. All this in order to offer our customers a wide range of high-quality services.

■ ...because we have **EXPERIENCE**

We are practitioners: we rely on our many years of experience in the renovation industry. Each contract is a new challenge- it motivates us to improve our skills and gain knowledge for the sake of subsequent realizations.

■ ...because we work with **PASSION**

We believe that engineering work is the craftsmanship that must be honed. By perfecting ourselves in the art of construction, we carry out our work with the utmost care and maximum efficiency.

■ ...because we focus on **QUALITY**

The high quality of our services is our best business card. Therefore, we always make every effort to ensure that our work is performed in accordance with the highest standards. These efforts are confirmed by the certificates we have received (ISO 9001:2015, ISO 14001:2015, ISO 45001:2018), but above all- by the trust of our customers who entrust us with further projects.



BLEJKAN S.A.

ul. Transportowa 25, 70-715 Szczecin, Poland

biuro@blejkan.pl | +48 91 416 31 01

www.blejkan.pl

