

IBAK offers you suitable solutions for your application



IBAK – What we do

IBAK, the pioneer of the industry, designs and manufactures high-quality sewer inspection and rehabilitation systems for worldwide operation. As reliable partners, we help our customers to provide a decisive contribution to ensuring a functioning sewer system and proper wastewater disposal. For a clean environment and reliable service.

Development of solutions

Our systems are ideally matched to each other and are used all over the world to ensure safe and perfect long-term functioning of sewer networks.

High-tech engineering

Our systems stand for reliability and safety in the demanding conditions of the system-relevant underground infrastructure.

Manufacture of systems

In our own production, we rely on latest technologies, innovative manufacturing methods and the automation and digitisation of processes.

Quality assurance

Quality is assured by quality checks combined with state-of-the-art test methods and fully automatic test equipment.

Good advice

We have a suitable solution and accompany you as partners through the process of purchasing your system.

Provision of services

Our experienced team at seven locations in Germany and our partners all over the world ensure optimum services and a high degree of operational reliability of your systems.

Our aims

- Implementation of high-quality, rapid inspection and rehabilitation everywhere
- Generation of added value, for example by means of numerous measuring and application possibilities
- Faster and better output and evaluation of the results

What have we done to achieve this?

- Extension of our high-resolution inspection concept
- Further improvement of rehabilitation systems for greater operating ranges
- Focus on future-oriented software support for inspection and rehabilitation
- Optimisation of systems for mobile operation
- Focus on easy handling of IBAK systems
- Development of smart solutions for large to small diameter pipes



Consistent operating concept with BS10X

The BS10X operating systems can be used for compact inspection systems as well as for fully comprehensive TV and refurbishment systems.

- Ergonomic: Very good handling thanks to flexible design ergonomically adapted to body posture
- Efficient working: Thanks to an additional easy-to-use touch display
- Added value: Display of important system and configuration data on a well-arranged screen
- Well-thought-out concept: Simplifies handling of the inspection and rehabilitation technology
- Flexible use: Operation of cleaning systems (UHP), cutting systems and inspection systems (depending on the configuration SD, full HD, 4K) for main sewers and laterals, if applicable
- Fully digital operation: Installation of software packages as required
- Fast data transfer: Easy transfer of the inspection results to customers

MiniLite 3 Push Rod Camera System – Easy handling during lateral inspections

The MiniLite is the push rod camera system for small and medium pipe diameters.

- Can be used anywhere: Typically for operation in laterals even if they are strongly ramified
- + Compatibility: For inspection with all full HD push rod cameras
- Variability: Use as an extension unit from the vehicle
- Added value: Thanks to extensive measuring functions for qualified condition assessment
- Ergonomic: Efficient control console with a big touch display
- Flexibility: Thanks to the removable rugged tablet
- Handling: Rack optimally adapted to the working procedures with a new brake and a new push rod guide
- Fast data transfer: Easy transfer of the inspection results to customers



IBAK AxialCam (SD)

Push-rod camera, axial view, use from DN 50 and up

Diameter: ø 39 mm Video format: SD System: MiniLite



IBAK POLARIS 3 Rotate and Pan and tilt camera from DN 100 and up Diameter: Ø 60 mm Video format: HD System: MiniLite, LISY



IBAK ORION 3 / ORION 3 L Rotate and Pan and tilt camera from DN 100 and up

Diameter: ø 60 mm Video format: HD System: MiniLite, LISY, all current IBAK tractors



IBAK NANO / NANO L

Rotate and Pan and tilt camera from DN 80 and up Diameter: Ø 47 mm Video format: HD System: MiniLite, LISY, all current IBAK tractors



MiniLite extension function

Extension system

Extension system function with voice connection

With the extension system, the MiniLite can be connected to a vehicle based system so that even difficult-to-access sections and laterals can be inspected from the vehicle.

Advantages:

- Transmission of the video and length values to the vehicle
- Convenient operation by using the software in the vehicle
- Parallel monitoring of the inspection by persons at the MiniLite and in the vehicle
- Communication of persons involved via a headset or loudspeaker and microphone in the vehicle

MainLite 2 easy – Compact inspection system in Full HD standard

The MainLite easy is an easy-to-transport inspection system for main lines.

- Added value: High-quality inspection thanks to full HD video standard and extensive measuring functions
- Safe investment: Flexible and future-proof thanks to modular system design
- Flexible operation: Transport also possible to places with difficult access thanks to its compact design
- Turnkey solution: Hardware and software from a single source
- Fast data transmission: Easy transmission of inspection results to the contractor

MainLite 2 – MainLite Inspection System in full HD standard – mobile or in the vehicle

The MainLite supplies inspection data with full HD resolution from main sewers.

- · Added value: Thanks to extensive measuring functions for qualified condition assessment
- Safe investment: Flexible and future-proof thanks to modular system design
- Variable use: In the vehicle and as a mobile inspection system
- Turnkey solution: Hardware and software from a single source
- Fast data transfer: Easy transfer of the inspection results to customers





Height adjusting devices for all pipe dimensions

In addition to long-established adjusting devices for pipe dimensions such as the pantographe for the T 76 tractor and numerous different sets of wheels, there is a variety of other options for the adjustment to pipe dimensions in the main line.

- High inspection quality: Thanks to flexible positioning of the camera at the centre of the pipe
- Easy handling: Thanks to simple assembly of the additional equipment
- Modularity: Thanks to the tractor's adaptability to different conditions







Manhole adapter KKA M 90 – Large system adapter for quick visual inspection in top quality





MicroGator 150 – Electric cutting and rehabilitation in relined DN150 pipes

With the electric MicroGator 150, the deployment range of the cutting and rehabilitation system has been extended to cover small diameter pipes.

- Greater deployment range: For operation in pipes as small as DN150 (relined) upwards
- Reliable functioning: Electrically-driven low-noise operation
- Valuable extension: The complete system covers pipe diameters from DN150 (relined) to DN800 (with larger MicroGator) plus ovoid cross-sections
- Added value: The exchangeable heads make the installation of top hats and sleeves and ultra-high pressure cutting (UHP) possible
- Everything in view: Thanks to the observation camera CutterCam with cleaning function

MicroGator 150 Air – Versatile operation in small diameters

The pneumatic cutter MicroGator 150 Air can be operated just like the bigger MicroGator Air with a compact MainLite system or a BS10X inspection system.

- Greater deployment range: Cutting is possible in pipes from as small as DN150 (relined) upwards
- Effective cutting: Thanks to precise control of the cutting process
- Reliable in operation: Pneumatic and powerful
- Safe investment: Flexible and future-proof thanks to modular system design
- · Maximum flexibility: Fully-fledged inspection from DN125 upwards as the cutter head and the ORION pan camera are exchangeable
- · Variable operation: In the vehicle and as a mobile rehabilitation system





aiControl – For the intelligent inspection of the future

aiControl is an innovative control concept for the inspection of main sewers and laterals "by autopilot".

- (Virtually) autonomous inspection: Supports negotiation, turning off and panning by means of pan cameras
- Perfect combination: Inspection in real time controlled by artificial intelligence (patented)
- · Enhanced data reliability: Self-learned algorithms ensure high objectivity and reliable capture of defects in large and small diameter pipes
- Time saving: Shorter inspection times through forward-looking inspection
- Safe investment: Future use with all new IBAK inspection systems (with BS10X and BP3) possible

IBAK ArtIST – For efficient high-quality condition capture with the aid of AI

ArtIST is a web service that helps inspectors to capture condition data rapidly and objectively on the basis of artificial intelligence.

- Time saving: Faster analysis and evaluation of inspection recordings
- · Stress relief: Manual routine tasks during condition capture are reduced
- Flexible: Use of the tool by your own inspector or by partner firms for sewer condition data capture or supplementation
- · Plannable: Permanent accessibility of the ArtIST web service
- **Consistent**: Ensures reproducible results of a consistently high quality
- · Objective: Standardised condition capture ensures transparency and comparability of the data basis
- Reliable: A well-grounded data basis forms the fundament for cost-optimised rehabilitation planning



1. Optical Inspection You carry out condition data capture as usual during inspection with the camera

2. Cloud transfer Then you transfer the condition data to the integrated ArtIST web service via IKAS evolution

3. Analysis by Al

Defects are recognized by the Al and are classified according to the selected coding system

4. Verification

After the returned results have been checked, the inspection report is prepared.



ISAM – Ageing prognosis of sewer networks by means of artificial intelligence



Efficient check and supplementation of master data for the network infrastructure

Optimising the data quality and saving valuable resources - with an intelligent solution for automated check and correction of master data. The use of state-of-the-art technologies such as artificial intelligence, 3D reconstruction and rule-based analyses leads to sustainable increase in data integrity for the entire network.

Advantages at a glance:

- Maximum time savings: Automated identification of missing or implausible master data quick, precise and without manual checks.
- Intelligent suggestion system: Suggestions for the supplementation or correction of master data based on AI, 3D reconstruction and intelligent checking rules.
- Higher data quality greater economic efficiency: The proportion of incorrect master data entries is reduced significantly - for reliable data as the basis for every analysis and decision.
- Noticeable cost savings: Efficient processing and cleansing of incorrect data in sections and networks manually or automated, as required.
- Transparent control & traceability: Every change is documented and made traceable for maximum transparency towards internal and external stakeholders.
- Scalable & flexible in use: Whether individual section or complete network the system adapts to the requirements and grows with them.



Future-proof maintenance planning with an innovative ageing prognosis procedure

The ageing prognosis procedure forms the basis for strategically sound and economically viable maintenance planning for the network infrastructure. Based on precise net asset value analyses, an automated, quick and reliable prognosis for the development of individual sections or complete networks is created.

Advantages at a glance:

- Time-saving: Prognoses for individual sections or complete networks within seconds ideal to quickly identify any need for action.
- · Meaningful visualisations: Colour-coded network plans and clear graphics ensure immediate traceability of changes in net asset value and show hotspots at a glance.
- Maximum flexibility: Prognosis periods can be set individually for individual sections, network sections or complete networks - for customised planning.
- Focus on economic efficiency: The change in net asset value is guantified in euros and visualised for maximum transparency and effective control of costs.
- · Sustainable decisions: Rehabilitation measures can be taken at an optimum point in time data-based, proactively and resource-friendly.
- Investment security & transparency: The need for investment is proven by valid prognosis data for convincing arguments to decision-makers and sponsors.
- Scientifically sound: The prognosis model is validated in accordance with highest scientific standards for maximum planning security and trust.







Change in the network with regard to substance classes.

The change in the monetary net asset value of the network over the years if no rehabilitation measures are carried out.

Remote Inspect – For greater flexibility and higher quality

Remote Inspect supports inspections in the field by networking systems or by providing access from the office.

- Supporting: Help with condition capture by active consultation of expert advice
- Functional intervention: By means of active control of the system from a remote site
- High quality: Thanks to efficient use of expert knowledge
- Flexibility: Use of the tool to network the vehicles with each other or with an office work station
- Site-independent: Remote inspections can be performed from any desired site with a stable internet connection
- Little impact on the environment: Because an expert does not need to travel to the site
- Time-saving: By means of direct, prompt expert intervention and rapid continuation of work







IKAS pressure

The IKAS pressure software is used to analyse the leak tightness of sewer reaches, joints and manholes.







Contact persons Consultation and sales





