IKAS EVOLUTION

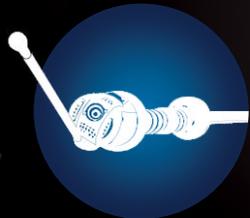**IKAS EVOLUTION**

IBAK's powerful sewer analysis software designed to integrate seamlessly with your IBAK Inspection System. Unlock the true potential of your inspection system with advanced extensions, personalized workflows, and complete data interface integration. Expand your capabilities with Digital HD Recording (1080p), 3D GeoSense mapping, Laser Measurement, LaserScan Profile Analysis, and much more. Adapt IKAS Evolution to your specific inspection protocols and data management systems. Generate clear, comprehensive reports for informed decision-making. Discover how IKAS Evolution can elevate your inspection process and improve your sewer network.

Introduction to IKAS Evolution

AVAILABLE IN **FOUR** BASE BUNDLES

PUSH

- MPEG Encoding IBAK MiniLite Systems
- Data Interface PACP, MACP, and LACP
- Single Laser Diameter Measurement

MOBILE

- MPEG Encoding IBAK Mobile Systems including PANORAMO SI
- Data Interface PACP, MACP, and LACP
- Single Laser Diameter Measurement

VEHICLE

- MPEG Encoding IBAK Vehicle Systems (Full HD & PANORAMO included)
- Data Interface PACP, MACP, and LACP
- Pointwise Measurements

OFFICE

- Management of sewer videos and PANORAMO films/photos
- Data interface PACP, MACP, and LACP

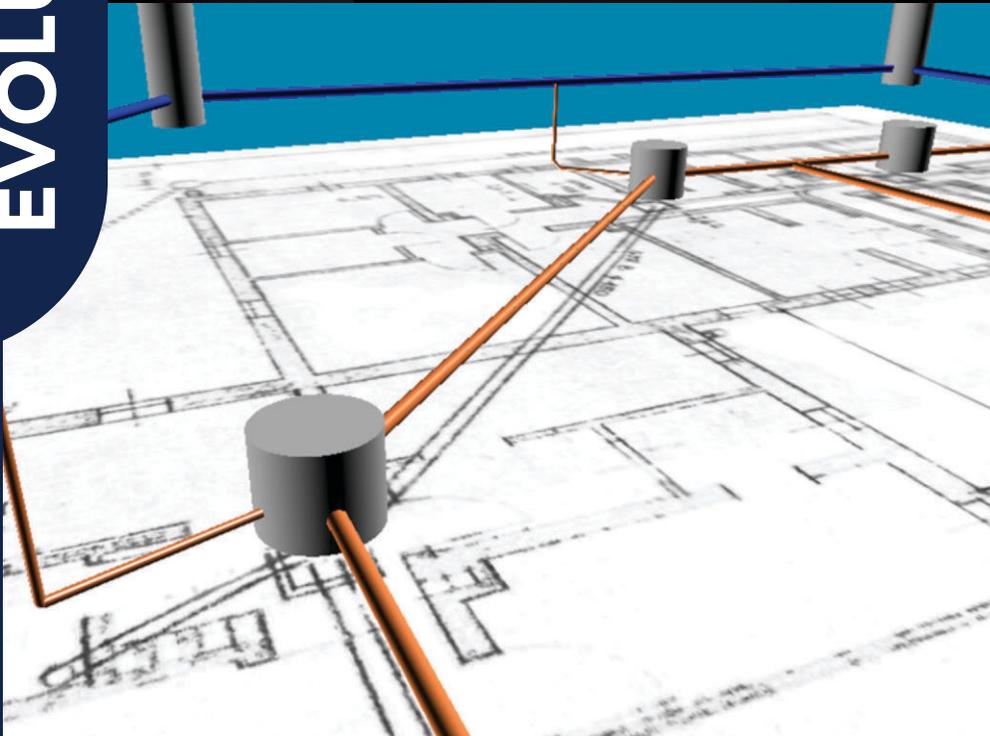| IKAS EVOLUTION MODULES	PUSH	MOBILE	VEHICLE	OFFICE
Map Viewer	●	●	●	●
Map Editor	●	●	●	●
Map Route Assistant	●	●	●	●
3D GeoSense	●	●	●	●
Diameter Measurement	●	●	●	●
Defects Measurement		●	●	●
Laser Deformation Measurement		●	●	●
Tilt Measurement		●	●	●
Temperature Measurement		●	●	●
Job Rule Management	●	●	Included	●
Continuous Profile Analysis (LaserScan)			●	●
PANORAMO® Analysis Pipeline + SI		●	●	●
PANORAMO® Analysis SI		●	●	●
PANORAMO® SI 3D Measurement		●	●	●

MAP EXTENSION

Transform IKAS Evolution into a powerful sewer GIS. A visual of the sewer network overlays onto real-world maps, providing situational awareness. Explore any section from the sewer network from any angle with the integrated 3D Viewer.

Once your sewer data is imported (via Shape, CSV, etc.), you can say goodbye to paper maps! Track your inspection jobs in real-time as the camera position updates live on the map. Inspected areas are clearly marked, and any missing coordinates can be generated or adjusted using CAD drawing tools.

Data sharing is effortless. Export sewer master data to other GIS systems using any of the supported interfaces. The free IKAS Evolution Viewer allows clients view and explore your sewer data. **Only available with IKAS Evolution bundles.**

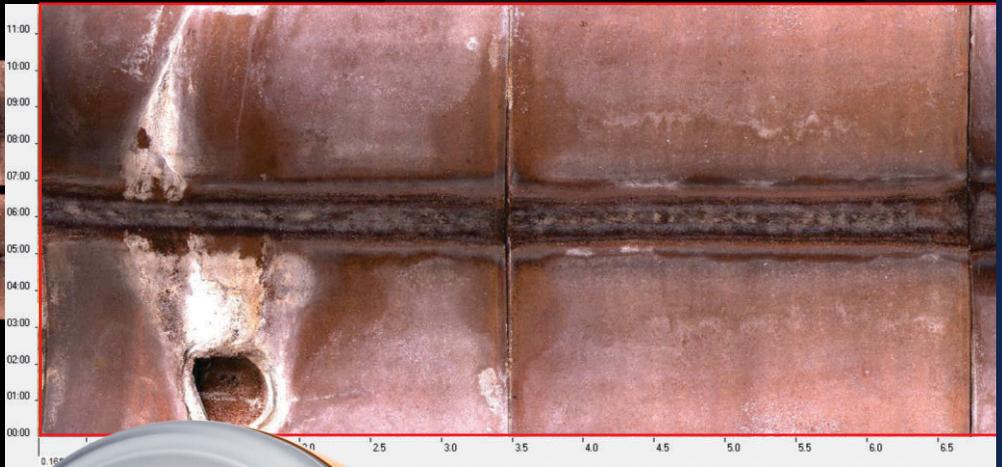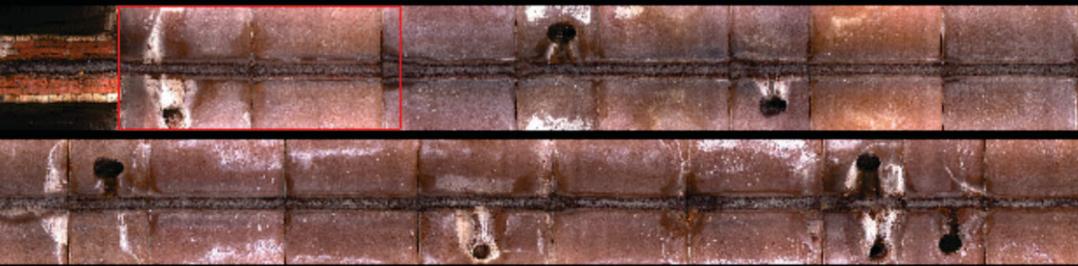*Live creation of the path during the TV inspection*

3D GEOSENSE®

IKAS Evolution 3D GeoSense transforms your sewer inspection system into a powerful 3D mapping tool. It seamlessly integrates pipe course measurement into your workflow, providing accurate and error-free data with simple, clear procedures. As you conduct your inspection, the system automatically captures precise 3D measurements as XYZ coordinates. These can be geo-referenced to existing master data for pinpoint accuracy and exported in common sewer data formats. View the map directly in IKAS Evolution, print it out, or create a DXF file for further analysis. **Only available with IKAS Evolution bundles.**
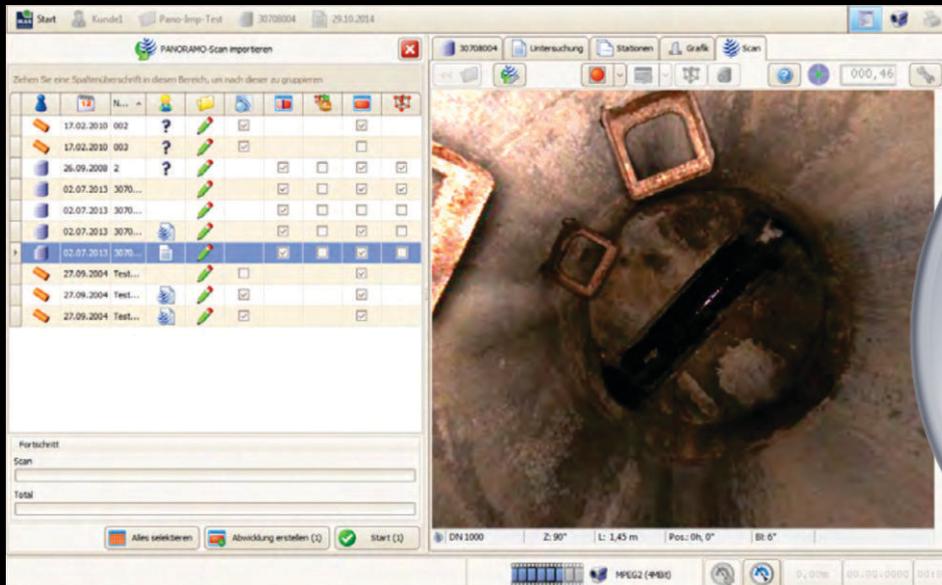
Integrated 3D Viewer

PANORAMO® ANALYSIS

IBAK's PANORAMO® system is a true alternative to traditional CCTV inspections. This established technology is available in 4K resolution and can collect sewer data at speeds up to 69′ (21m) per minute. Once you've captured the data in the field, you can analyze and evaluate all from IKAS Evolution. The scan mode helps the operator meet all inspection regulations without compromising video quality. All inspections are compliant with industry standards and flexible enough to adapt to your client's needs. From condition assessment to rehabilitation planning, you can do it all from the comfort of your office. Scan now, analyze later with PANORAMO® and IKAS Evolution. **Only available with IKAS Evolution bundles.**
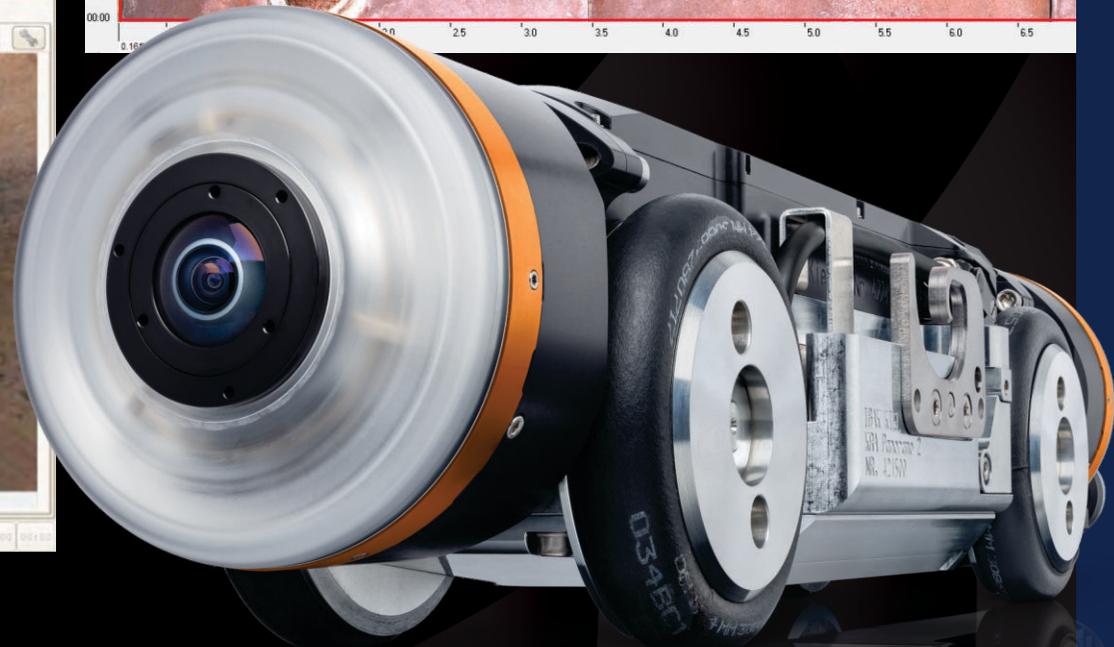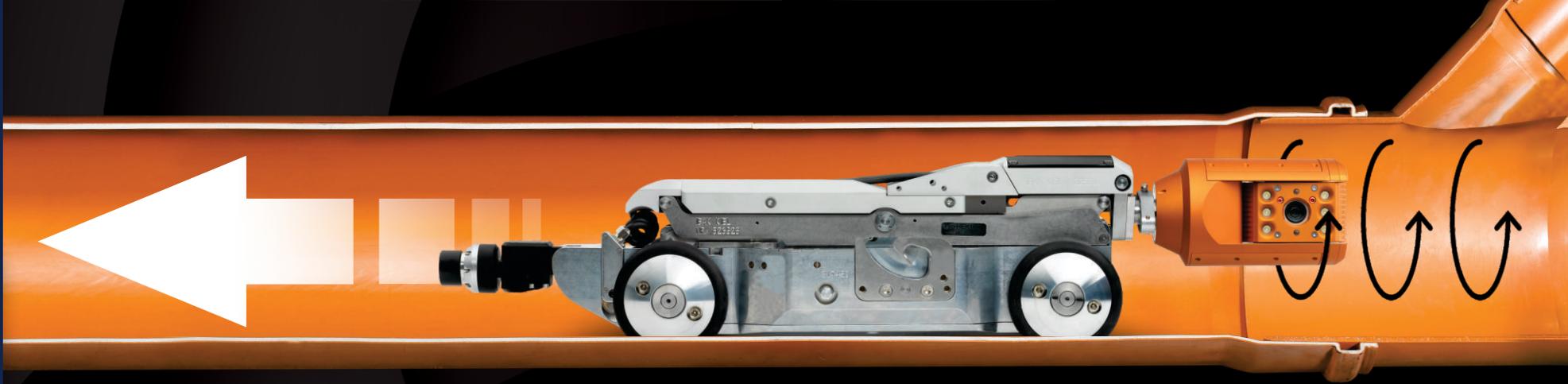

Unfolded View Timeline (Above) & Unfolded Section View (Right)

The PANORAMO wizard for importing films indicates which inspection diagrams are available and those that are missing.

LASERSCAN *(Continuous Profile Analysis)*

When you pair your ORPHEUS® 2 with IKAS Evolution Software, you can detect deformation of the whole pipe in one continuous motion with LaserScan Continuous Profile Analysis. Once you begin your scan, your system will move in reverse while the camera head rotates 300°/second. The camera takes a measurement every 12° rotation. With the profile analysis report completely integrated, identifying ovality, corrosion, reduction of cross-section, and internal geometry is easy. **Only available with IKAS Evolution bundles.**

LaserScan Continuous Profile Analysis

ORPHEUS® HD

HOW IT WORKS

SCAN WHILE RETRACTING: As you retract your camera system, the camera head rotates (300°/second) while using laser points to create a detailed profile.

GENERATE REPORTS: IKAS Evolution processes the data and generates clear diagrams and PDF reports.
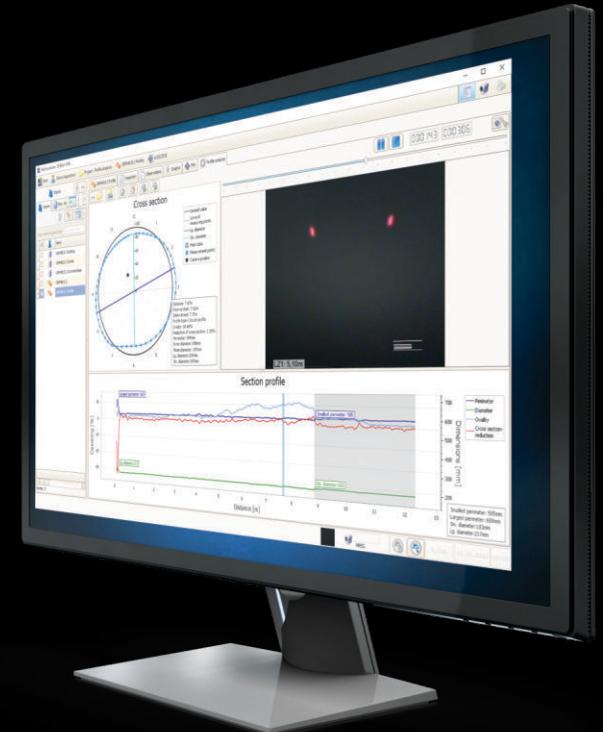
ANALYZE NOW OR LATER: Review the data in the inspection vehicle or back at your desk, whether verifying a new pipe or assessing an old one for repair.

TAKE WHAT YOU NEED: Mask irrelevant features for a clear picture. Get key stats like min/max values, ovality, and diameter deviations.
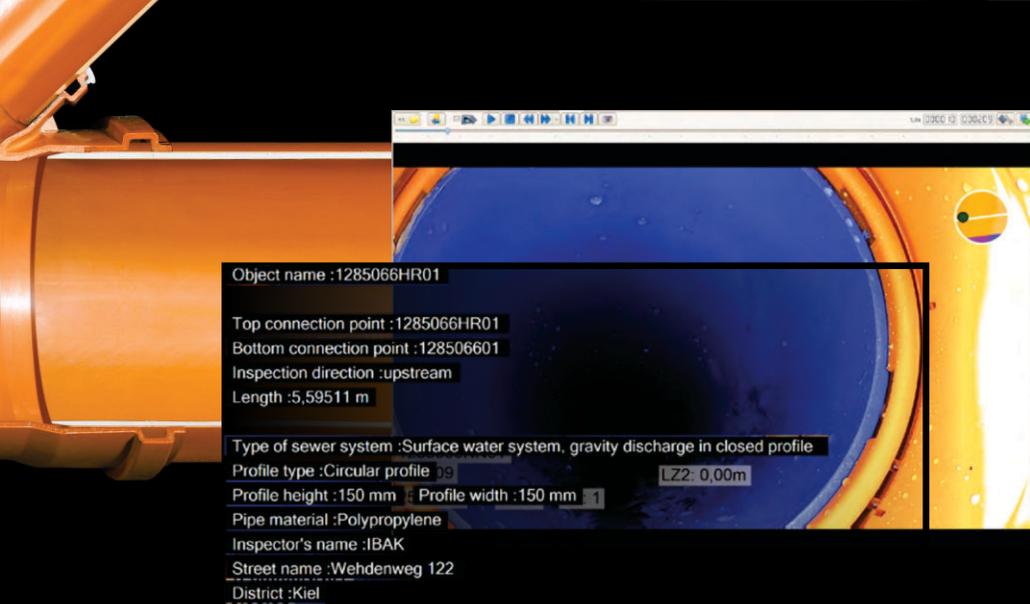
EASY TO SHARE: Transfer data to clients for interactive via the free IKAS Evolution Viewer.

Cross Section & Section Profile Views

Object name :1285066HR01

Top connection point :1285066HR01
Bottom connection point :128506601
Inspection direction :upstream
Length :5,59511 m

Type of sewer system :Surface water system, gravity discharge in closed profile
Profile type :Circular profile
Profile height :150 mm   Profile width :150 mm
Pipe material :Polypropylene
Inspector's name :IBAK
Street name :Wehdenweg 122
District :Kiel

LZ2: 0,00m

Representation of the 2-layer technology for the Temporary Data Overlay

TEMPORARY DATA OVERLAY

Update master data, make station adjustments, and revise entries after recording seamlessly without compromising the original footage. With the data separated from the video itself, changes can be made up until the final delivery to the client. During the inspection, your live data will still be displayed on the vehicle's preview monitor. With this feature, you can import external inspection footage into your IKAS Evolution project with no data. From there you can analyze the inspection, add your own temporary data overlay, and have a deliverable ready to present. **Only available with IKAS Evolution bundles.**

IKAS RECORDER: Lightweight, secure inspection software designed to capture both HD and SD video while annotating observations directly on the inspection footage. Optimized for IBAK camera systems, and included with every IBAK inspection system purchase. Convenient, user-friendly, and easy to learn.

IKAS MINI: Finding the middle-ground between basic recordings and entry-level inspections. Store more data about your object and gain deeper insights with more comprehensive reporting than IKAS Recorder. Simplified operations with a user-friendly interface. Take a step towards the full potential of your inspection system with IKAS Mini.

INCLUDED WITH IKAS MINI: *Project Management, Sewer Database, Video Overlay, WRC Condition Codes, Inspection Video Player, All IKAS Recorder functions.*

*IKAS Recorder and IKAS Mini **do not** include IKAS Evolution modules.*
IKAS Recorder and IKAS Mini are tailored for entry-level inspections.

IKAS NETWORK VIEWER

Take your inspection data into the office and make it available to anybody with connection to your network in two easy steps. Data updates in real-time so no one gets left behind! **Only available with IKAS Evolution bundles.**