Why iCg

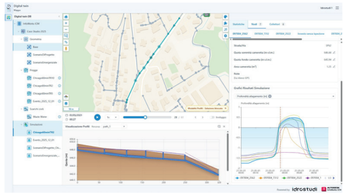
A smarter way to manage wastewater and sewer networks

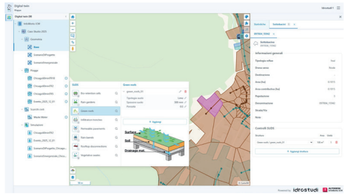
iCg is a cutting-edge, cloud-based platform accessible via a web interface, designed to transform how wastewater and urban drainage systems are monitored and managed. Developed by our hydraulic modelling experts and engineers in cooperation with IT specialists, it brings together data science, modelling, and strategic investment planning in a unique, powerful tool.

By integrating near real-time data, hydraulic models and operational tools, iCg enables utilities to move from reactive to **predictive and data-driven management**, bringing the power of **AI and the digital twin into daily operations**, even to support non-specialised operators.

With iCg you can:

- Quantitatively characterise stormwater and sewer systems
- Anticipate critical events before they happen
- Reduce flood and overflow risks and related costs
- Improve efficiency and service reliability
- Quantitatively support wastewater and urban drainage systems management and decision making





Discover iCg in action

iCg in less than 3 minutes

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Idrostudi supports the ONU Agenda on Sustainable Development Goals:

SUSTAINABLE DEVELOPMENT GOALS

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

idrostudi

iCg Web Platform

The new era for urban drainage and wastewater systems

iCg
Sewerage & Urban Drainage Systems Web Platform

About Idrostudi

Engineering water intelligence since 2002

Idrostudi is an independent engineering company specialising in water systems, combining expertise in hydraulic modelling, monitoring, and digital solutions.

Based in Italy, Idrostudi supports utilities and public authorities worldwide in improving the efficiency and resilience of water and wastewater networks.

Through the integration of data, models, applied research and advanced analytics, the company delivers digital platforms that connect planning with real-time operations.

Part of Axeya Group since 2025, Idrostudi transforms technology and insight into innovative solutions that create measurable value across every stage of the project lifecycle.

From raw data to actionable insights



Platform structure

One platform. Two integrated modules

iCg is built on a modular architecture that connects data, models, and decision-making tools into a single environment that can be tailored to your organisation's needs.

Monitoring

Monitoring Module focuses on the management and analysis of real-time data from field sensors, SCADA systems or other sources and protocols. It processes big monitoring data from rainfall, sewer systems, and urban drainage using AI and engineering algorithms, within an attractive user interface integrating GIS features.

It allows:

- Sensor anomaly and data transmission alert
- Identification of hydraulic and environmental critical issues
- Overflow structure monitoring
- Identification of sewer districts affected by inflow/infiltration (I/I)

Users can explore data at different levels of detail and support **instant, data-driven decisions.**

Digital Twin

Digital Twin Module creates a highly accurate virtual replica of sewer and urban drainage systems. Developed in **collaboration with Autodesk**, integrating the InfoWorks ICM software, this module enables **advanced simulations and predictive analysis**.

It allows:

- Hydraulic status assessment
- Proactive management
- Scenario analysis
- Decision support
- Service improvement

This module supports daily operations through an **intuitive interface** displaying key **map-based information** at multiple levels of detail.

Technical features

Designed for real-world operations

Architecture

Fully cloud-based platform
Scalable and modular design
Multi-user access

Integration

Different metering devices types
SCADA and telemetry systems
GIS and WMS
Hydraulic modelling software (e.g. InfoWorks ICM by Autodesk)

Core functionalities

Near real-time monitoring
Historical data analysis and reporting
Interactive time series plots
Alarm management and threshold control
Reporting
Digital Twin support
Scenario simulation ("what-if")

Data & analytics

Multi-source data integration
Automated data quality checks
Advanced analytics and predictive tools

Applications

Combined and separate sewer systems
Inflow & infiltration analysis
Storm event response management
Network performance optimisation