



hammerer-system-messtechnik

Modern Operations Management with PARIS + PROFI

The line cadastre for water and wastewater creates new potential for efficient and effective maintenance and operational management

The centralized administration of inventory and operating data in **PARIS + PROFI** for drinking water and wastewater allows for cost-saving maintenance decisions. In this manner, future challenges in supplying drinking water and disposing wastewater at a reasonable price may be met. Efficient and modern management of the company is thereby ensured. The documentation of sanitary and technical inspections is likewise provided for the regulatory agency.

PARIS is a geographical information system in which all graphical information and its technical data are stored in a centralized, relational database according to the OCG standard. **PROFI** is an operations management program that covers technical and commercial aspects, and which documents and evaluates operations and status data together with inventory data.

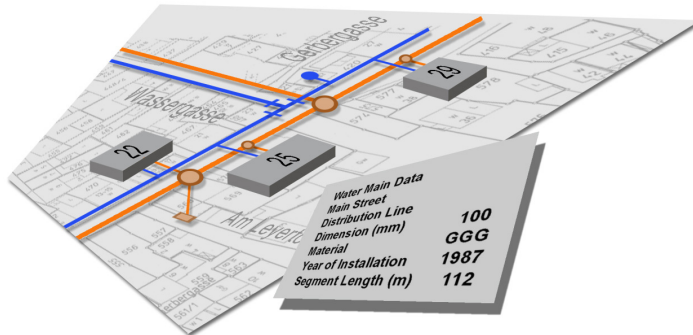
By using a master plan from a single source, **PARIS + PROFI** enable the independent management of the line cadastre and operating data, even for small companies.





PARIS Line Information System

For water supply and wastewater disposal



Management of as-built plans, general plans and schematics with consistent data management and individual specifications. Line plans are issued with various standards, formats and content. Industry-standard interfaces for data

export and import underscore the openness and flexibility of **PARIS**. The graphical data and technical data are stored in a central database and can be made available to any number of users at permanent and mobile work stations.

PROFI Technical Inspection System

For water supply and wastewater disposal



The inspection of supply facilities such as springs, wells, pump stations, tanks, treatment facilities and manholes along with components must be periodically reviewed for structural, sanitary and technical integrity.

The inspection guidelines for water supply and wastewater disposal are integrated into **PROFI**. The inspections are intended to document and eliminate any inadequacies discovered. **PROFI** enables the tracking and assessment of repairs as well as the planning of the next inspection.



PROFI Damage Information System

For water supply and wastewater disposal

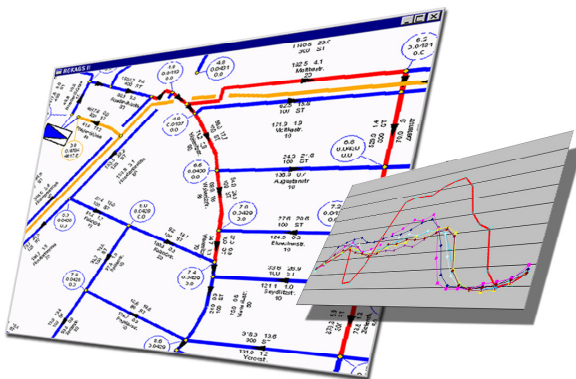


All damage and repairs discovered by inspections, TV-examinations and leak detection, are recorded in a damage form and stored in the central damage database. These results describe the status of the line system. The priorities for replacement are established by **PROFI** in

specialized **STATUS** programs for further decision-making, reduction in piping networks losses and for environmental protection. Thereby, limited resources may be optimally used for the improvement of the facilities.

PROFI Operations Information System

For water supply and wastewater disposal



Operational information, such as series of measurements and customer complaints, constitute additional information for planning, construction, coordination and the management of investments. The outcomes, together with local influences, form the basis for required measures. In this manner, besides the urgency of the

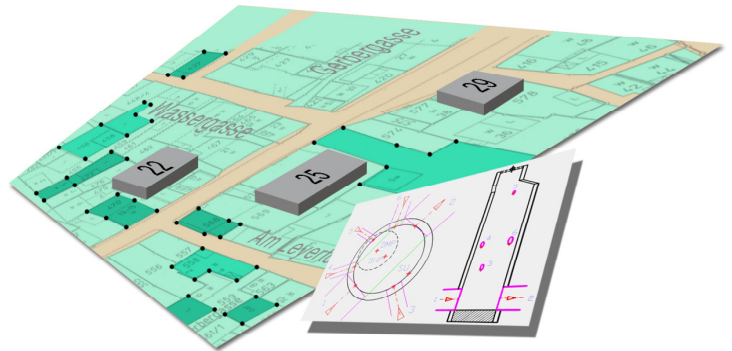
measures, structural, environmental, sanitary and technical aspects are also considered. Results relevant to the network may be displayed in the line cadastre with colour indicating priority. An important factor in overall operations management is customer satisfaction, and hence the image of the supply and disposal company.



Survey and Measurement

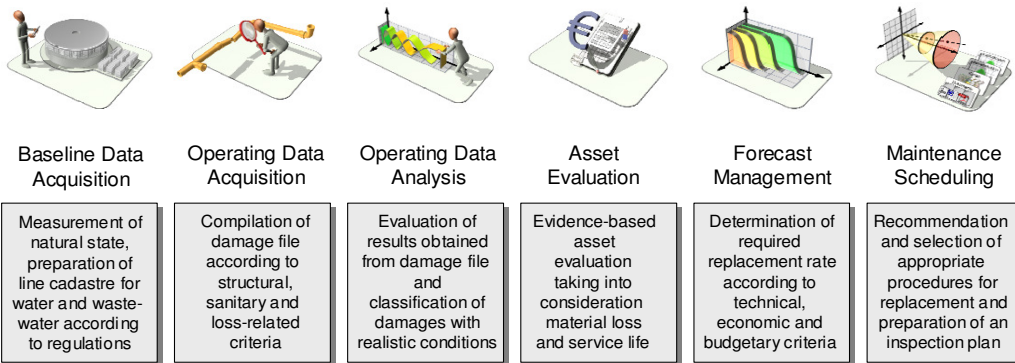
Natural state and components

In the preparation of a modern line cadastre, a measurement of the natural state is required, in which the location of the lines and components of the supply and disposal systems are recorded. The line survey in the field, specifically for the wastewater system, is obtained by recording the GPS-coordinates of the manholes, from which a depiction of the line is configured directly in an add-on program and imported into the natural state. Furthermore, the manhole is scanned by a patented TV-Robot to document the exact locations of the intake and outlet as well as the condition.



Steps for Evaluating Existing Facilities

Master plan from a single source



The described method for preparing the line cadastre, together with acquisition, evaluation and use of status reports, forms the basis for planning and maintenance, for the management of investments and inspection measures. In this

manner, the facilities may be maintained and an economic operations management attained. With the modules in **PROFI** and the partners mentioned, individual solutions for different company structures may be achieved.

