

Works Management System KANiO® - More Quality at Low Cost

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In Meinerzhagen, the municipal works have introduced the KANiO® Works Management System to improve their operating procedures. The system supports employees in organising and scheduling.

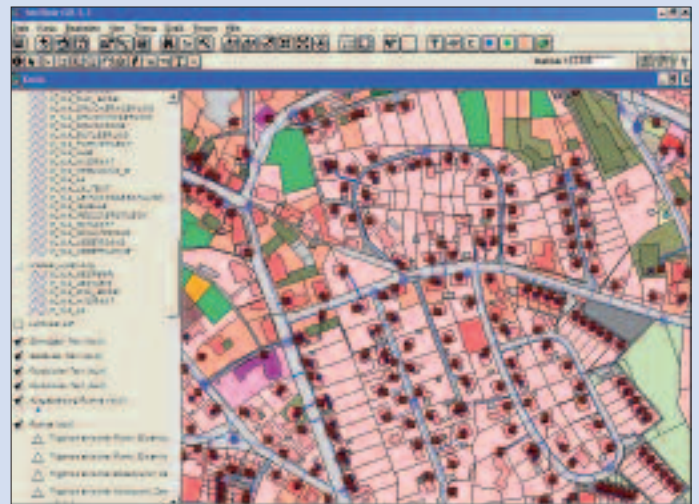
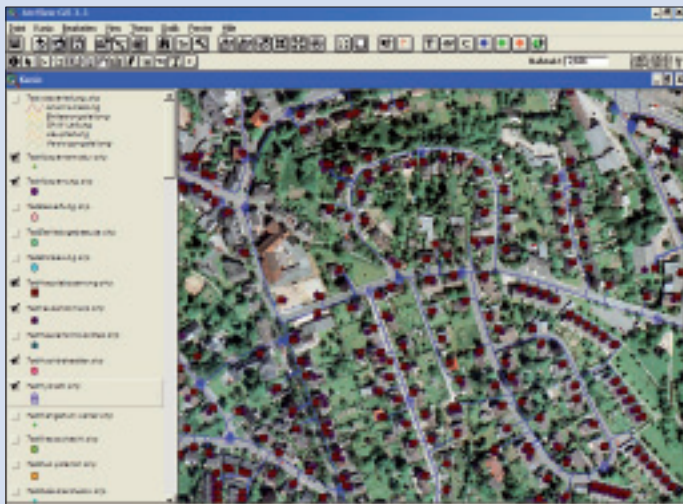
Like all companies, public-utility and waste-disposal organisations must also provide high-quality services at low cost in order to survive in a competitive environment. Since a host of statutory requirements also have to be fulfilled, the municipal works in Meinerzhagen decided to introduce a works-management system to enable them to operate public-utility networks more reliably and efficiently. The software package KANiO® produced by HST Hydro-Systemtechnik, Germany, met all the requirements specified by those responsible. Meinerzhagen, east of Cologne, is situated at a favourable point between the industrial areas of the Ruhr, Rhine and Rhine-Main and offers ideal infrastructural conditions for the location of production facilities. However, good communications (road, rail and air-traffic) are not enough in themselves. Reliable supplies of water and power

also have to be guaranteed. This is why the municipal works of Meinerzhagen are constantly investing in modern plant and processes. For example, all the high-level distributing reservoirs for the intermediate storage of drinking water, have been refurbished and modernised. New central stores for components and equipment needed for local gas and water supplies, have also been built. And with the software package KANiO®, a solution has been introduced by means of which all the work necessary on the infrastructure system can be carried out more efficiently and economically.

The Requirements

In making their selection, the managers of Meinerzhagen municipal works placed particular importance on an intuitively operated user interface as well as simple

system functions based on the Microsoft environment. This was specified to make it easier for employees not constantly working with the program to understand and use it effectively. Existing master data stored in a central computing unit were also transferred to KANiO® via a standard interface. Further requirements were the linking of the system to a graphic information system to display all the facilities and equipment operated by the municipal works as well as the field activities of employees as concisely and understandably as possible. The program also had to support employees in the planning and implementation of their tasks in order to avoid disruptions, prolong the life span of equipment and reduce the cost of day-to-day operation.





The System Structure

KANiO® is a high-performance tool for planning, maintenance, repair, documentation and implementation of all relevant laws and regulations. The open data structure, modular design and flexibility of the program mean that it can be adapted perfectly to existing structures, organisations and individual requirements. The works-management system can be operated with equal effectiveness in a single workstation or network. The data processed are saved in a central Oracle data base. To cope effectively with a wide variety of tasks, KANiO® is divided into four modular sections.

1. Configuration

The Configuration module contains all the data needed for operational planning, e.g. employees, vehicles, materials, machinery

and equipment as well as cost centres. Meinerzhagen municipal works can also define tasks and schedules and fix deadlines. The system then generates provisional schedules which can be grouped together for efficient integration into the routine work of field-service employees. Absences due to vacation or sickness can also be taken into account.

2. Works Management

The heart of the KANiO® program is the Works Management module which organises, displays and outputs all activities and operations. The integrated scheduling feature supports the employees in planning preventive maintenance, not only by fixing dates but also by displaying available personnel, vehicles and materials. The tasks are then grouped together by economic criteria and issued to employees, results are recorded and reported back. Interfaces also exist to standard GIS systems, so all operations can also be displayed in graphic form.

3. Analysis

The Analysis module makes it possible to search for information in the data base at any time by means of individually prepared reporting forms. The search can refer to individual machine

components or complete sections of the network. The Analysis module therefore makes it possible to obtain accurate information on all operations, thereby making written assessments of operation records unnecessary. This kind of analysis also gives vital information for personnel and budget administration and indicates weak points and maintenance-intensive areas within the organisation. The knowledge thus obtained is used in subsequent planning, thereby helping to make operations more efficient.

4. Documentation

Documents required for routine work such as operating instructions, drawings or photographs can be saved in text, image, video or sound format, and are available for the use of employees at all times. The data are stored directly in the Oracle data base in Meinerzhagen to protect them from change or accidental deletion by unauthorised persons.

Conclusion

HST introduced the KANiO® works-management program in the Meinerzhagen municipal works within a short time of receiving the order. All the data concerning the gas and water supplies were integrated in the system from existing programs and individual planning processes imitated in the program. The operations of the municipal works can now be administered, analysed and documented in detail in order to achieve a consistently high level of quality. The documentation by the program of all measures carried out in municipal facilities allows the management to provide proof wherever required. Within six months of the introduction of the works-management system, the first improvements became noticeable. In time, these will allow Meinerzhagen to make considerable savings in the running of the municipal works.

