Sewsan™

Overview

Sewsan™ simulates, analyses and optimally designs sewer reticulation systems. The program uses the theory of contributor hydrographs for analysis and time simulation to determine spare capacities in sewer systems taking cognisance of infiltration and leakage.

Our software is designed by engineers for engineers. We aim to simplify the modelling process during every step and make the power of GIS available to the modeller.

MODEL LIVES IN GIS

The sewer system model is embedded in Albion™ which is our in-house GIS platform.

The power of GIS can now be applied to the engineering model, allowing the modeller to directly harness GIS tools when creating and editing datasets.

For example, spatial correlation can be used to extract text, such as pipe diameters from CAD or other GIS sources and apply it directly to the pipe entities of a hydraulic model.

Another example would be to select part of the model using a spatial query, then refine the selection using a SQL text query. Finally the resulting filtered dataset can be populated interactively with data. This works directly on the engineering model.

The more advanced modeller can create extensive selection or update queries using SQL, and see the effect immediately rendered in the GIS based model.

Model tables are now dynamic, fast and practically unlimited in size. The modeller can have multiple user customizable layouts with field groupings in colour.

Sewsan™ is a user friendly program with a menu driven, easy-to-use and understand interface between the graphical display/edit model as well as the model database and results.

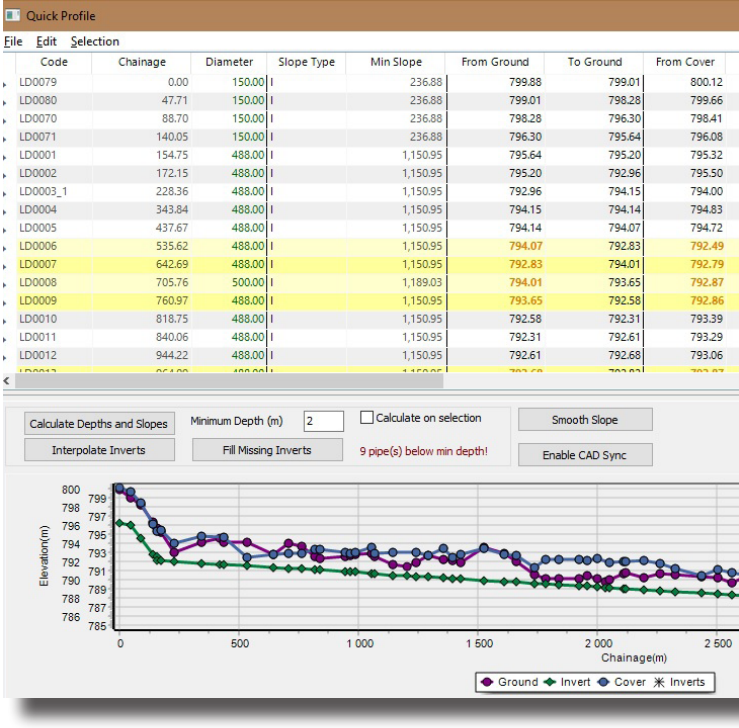
GLS
Infrastructure planning

Sewsan™ Overview

Sewsan™ simulates and analyses flow through sanitary sewer systems. It is an analysis tool coupled with a GIS interface for display of all entities on a map. Sewsan™ provides for an extremely flexible query system in order to map data and results.

Key features of Sewsan™

- Support for Google Maps Imagery
- Support for embedded Google Street View
- Integrated hydraulic network modelling and design
- Ideal for modelling very large systems
- Non-network data may also be displayed as background information
- Customisable graphical display of results and data, through colour grading, arrows and pipes, different line thickness and nodes sizes, etc. is available
- Data for all entities required for modelling is included in the GIS database, with extra fields for other attributes
- Detailed grid-based data and result presentation with filtering capabilities
- Supports data storage and data exchange with SQLite, Microsoft SQL Server, PostgreSQL and ArcGIS Server
- Simultaneously captures spatial and hydraulic network topology in a single model with the addition of user-defined information
- The graphical display is always geographically correct and not schematic
- Bitmap images can also be imported as a backdrop or downloaded on the fly from imagery web services, such as open street maps and Google Maps
- Support for Sewsan's contributor hydrograph method of analysis as well as support for SWMM on selected critical long sections
- Pipe size enumeration using Sewsan's design functionality
- A master planning system for hydraulic networks
- Result presentation available in GIS, graphs, SQL-based reports and hydraulic grade line profiles



Sewsan™ Quick Profile

Simplified model building

Version 6 simplifies the process of model building from a wide range of sources including as built drawings, CAD plans, GIS data sources, scanned images, schematic layouts, tabular spreadsheets or even hand drawings. The process of adding model elements such as pipes, cables or catchments with the minimum number of clicks has been at the forefront of the new design to minimize repetitive tasks for the modeller.

Interaction with web services

Vast amounts of information are available on the Internet. Accessing Internet based resources through web services, allow Sewsan™ to display background maps from sources like Google™, Mapbox™, Bing™ or OpenStreetMap™. In addition Street View is now integrated in the software.

Sewsan™ can simulate 100 000 pipes in one model. Large models can be built including all pipes in a system, thus improving modelling accuracy.

Summary of features of Sewsan™

- Models live in GIS
- Interaction with web services
- Simplified model building
- Customizable GIS based themes
- Extensive model reporting system

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