

The best software solutions for hydraulic engineering

ReteGas

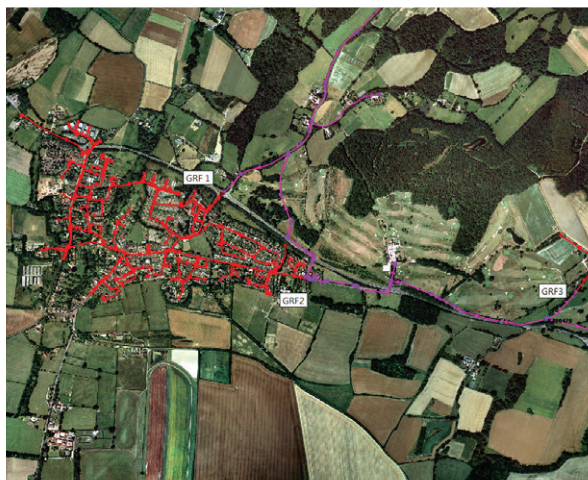
Gas distribution network modelling

ReteGas is the ideal tool for analysing any gas transport and distribution network (natural gas or other compressible gases) in a steady state.

ReteGas can be run in conjunction with InfoWorks WS Pro (developed by Innovyze). This enables you to manage all the network-related information in one efficient environment; from its geometry to gas pressure regulators, demand allocation and elevations etc.

Gas simulations can be run in a steady state with simple commands and ReteGas can quickly return the distribution of flow rates and pressures over the entire network.

Low, medium and high-pressure gas networks can be represented in a single integrated model.



Features

- > Calculation is based on Fergusson's formula, valid for any pressure and temperature ranges, which allows network simulations of integrated systems to launch in a single run.
- > Various kinds of demand (domestic, commercial, industrial etc.) and their respective consumption levels can be represented.
- > The software checks whether pressure reducing devices are being fed by sufficient pressure upstream and whether there is a risk of failure.
- > High or low consumption regime simulations can be run to check if the required minimum pressures are maintained and whether some regulator stations can be closed in low consumption regimes.
- > Fast computational time allows very large systems to be modelled.
- > Advanced calculation modules allow automatic batch simulations to be launched in order to analyse emergency conditions.

Applications

- > Minimum pressure and maximum velocity can be predicted for different demand and operational settings.
- > Enables new gas transport and distribution networks to be designed.

- > Integrated master plan projects can be used to strengthen existing networks.
- > Management plans for different consumption regimes can be developed.
- > The effects of interconnecting several networks can be checked.
- > The potential effects of emergency conditions can be predetermined.

InfoWorks WS Pro Interface

The InfoWorks environment is easy to use, quick and intuitive. The interface shows planimetric and table views, as well as longitudinal profiles. Its results are displayed with easily interpretable thematic maps.

InfoWorks can use, import and export files in industry-standard formats, such as AutoCAD, ArcView/ArcGIS, MapInfo, Access, XLS etc.

Large amounts of data from different platforms, such as map data, bill data, remote control information, pressure or temperature measurements etc. can easily be uploaded and integrated into a single environment.