

Bentley sisHYD V8i

Product Overview

What is Bentley sisHYD?

- **Bentley sisHYD** is a comprehensive analytical modeling and network design solution for the hydraulic and thermal calculations necessary in pipeline networks.
- **Bentley sisHYD** executes hydraulic calculations of pressure pipe systems with compressible and incompressible media:
 - District heating (2 or 3 conductor networks)
 - District cooling
 - Gas networks



Who Uses Bentley sisHYD

Germany

- Vattenfall Europe Berlin
- swb Norvia
- Evonik New Energies
- EnBW

Netherlands

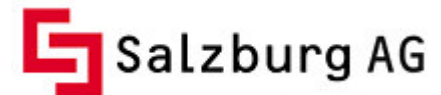
- Essent

Austria

- Salzburg AG
- Energie AG Oberösterreich

Engineering Companies

- GEF Ingenieur AG



Benefits of Bentley sisHYD

Optimize network performance

- Utilities can optimize the balance between electric and heat generation depending on actual and predicted loads

Improve service delivery

- Identify areas of the network where service will likely be deficient or non-existent

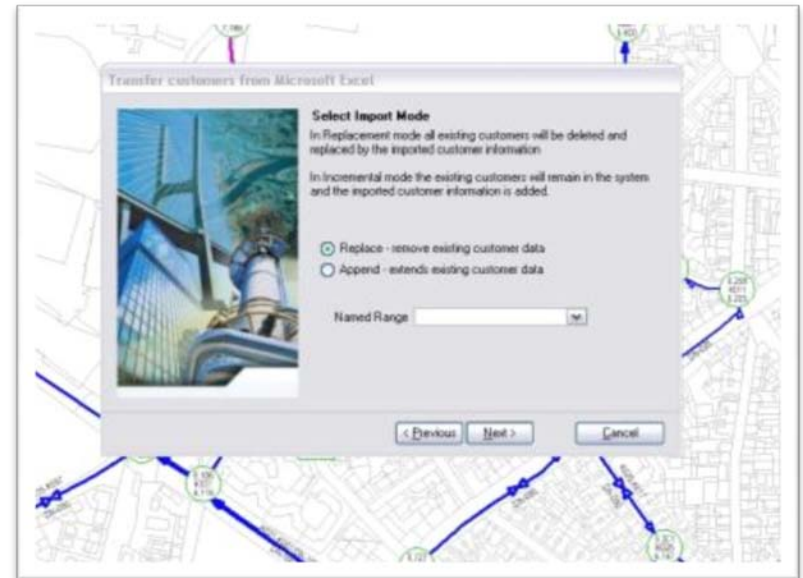


Reduce operational costs

- Design new infrastructure more intelligently or model operational conditions more efficiently

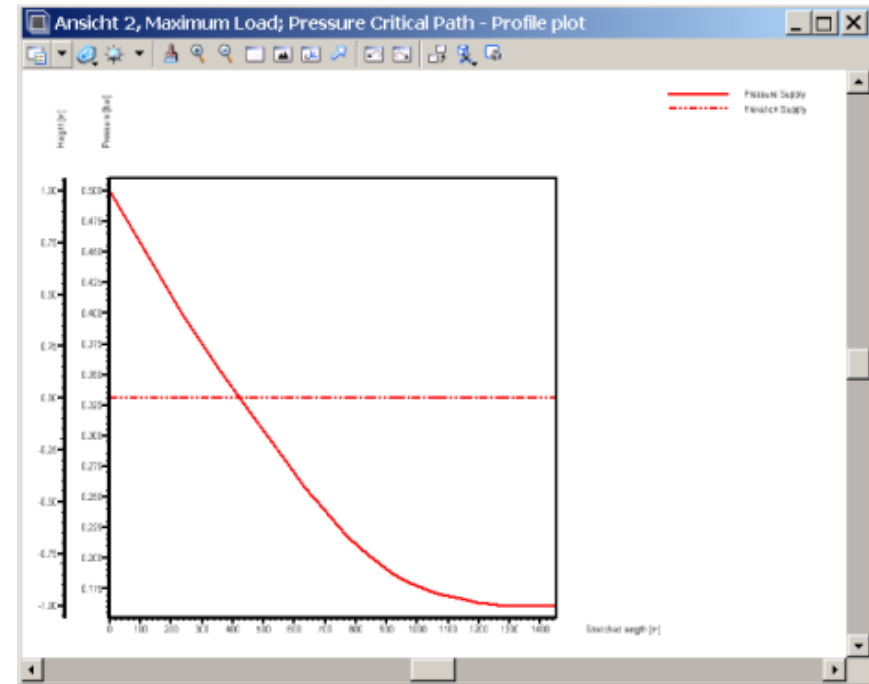
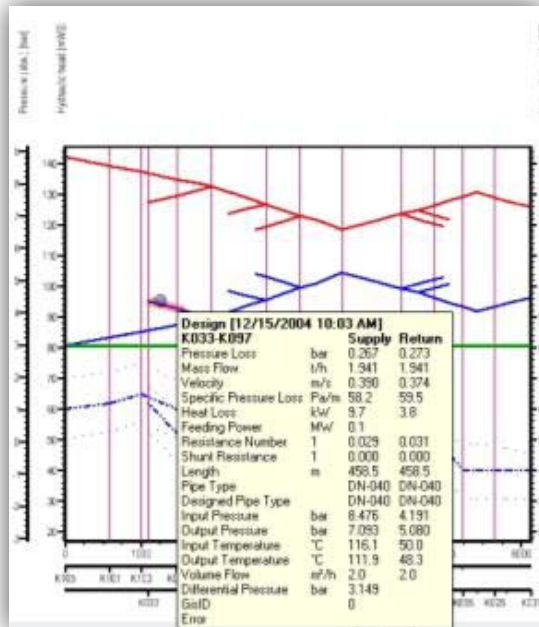
Model Building with Bentley sisHYD

- Network data
 - Build network model based on existing infrastructure
 - Add additional proposed infrastructure
 - GIS import tool (works with Bentley sisNET, Bentley Gas, GE Smallworld)
- Customer data
 - Integrate customer data with network model
 - Sources include:
 - Excel spreadsheets
 - Customer billing systems
 - SAP



Reporting with Bentley sisHYD

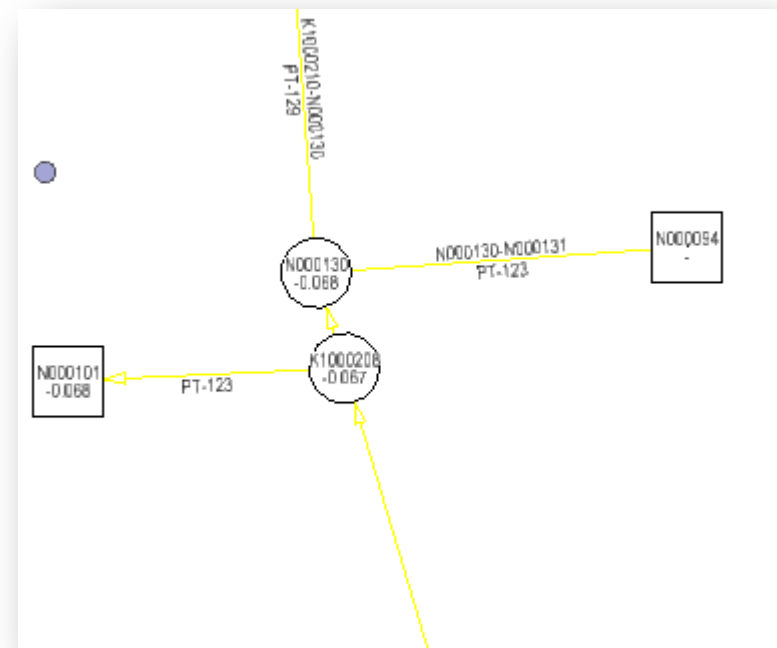
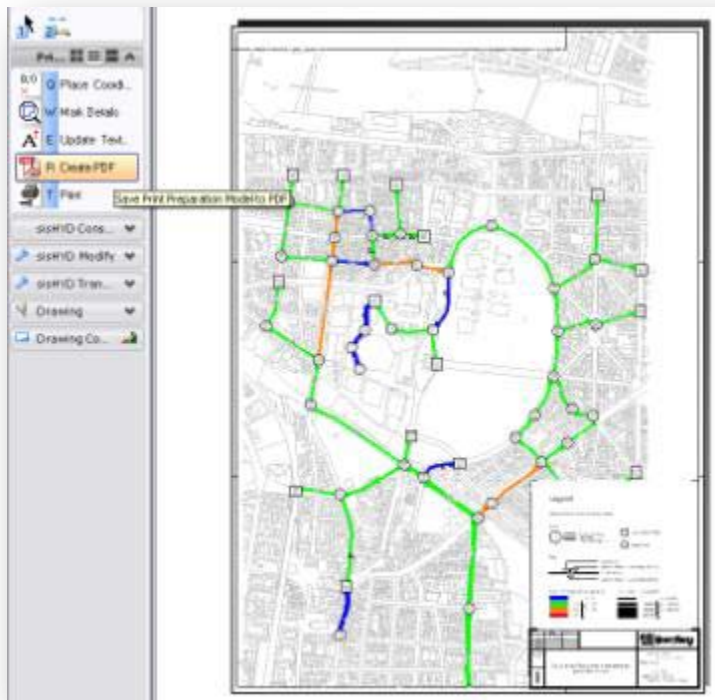
- Results as profile in length



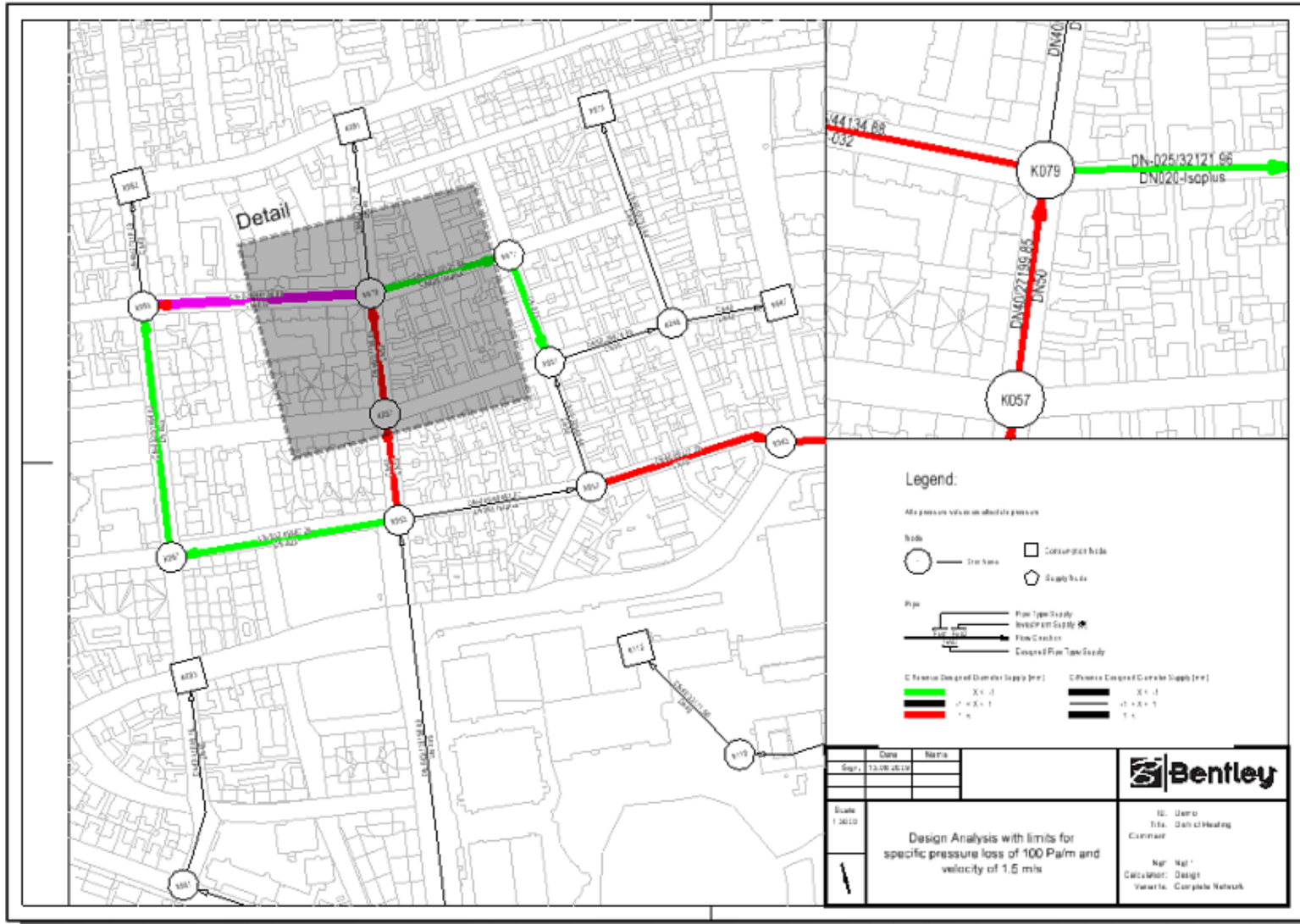
- Time series for dynamic calculation for district heating networks

Plotting with Bentley sisHYD

- Configurable network plots
 - Labels for object attributes and analytical results
 - Color and weight coding by selecting appropriate input or result attributes



Plotting with Bentley sisHYD



Analysis with Bentley sisHYD

- Energy balance
- Design data
- Customer data
- Evaluation by object type
- Min-/Max-Reports

The screenshot shows the 'Report-Center' application window. The left pane displays a tree view with the following structure:

- Summary
- Supplier
- Nodes
- Consumer
 - Overview
 - Max values
 - Min values
 - Input Pressure
- Pipe
- Consumer groups
- Organisation groups
- Model adaption
- Load factors

The right pane displays a table titled 'Consumer pressure' with the following data:

| | Consumer | Inlet pressure [bar] |
|----|----------|----------------------|
| 1 | C117 | 0.161 |
| 2 | C103 | 0.161 |
| 3 | C124 | 0.163 |
| 4 | C114 | 0.166 |
| 5 | C119 | 0.168 |
| 6 | C113 | 0.168 |
| 7 | C100 | 0.170 |
| 8 | C101 | 0.170 |
| 9 | C107 | 0.170 |
| 10 | C121 | 0.172 |
| 11 | C102 | 0.173 |
| 12 | C126 | 0.179 |
| 13 | C128 | 0.188 |
| 14 | C110 | 0.202 |
| 15 | C123 | 0.216 |
| 16 | C116 | 0.219 |
| 17 | C122 | 0.239 |
| 18 | C104 | 0.258 |
| 19 | C105 | 0.318 |
| 20 | C127 | 0.359 |

At the bottom of the window, the status bar indicates: Calculation: Maximum Load Time: 1 1-2

What's New in Bentley sisHYD V8i

- Multi-Level Undo/Redo
- Enhanced Excel import and export
- Enhanced GIS import
- SQLite project database
- Improved performance of Bentley sisHYD Archive Import
- New controls tab page for pump/valve dialog
- New customers tab page for consumer dialog

Thank you

