



PIPENET Vision 1.8.0 Transient Module Enhancements include...

PIPENET Vision 1.8.0 Spray/Sprinkler Module Enhancements include...

PIPENET Vision 1.8.0 Standard Module Enhancements include...

# NEW FEATURES IN PIPENET<sup>®</sup> VISION 1.8.0



The PIPENET Development Team has been working hard for you to make PIPENET even better. We have added over 150 enhancements in PIPENET Vision 1.8.0!





## PIPENET Vision 1.8 Transient Module Enhancements include...

- Smart Output is a new feature ensuring that maximum and minimum values will now not be missed because of large output graphical time steps. Maxima and minima arising during the calculation are captured in the graphical output
- An improved graph viewer with many new features for manipulating information in the graph viewer window
- A new Ribbon style results browser is available
- Improved initial steady-state calculations for networks, with control loops - and large vessels are faster and more stable than ever
- Force time history time can now be output in .csv format, as well, and opened with a spreadsheet program
- Dry pipe model has improved performance when considering the effect of air passing valves
- Channel cavitation modelling is now faster with improved capability for timestep
- Vacuum breaker has been improved, delivering even better calculation
- Two-node caisson is more reliable than ever before
- Pump calculation accuracy is improved for reverse flow and rotation for the inertial pump model
- A new diaphragm type accumulator model is now available, extending the range of applications on which it can be used
- A milli-second time unit is now included in PIPENET
- The output report has been improved with better format for pressure extrema
- The output report has been improved with velocity summary added
- The output report has been improved for maximum air flow of vacuum breaker and caissons
- Transient spec time-function handling has been enhanced for all time units
- It is now possible to have 100 types of fitting on a given pipe
- It is now possible to have 3000 flow nodes
- It is now possible to have 2000 pipes in a network
- It is now possible to have 200 operating valves in a network
- It is now possible to have 200 general pressure loss components in a network
- 500 nozzles can now be included in a network
- 500 specifications can now be made in a network

### *Transient Module*



### *Spray/Sprinkler Module*



### *Standard Module*



- The component graphical output results selection has been simplified
- The count of components in a network in the properties panel is improved. The components are in alphabetical order; it is now possible to hide those with a count of zero
- The 'Convert to Transient' utility now includes pressure Loss and nozzles



## PIPENET Vision 1.8.0 Spray/Sprinkler Module Enhancements include...

- A simplification to the design/analysis dialog box and tools which makes it much more flexible and easier to use. It is no longer necessary to input both design and analysis specifications when it is not necessary
- A new Ribbon style results browser is available
- Pipe sizing rules have been simplified
- The underlay (a graphic that can be imported to appear behind the network schematic) can now be re-positioned and re-scaled
- The general pressure loss component result output is clearer in the report
- The checking in the general pressure loss library is more comprehensive
- Pumps have been improved for the smooth (spline) type
- Pipe type output is capable to handle special characters
- Velocity pressure options can be saved as a part of the default options
- The results can be displayed in the user interface without any table selected
- Several utilities, including XML to excel converter, RES to csv converter and Standard/Spray to Transient converter have been integrated into the main user interface
- The training manuals have been improved and they have been integrated into the main user interface
- The text contents of a text component can now be searched
- The calculation type can now be saved
- The unit conversion has been improved for the Autolayout tool
- Tooltip has been added for the general pressure loss component
- The operating point has been added in the NFPA report
- The node elevation updating is more flexible
- A warning is issued when a pipe type or user-defined schedule is deleted, to avoid inadvertent loss of data
- The non-return valve model is more accurate for loops
- The display precision has been increased for pump settings
- The user interface display has been improved for the Chinese operating systems



## PIPENET Vision 1.8.0 Standard Module Enhancements include...

- A simplification to the design/analysis dialog box and tools which makes it much more flexible and easier to use. It is no longer necessary to input both design and analysis specifications when it is not necessary
- A new advanced fluid type that allows mixtures of component fluids to be defined, taking into account their physical properties
- A wide range of new and alternative fittings is included. We have called these 'Sunrise Fittings'
- A new Ribbon style results browser is available
- The underlay (a graphic that can be imported to appear behind the network schematic) can now be re-positioned in addition to being re-scaled
- The Standard control valve model has been enhanced to increase the accuracy for the sensor calculation
- Pipe sizing has been simplified
- The heat transfer calculation has been improved – the energy balance calculation at the node is even more accurate
- The general pressure loss component result output is clearer in the report
- The checking in the general pressure loss library is more comprehensive
- Pumps have been improved for the smooth (spline) type
- Pipe type output is capable to handle some special characters
- The results can be displayed in the user interface without any table selected
- Several utilities, including XML to excel converter, RES to csv converter and Standard/Spray to Transient converter have been integrated into the main user interface
- The training manuals have been improved and they have been integrated into the main user interface
- The text contents of a text component can be searched now
- Warning has been added when switching between flow types
- The node elevation updating is more flexible
- A warning is issued when a pipe type or user-defined schedule is deleted, to avoid inadvertent loss of data
- The non-return valve model is more accurate for loops
- Fluid option dialog has been improved to avoid re-inputting information
- The friction loss/length and friction factor result are more accurate for pipes with a Laminar flow
- The display precision has been increased for valve or pump settings
- The user interface display has been improved for the Chinese operating systems

