



UNIQUE ADVANTAGES OF PIPENET[®]

STANDARD MODULE

Sunrise Systems Limited

Section 1: Unique Advantages of the leading hydraulic analysis engineers prefer to use:

- *PIPENET schematic design is unique.*
- *PIPENET interface is flexible and easy to use.*
- *The creation of the large and complex networks is fast and efficient. Please refer to Section 2 for examples.*

PIPENET Standard combines simplicity with powerful capability

PIPENET Standard delivers accurate results

PIPENET Standard can deal with compressible as well as incompressible flow and steam

PIPENET Standard has a number of applications such as air, water, steam utility systems design and ventilation (HVAC) systems design

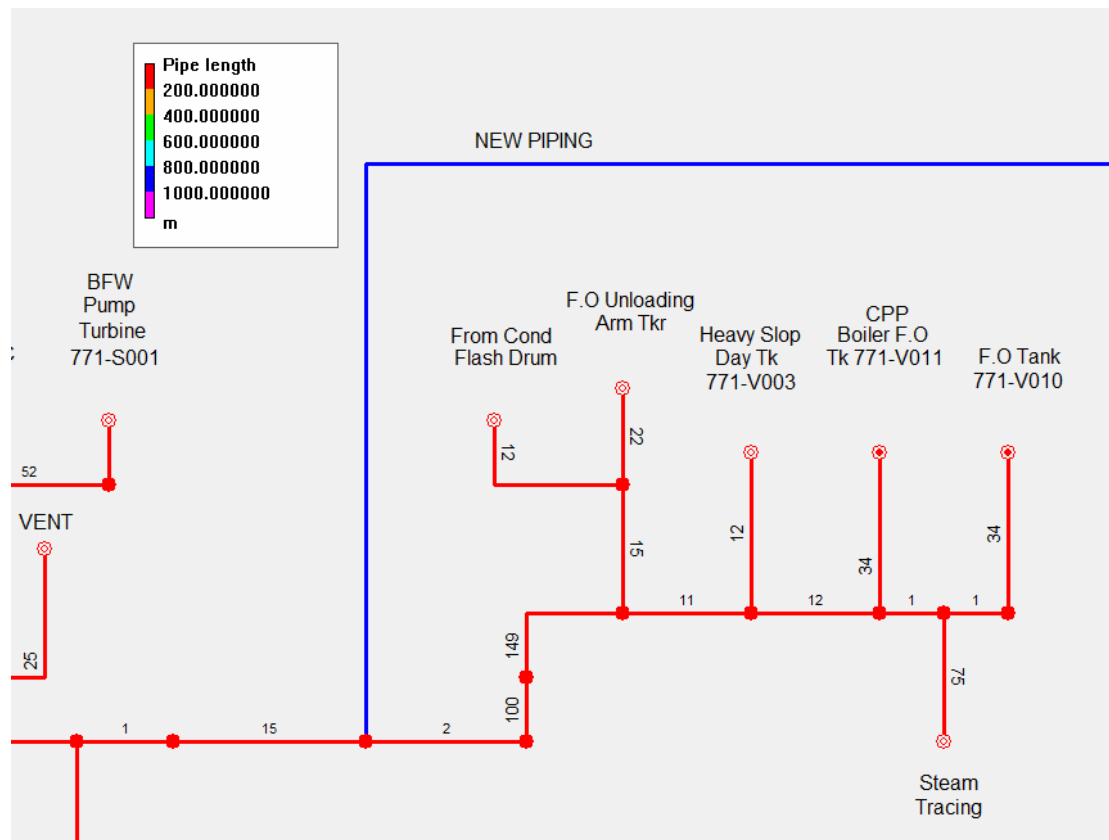
PIPENET Standard performs pressure drop, flow balance, pipe sizing and temperature calculations

PIPENET Standard can model pipes, ducts, pumps, fans, heat exchangers, control valves, nozzles, orifice plates, elastomeric valves, check valves, fixed pressure losses, filters, leaks, breaks/blocks and other items

PIPENET Vision Standard Module - The Features

1. **Copy/paste function:** Copy, cut, and paste functions are available for whole sub-networks including schematic and data. Copy and paste between different networks or within the same network. With this facility, it is easy to build a large network quickly and easily. The hot keys available for copy, cut and paste functions increase speed and efficiency even further.
2. **Clear results display:** The results are summarized in the output report, shown in the property window of each component, listed in the data window as tables, and also can be displayed in the schematics. All these make the results can be read clearly, easily and conveniently. Please refer to Section 3 for example.
3. **Multiple components creation tools:** “Add multiple pipes” tool is especially useful in creating multiple pipes at the touch of a button.
4. **“Area” tool and “polygon” tool:** With those two tools, simply choose an area in the schematic using the mouse, then copy, cut, paste, delete, mirror, invert and rotate all the components in this area in one step. This really saves time!
5. **Interface with WORD:** PIPENET can export the schematic to clipboard, and then paste in other programs such as WORD.
6. **Interface with EXCEL:** PIPENET is compatible with the spreadsheet programs, such as EXCEL. Data and tables can be imported to EXCEL, or exported from EXCEL, giving the engineer total flexibility.
7. **Component graphical manipulation:** The components can be flipped or rotated by dragging the ends of the components to suit a user’s preference. Mirror, invert and rotate functions are also available to flip or rotate components. In addition, Undo/redo, zoom/pan, schematic overview, combination of subnets, and an easy to use data window also make the component graphical manipulation a simple task.
8. **Global edit function:** Using this function, the attributes for all the components can be edited in one step.
9. **Data table:** PIPENET presents all the data in table format. The table is clear, easy to read and can be easily modified.
10. **Sorting function:** Sort the data as you prefer in the data window. For example the pipes can be sorted according to the velocity and the nozzles can be sorted according to the deviation.

11. **Colouration:** All the nodes, pipes and nozzles can be coloured according to a certain attribute.
12. **Interface with the plotter:** PIPENET can export the schematic as HP-GL/2 format.
13. **Interface with AutoCAD:** PIPENET can export DXF file.
14. **Autosave:** The engineer can specify the frequency at which the autosave operations should be preformed.



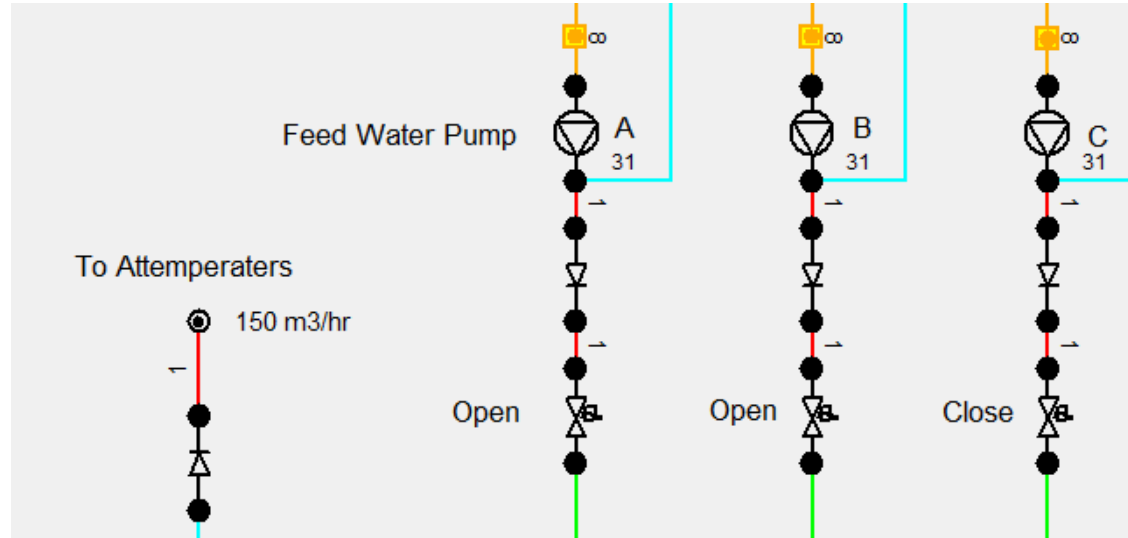
PIPENET is renowned for outstanding comprehensive, fast, accurate and reliable modelling

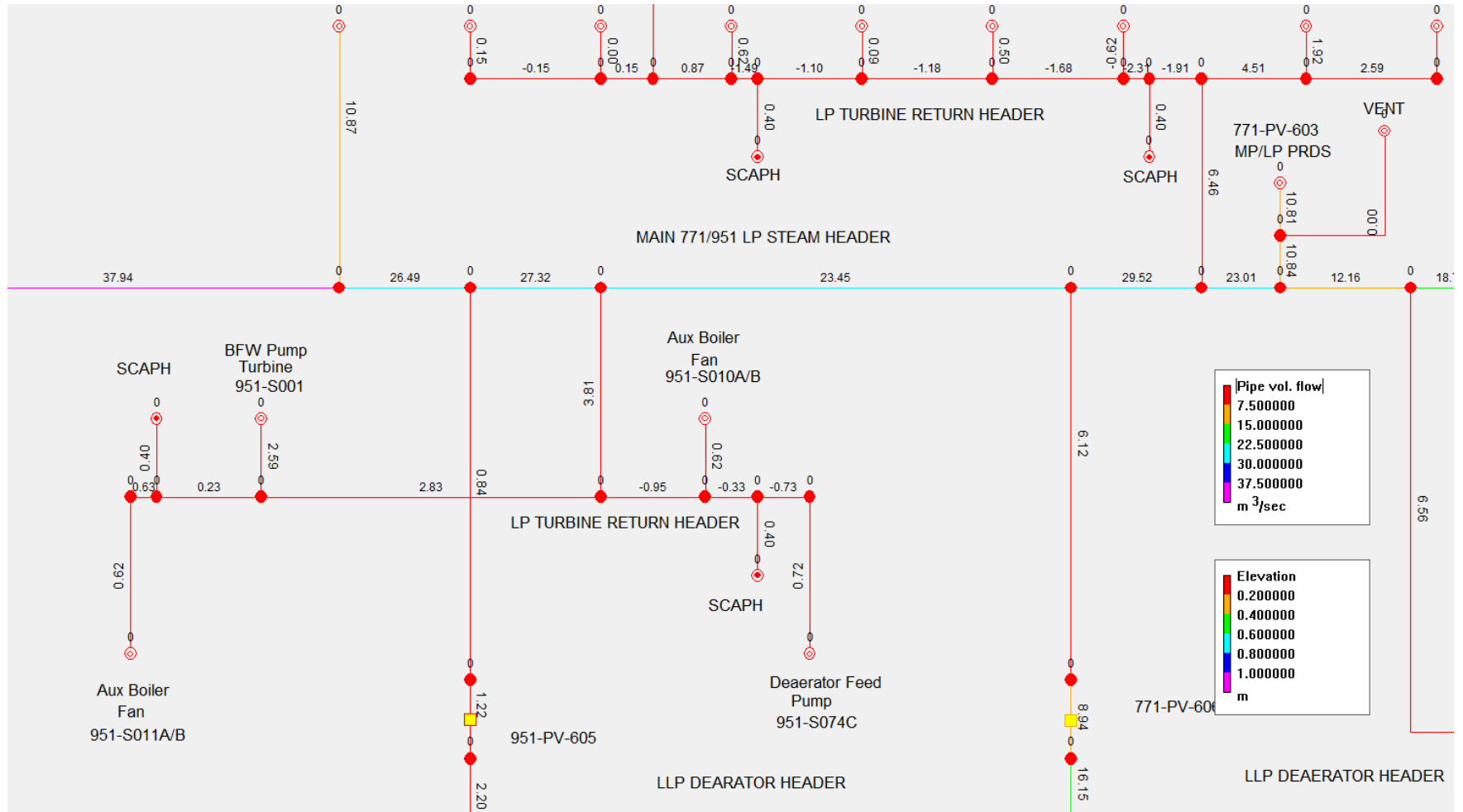
15. **Comprehensive modelling tools:** PIPENET provides totally comprehensive modelling tools, including pipe, duct, pump, filter, nozzle, non-return valve, control valve, orifice plate and fixed pressure drop items.
16. **Various fluid choices:** PIPENET Standard Module can model liquid, steam and gas.
17. **Powerful network solving ability:** No matter how complex a network, and how many loops are included, the network can be solved precisely and quickly!
18. **Pipe status:** PIPENET recognises pipes as blocked or broken, enabling fast repair, crucial for piping systems.
19. **Pipe sizing:** PIPENET has a huge range in its pipe sizing function, enabling engineers to plan as easily for massive pipes as for small pipes.
20. **Libraries:** Extensive libraries are available for pipe schedules, pumps, fittings, fluids and control valves. User can add often-used components to a library, and so avoid re-inputting components.
21. **Fittings:** Most popular fittings are available as the built-in fittings in PIPENET, such as tilting disc, 3 way cock, elbow, bend, angle-stop check, ball valve, butterfly valve, gate valve, globe lift check, globe swing check, globe valve, globe/angle valve, globe-stop check, hinged foot valve, pipe exit, plug valve, poppet foot valve, projecting entrance, return bend, sharp flush entrance, tee, Y-pattern valve, Y angle-stop check, Y globe-stop check, Y lift check and Y swing check, etc. User can also define their own fittings.
22. **Pump curves:** PIPENET has three different types of pump curve: quadratic, cubic and spline smooth. Pumps can be defined flexibly, precisely and easily with these options.
23. **Checking facilities:** PIPENET provides helpful checking facilities, for example PIPENET can identify an elevation error easily.
24. **Units:** PIPENET has convenient unit options, including SI, Metric, British, US, and user defined. The user defined unit option allows users to define their own preferred unit combination and save it as a default.
25. **Default values:** Set up default values for the common attributes, and there will be no need to re-input values in the table.

PIPENET User friendly interface and powerful function are not the only guarantee

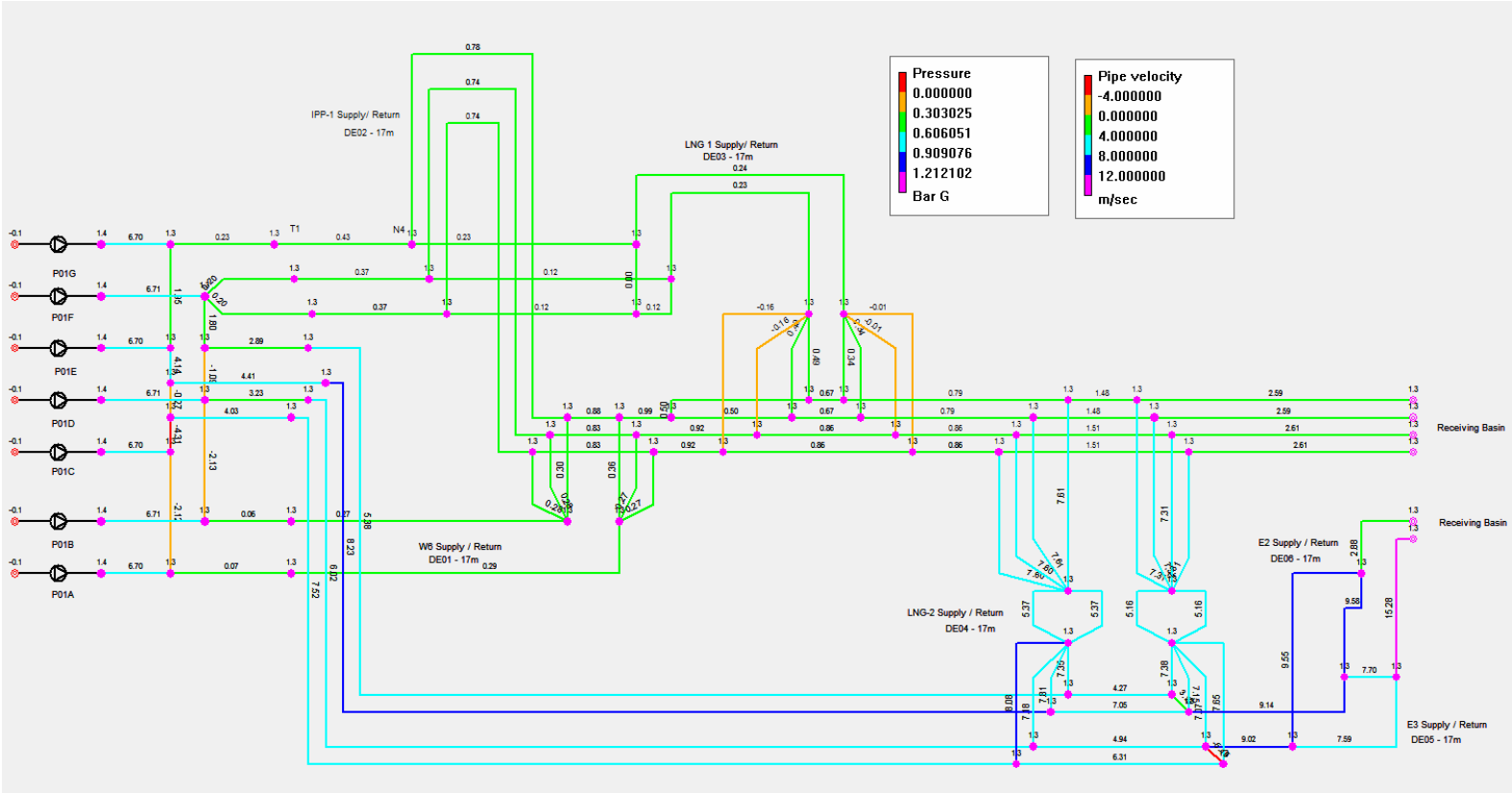
PIPENET's customers benefit from many additional advantages!

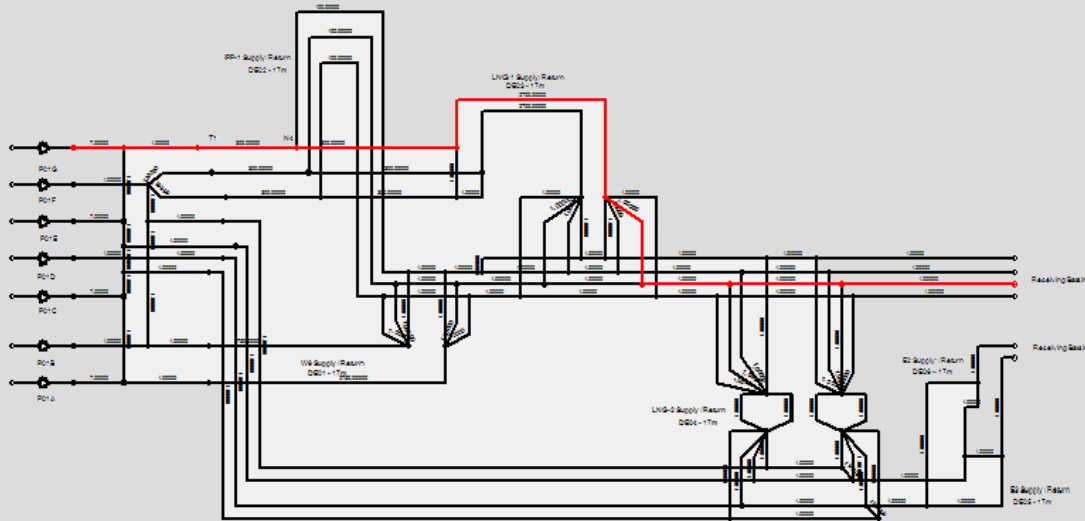
26. **Acceptability:** Wherever you go, PIPENET is accepted, approved and frequently required.
27. **Comprehensive help information:** PIPENET provides comprehensive help information through the Sunrise website: www.sunrise-sys.com, help manuals, user manuals, training manuals and PIPENET News. Sunrise Systems Limited also organizes seminars and training courses to help users to enjoy the many features of PIPENET.
28. **Customer support:** Sunrise Systems Limited provides prompt, friendly and professional customer support. Customer service to support our outstanding product is our first concern!
29. **Future Orientation:** PIPENET is constantly improving and always moving forward.
30. **High quality standard:** Sunrise Systems Limited is qualified with ISO9001.



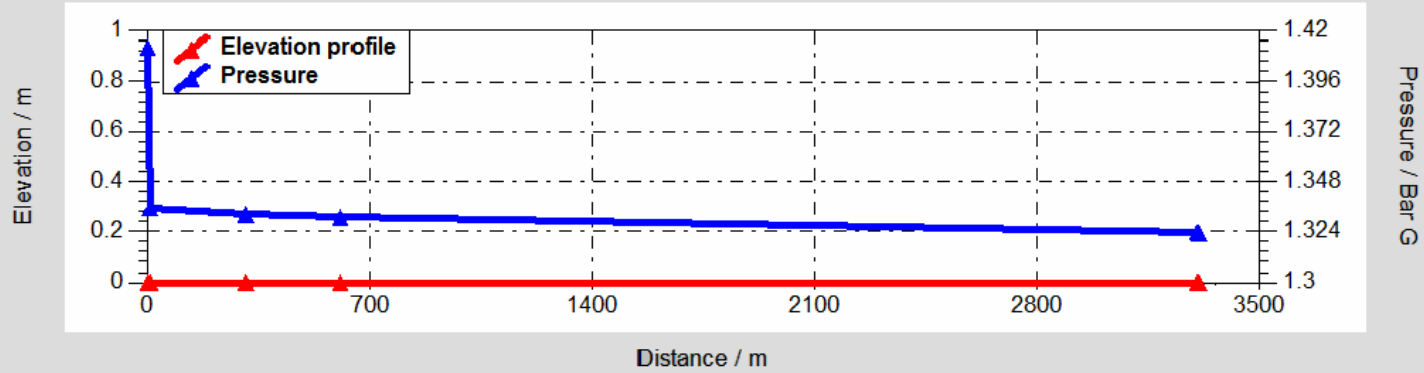


Plant Cooling Water System (with Pressure Profile along User Defined Path)

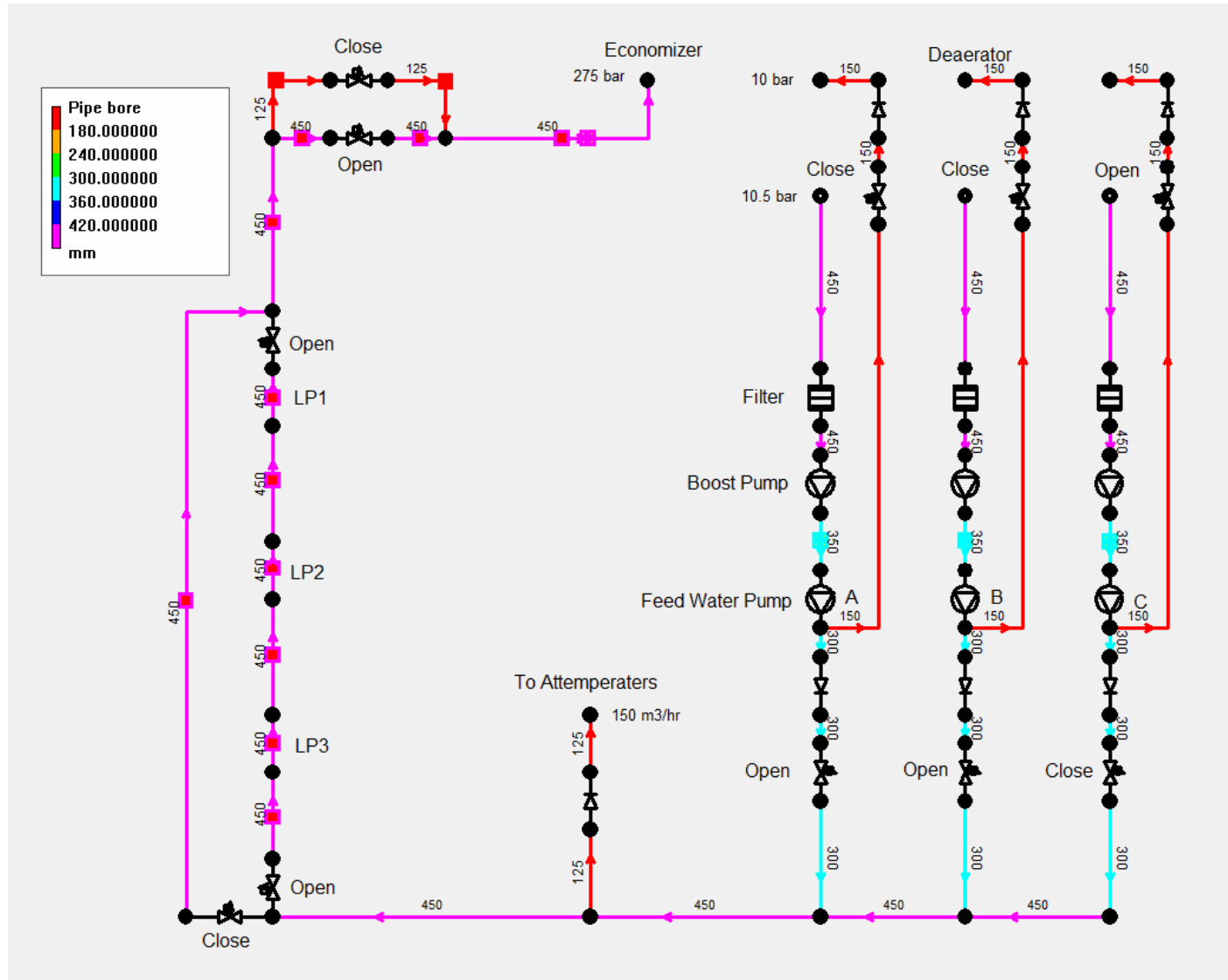




Elevation profile from node 10 to 78 via 65, 83, 15, 28, 63, 22, 57



Feed Water Systems from a Power Station



Cooling Water System with Heat Exchangers

