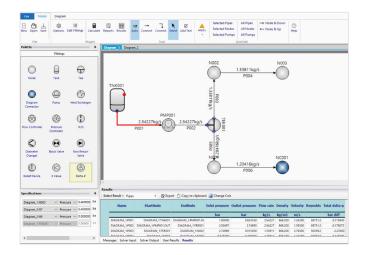
PEL Flonet

Incompressible network flow



PEL Flonet calculates single phase liquid or vapour flow rates and pressure drops in piping systems. These may consist of piping loops or be 'tree-like' in form. Pumps and non-return valves can be included in the system. When supplied with the pressure at the inlets, PEL Flonet calculates the flows and internal pressures throughout the network. Alternatively, given the flows and one pressure, it will calculate the pressures at all other points.

WHAT WE OFFER

PEL Flonet has all of the flexibility you need to draw and construct your models using an intuitive graphical interface. Behind the scenes PEL Flonet has a powerful new calculation engine to support a number of new capabilities. Importantly, with its new 'controllers', PEL Flonet now has the flexibility to help you size fittings within your model in order to achieve specified flow rates and pressures. PEL Flonet brings speed and reliability to the process of modelling liquid and low velocity gas distribution networks.



KEY FEATURES

A number of specific types of equipment are modelled:

- Pumps
- Pressure and flow control valves
- Restriction orifices
- Heat exchangers
- Block valves
- Non-return valves
- Storage tanks

Models can be made up of reusable 'sub-networks', allowing large networks to be developed in smaller sections and understood in detail.

Creating models is simpler:

- An easy-to-use graph tool allows pump curves and other data to be captured
- PEL Flonet has a library facility to save and share curves, fluids and sub-networks

The presentation of results makes it easy to understand how your model is working:

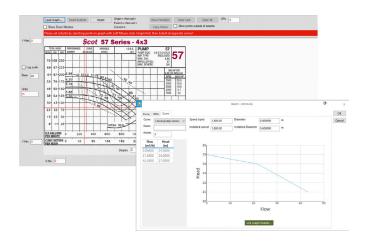
- Calculated results and input data can be highlighted or displayed on the drawing
- Alerts and warnings can be set up for calculated values
- Calculated results can be presented in a customisable table of results and exported to MS Office



BENEFITS

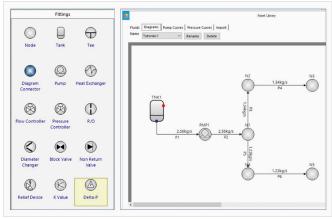
- Users can have complete confidence in the results
- Reduces risk of human errors in calculations essential when working with safety critical equipment
- Allows engineers to be more efficient and productive
- Provides a documented record of calculations for audit
- Improves QA and standardises procedures by everyone using the same set of data and calculations
- PEL Flonet can be licensed as an add-on to PEL or as a completely separate programme
- New version improves flexibility of models created in PEL Flonet

Here you can see some of the features of PEL Flonet.

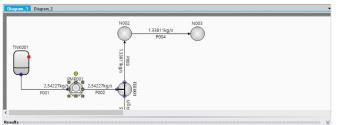


The new graph reading tool makes it easy to import data from manufacturer's pump curves in your PEL Flonet and the library function allows these curves to be saved so they can be quickly reused and shared. Build your models with a range of components and fittings. Customisable, visible alerts on the drawing warn you when flows, pressures, etc. are outside expected ranges.

Large models can be built up from smaller, connected sub-models and saved in your personal library.



Decide which results you want to display in the drawing, and also see the link between the rows in a table and the items in the drawing



Name	StartNode	EndNode	Inlet pressure bar	Outlet pressure bar	Flow rate	Density kg/m3	Velocity m/s	Reynolds	Total delta-p bar diff
DIAGRAM_1:P002	DIAGRAM_1:PMP001.OUT	DIAGRAM_1:TEE001	2.92697	2.74890	2.54227	868.200	1.35300	88731.2	-0.178070
DIAGRAM_1:P003	DIAGRAM_1:TEE001	DIAGRAM_1:N002	2.74890	0.515300	1.33811	868.200	2.76500	92039.2	-2.23360
DIAGRAM_1:P004	DIAGRAM_1:N002	DIAGRAM_1:N003	0.515300	0.400000	1.33811	868.200	1.17400	59963.9	-0.115300
DIAGRAM_1:P005	DIAGRAM_1:TEE001	DIAGRAM_1:N004	2.74890	0.770550	1.20416	868.200	2.48800	82825.3	-1.9783
DIAGRAM_1:P006	DIAGRAM_1:N004	DIAGRAM_1:NC001	0.770550	0.669380	1.20416	868.200	1.05600	53961.0	-0.101170
DIACO ANA 3.0004	DIACOMA DECOMOUT	01400444.0400	0.04000	0.000000	* 00000	000000	0.033000	*****	0.404066

TÜV Rheinland Industrial Services Limited Technical Engineering Consultancy PEL Support Services Pavilion 9, Byland Way Belasis Business Park Billingham TS23 4EB United Kingdom +44 1925 93 8668 pel.support@tuv.com www.tuv.com/pelsoftware

