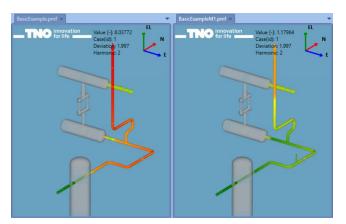


# **PULSIMSUITE NEWSLETTER**

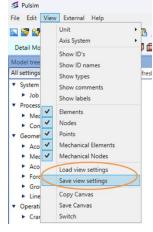
This is the PulsimSuite newsletter of Q1, 2025, presenting version 2.4.1. With your feedback, we have implemented new functionality of which we give you a brief overview here.

With this release 2.4.1, the graphical user interface is now a 64-bit program. One of the advantages of this is that the GUI is granted more memory by Windows, so that larger sets of results (in case of big models with many run cases) can be loaded. Furthermore, it is now possible to view two models side-by-side, from the exact same viewpoint. Other major changes are the new Flow-Induced Pulsation simulation method and the multi-bore orifice design tool. Also check out the other novelties in the overview below. Enjoy PulsimSuite 2.4.1!



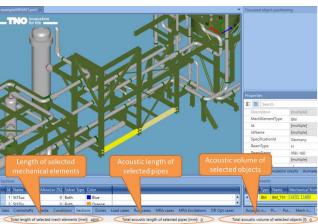
# View models side-by-side

Especially when analyzing results, it can be helpful if two versions of a model can be placed side-by-side, to quickly see the impact on results of certain modifications. This side-by-side view can be activated by opening the **View** menu, and select **Switch**.



## Viewpoint save and load

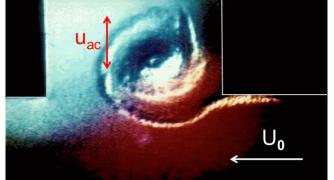
To further support visually comparing results of two models side-by-side, you can save the camera viewpoint and view direction of one model, and load that viewpoint for the other model. This functionality is available in the **View** menu, where you can select **Save view settings** and **Load view settings**.



# **Check length of mechanical elements**

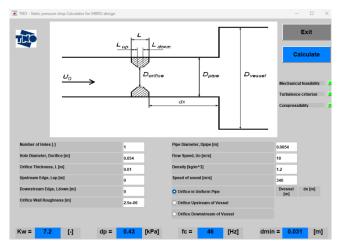
Previously, you could see the length and volume of the selected acoustic objects in the bottom edge of the GUI. To ease your mechanical modeling, in version 2.4.1 also the length of selected <u>mechanical</u> objects is shown.





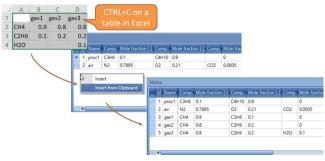
#### Simulating Flow-Induced Pulsations with DP node

A DP node was introduced PulsimSuite version 2.3.0, for simulating a harmonically varying pressure difference source (Flow-Induced Pulsation, FIP). FIPs can now be simulated with an automatic scaling of the results with the FIP frequency, using the relation between the FIP strength (the pulsation source amplitude), its frequency, and the FIP Strouhal number.



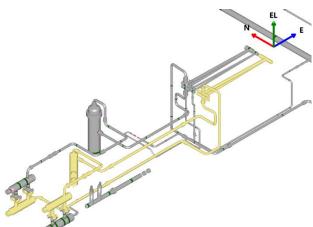
#### MBRO design tool

A single-bore orifice plate acts as a friction element to dampen pulsations of frequencies up to about 100 Hz. Above that frequency, there is a decay in efficiency. Multi-bore restriction orifice (MBRO) plates are more effective in damping higher-frequency pulsations than single-bore orifice plates. With the application of e.g. screw compressors, pulsation frequencies much higher than 100 Hz are generated. For these high-frequency applications, an existing TNO tool has now been made available to PulsimSuite users. The "MBRO tool" can be started from the PulsimSuite GUI for designing multi-bore restriction orifice plates. This tool helps you design the number of holes and their bore that are required to obtain effectiveness of the orifice up to the high pulsation frequency that needs to be mitigated.



#### Copying gas composition table into Media tab

The **Media** tab may contain several gases with many gas components. It is now possible to directly Copy and Paste gas compositions from Excel, for multiple gases in one go.



### Selecting only "visible" parts of a model

With the **Visibility** function, you can hide parts of a model. The multiple-select functions (e.g. CTRL+A for "select all") will now only select the objects that are "visible" in the 3D canvas. This makes it a lot easier to e.g. copy or remove specific parts of a model.